The Internal Medicine Clerkship

A Quick Reference Guide

TSM Guides

Drs. Rajani Katta &
Samir Desai

Internal Medicine Clerkship:
A Quick Reference Guide

Rule # 2 The field of internal medicine has a broad impact on all fields of medicine.

"Learning about internal medicine – the specialty providing comprehensive care to adults – in the third year of medical school is an important experience, regardless of what specialty the medical student ultimately pursues," says Dr. Patrick Alguire, the Director of Education and Career Development at the American College of Physicians.[1] Through this clerkship, you will hone your skills in history and physical examination, diagnostic test interpretation, medical decision-making, and management of core medical conditions. These skills are important ones for all physicians, even if you ultimately decide to enter radiology, pathology, emergency medicine, or another field.

Your internal medicine (IM) clerkship grade can impact your career. It's a factor in the residency selection process for all specialties, not just internal medicine. In a survey of over 1,200 residency program directors across 21 medical specialties, grades in required clerkships were ranked as the # 1 factor used in the selection process.[2] "Do well in your clerkship," writes the Department of Medicine at the University of Washington.[3] "Yes, this is obvious – and easier said than done – but it's also important. Most residency programs look closely at the third-year clerkship grade when selecting applicants."

Many medical students find this clerkship formidable. A lack of knowledge isn't the main factor. The main factor is a lack of preparation for your many responsibilities. How do I evaluate a newly admitted patient? What do I need to include in a daily progress note? What information do I need to include in a comprehensive writeup? How do I present newly admitted patients to the attending physician?

In this chapter, templates and outlines are included for each of these important responsibilities. You'll also find a number of tips and suggestions on how to maximize your learning and performance during this rotation. You'll find detailed information that will help you effectively preround, succeed during work rounds, deliver polished oral case presentations, create well-written daily progress notes, and generate comprehensive writeups.

For students interested in a career in internal medicine, this chapter also details how to strengthen your application.

About the rotation

The internal medicine clerkship is usually two to three months in duration. Depending on your school, you may spend the entire rotation at one hospital, or you may rotate through several affiliated institutions. While largely an inpatient experience, you'll also have opportunities to practice outpatient medicine, either through regularly scheduled outpatient clinics or a dedicated monthlong outpatient block. The clerkship will expose you to not only general internal medicine, but also to subspecialties, including cardiology, pulmonology, gastroenterology, nephrology, endocrinology, hematology, oncology, infectious disease, rheumatology, and allergy.

Typical day

Here's what a typical day on the internal medicine clerkship looks like (inpatient setting):

6:30 – 7:30 AM	Prerounds
7:30 – 9:00 AM	Work rounds
9:00 – 10:00 AM	Patient care tasks
10:00 – 12:00 NOON	Attending rounds
NOON – 1:00 PM	Noon conference
1:00 ?	Patient care tasks (+ student conferences)

What should you carry with you?

- Stethoscope
- Penlight
- Reflex hammer
- Tuning fork
- Eye chart
- Tongue blades
- Calculator
- Ophthalmoscope
- Watch with second hand for pulse measurement

Your Team

During your clerkship, you'll work as a team to take care of your assigned patients. The team usually consists of the following individuals:

Attending physician

The attending physician is typically a faculty member at the medical school (clinical or academic) who has been assigned to be the leader of the team. The attending's primary goal is to ensure that the patients assigned to the team receive the best possible care. Providing a solid educational experience for residents, interns, and medical students is also an important goal. The attending is responsible for evaluating all team members. The team's contact with the attending is usually limited to attending rounds, a period of time during the day in which the entire team meets.

Resident

The resident physician is a house officer who, at the minimum, has completed an internship. Second in charge, the resident (along with intern), under the guidance of the attending, formulates a treatment plan for the patients assigned to the team. The resident then makes sure that the interns and medical students implement this plan. The resident is also responsible for teaching the junior members of the team. The extent of teaching varies, and may consist of didactic lectures or pimping.

Intern

By definition, internship refers to the first year of residency training that follows medical school graduation. Next to medical students, interns are the most junior members of the team. They are responsible for executing the treatment plan. Interns have a lot on their plate, which is why they need to function quickly and efficiently to accomplish the day's patient care activities.

You will interact the most with the intern, since he or she will also follow the patients assigned to you. When issues arise in the management of your patient's condition(s), you should first discuss them with your intern. Although many interns love to teach, this isn't always possible, given the many demands on their time. On a daily basis, some of their responsibilities include scheduling tests and procedures, checking lab test results, entering orders, drawing blood, and writing daily progress notes.

Prerounds

Your day will typically begin with prerounds, in which you'll see your patients alone. The goal is to identify any new events in the patient's course. This information will be presented to the resident and intern during work rounds (morning walk rounds).

What to do during prerounds

- Review the chart for any new progress notes that may have been placed after you left the hospital.
- Review the patient's orders, looking for any new orders that may have been written after you left the hospital.
- Speak with the intern (i.e. cross-covering intern) who was taking care of your patient while your team was out of the hospital. See if any new events occurred in your patient's hospital course. If this isn't possible, touch base with your intern, who will get sign-out from the cross-covering intern.
- Speak with the nurse involved in your patient's care to see if he or she has any concerns or issues.
- Speak with the patient. Ascertain the following:
  - Has the patient's overall condition improved, stayed the same, or worsened?
  - Does the patient still have the same symptoms? If so, have these improved, stayed the same, or worsened?
  - Does the patient have any new symptoms?
  - Does the patient have any new concerns? Questions?
- Examine the patient.
  - Write down the most recent vital signs (BP, HR, RR, temperature), maximum temperature (Tmax), and if pertinent, O_2 sat, weight, blood glucose checks, and Ins/Outs. Also note any trends in the temperature, BP, or HR. If vital signs haven't been taken recently, do so yourself.
  - Check the IV. Note the type of intravenous fluids hanging and the rate of administration.
  - Perform a brief physical exam: focus on the area of interest (if the patient has a foot ulcer, examine the foot). At a minimum, you should also perform a heart, lung, abdomen, and lower extremity exam, irrespective of the reason for hospitalization.
- Check on the results of lab and diagnostic tests: labs, ECG, radiographs, other.
- Gather your thoughts and formulate your assessment and plan for each problem.
- Get ready to present this information to the resident and intern during work rounds.

Prerounds: 10 Tips for Success

Tip # 1 Arrive early. Give yourself enough time to see your patients so that you can gather the necessary information without being rushed. An extra cushion of time is especially helpful when the patient had an eventful night, which creates considerable information to gather and sort through.

Tip # 2 Write down all information so that you can accurately convey it to your team in work rounds. Writing it down in an organized manner also helps with the patient's progress note.

Tip # 3 A review of the chart for any new progress notes is a must. This is one of the keys to getting up to speed on your patient's hospital course. Read all new progress notes, including those left by nurses.

Tip # 4 Always look at the orders. New orders may be written after you leave the hospital. Often these orders aren't documented in the progress notes.

Tip # 5 Your intern may know things about your patient that you don't. They receive report (sign-out) from the cross-covering intern, who cares for your patient when your team is out of the hospital. Always ask your intern if they know anything about your patient that you don't.

Tip # 6 Perform a heart, lung, abdomen, and lower extremity exam on every patient, irrespective of the reason for the patient's hospitalization.

Tip # 7 Always check the computer for the most up-to-date lab test results. Don't rely on the chart because it often takes time for the most recent results to be placed in the patient's chart.

Tip # 8 Some lab test results take days to return. Check on pending test results every morning.

Tip # 9 Think about the data you've gathered. Actively processing the data will help you formulate an assessment and plan.

Tip #10 Before leaving the hospital for the day, read any new progress notes that may have been added to the chart. This shortens the time needed for the next day's prerounds.

Work Rounds

During work rounds, also known as morning or resident walk rounds, the team (usually without the attending) travels from room to room, seeing each of the patients on the service. At times, depending on the institution, other healthcare professionals may join rounds. These may include pharmacists, dieticians, social workers, and nurses. The most junior member of the team (junior medical student, sub-intern, intern) following the patient is required to update the team on the patient's progress. This update includes any significant events that have occurred overnight and the results of any lab or diagnostic testing. The information you present will help the team formulate a diagnostic and therapeutic plan.

8 Questions to Ask Your Resident before Your First Work Rounds

Question # 1	Where will work rounds begin?
Question # 2	What information should I gather for work rounds?
Question # 3	What time does work rounds start?
Question # 4	How much time do I have for my work rounds presentation?
Question # 5	How would you like me to present newly admitted patients?
Question # 6	How would you like me to present established patients?
Question # 7	In what order should I present the information?
Question # 8	How detailed should my work rounds presentation be?

Step-by-Step Approach for the Work Rounds Presentation

Step 1: Start with a short summary of the patient to remind the team of his or her problems. Give the patient's name, age, gender, and chief complaint or working diagnosis/reason for being in the hospital.

Mr. Smith is a 64year old white male who was admitted two days ago with shortness of breath and diagnosed with COPD exacerbation

Step 2: Present the subjective data, which should include the patient's current status and any events or complaints that have occurred or developed since yesterday's rounds.

He states that his night was uneventful. He continues, however, to have shortness of breath without significant improvement from the day of admission. He denies fever, cough, or chest pain.

Step 3: Present the objective data, beginning with the most recent vital signs, including temperature, blood pressure, heart rate, respiratory rate, and pulse oximetry (mention the amount of oxygen patient is receiving). Also mention the maximum temperature in the last 24 hours. Express the vitals with ranges. Also mention the total fluid input and output, blood glucose checks over the last 24 hours, and daily weights if pertinent to the patient.

Current respiratory rate, pulse, temperature, and blood pressure are 18, 84, 99, and 130/80, respectively. Maximum temperature of 99. The blood pressure has ranged from 118/75 to 135/85.

Step 4: Present the physical exam findings from your most recent exam. Always present the heart, lung, abdominal, and lower extremity exam (be brief). Also include findings pertinent to the patient's problem. If the patient was admitted with delirium, you need to perform a mental status exam.

Physical exam is remarkable for prolonged expiratory phase and scattered expiratory wheezes throughout both lung fields. Heart exam reveals a regular rate and rhythm. Abdominal and lower extremity exams are unremarkable.

Step 5: Present the laboratory test results. Include only new lab test results, if they are back. Present the pertinent or changed lab values, not unchanged or normal values. Old results may be presented if needed.

All laboratory test results are normal except for the serum BUN and creatinine, which are 30 and 1.5, respectively. Admission values were 15 and 1.0, respectively.

Step 6: Present the results of any other diagnostic studies or imaging tests. Include only the results of new studies or tests.

Chest x-ray performed yesterday revealed no evidence of pneumonia or pneumothorax.

Step 7: Discuss each of the patient's problems in descending order of importance. Provide an assessment for each problem followed by the management plan.

P*roblem # 1 is COPD exacerbation. He has been receiving albuterol and atrovent nebs every 8 hours. Despite this therapy, his condition has not improved. The plan is to increase frequency of the neb treatments to q4 hours and add intravenous solumedrol at a dose of 60 mg q6 hours. I will continue to check in on him every few hours.*

Problem # 2 is HTN. He has been normotensive over the past 24 hours. The plan is to continue his antihypertensive regimen of hydrochlorothiazide and felodipine.

Work Rounds: 10 Tips for Success

Tip # 1 Always be on time. There is a lot to accomplish, and if you're late you put the team behind schedule.

Tip # 2 Brief oral patient presentations are preferred during work rounds. Ask your resident how much time you have to present the information. Don't exceed your allotted time.

Tip # 3 Know the order of the work rounds presentation. Don't deviate from the expected order.

Tip # 4 Bring any new studies, such as ECGs, with you to rounds. This saves the team time, and increases efficiency.

Tip # 5 As the day's plan for each patient is defined during work rounds, add each task to your to-do list. Don't rely on memory.

Tip # 6 Your team would like to hear your own assessment and plan for the patient because it reflects your thinking process. Don't defer to the intern for this discussion.

Tip # 7 After discussing the day's plan for your patient, make sure you understand the reasoning behind the plan. Ask questions if you need to.

Tip # 8 Residents often teach during work rounds. They often pass along important pearls of information, which may very well be the answers to your attending's questions later in the day.

Tip # 9 Listen carefully to all patient presentations, even if you aren't directly following the patient. You'll maximize your medical education.

Tip # 10 Students are graded on enthusiasm. One way to demonstrate interest is to ask informed questions.

Evaluating the New Patient when On Call

"On call" denotes the time period when you admit new patients onto the service. Call structure varies according to the medical institution, but in general ward teams admit anywhere from 5–10 patients when on call. Call can either be during the day or night. Call is an outstanding educational experience, and it allows you to evaluate new and interesting patients.

Step 1: Have a patient information template available to collect all data. This helps you organize the information for writeups and oral case presentations.

Step 2: See if there are previous medical records on your patient. In some hospitals, you have to call and request medical records. In others, electronic records are readily available.

Step 3: Before seeing the patient, review the emergency room or clinic notes which prompted the admission.

Step 4: See the patient and perform a *complete* history and physical exam. It's preferable to perform this evaluation separate from the house-staff.

Step 5: Gather lab test results, ECGs, and imaging test results. Interpret the studies yourself before reading the reports. Add these results to your patient template.

Step 6: Use the information from the history, physical examination, and other data, including labs and imaging, to create a complete problem list.

Step 7: Prioritize the problem list in descending order of importance and generate a differential diagnosis for each active problem. Ask yourself:

- What is the most likely diagnosis and why?
- What is the differential diagnosis?
- What further evaluation is needed to support my working (likely) diagnosis?
- What treatment should I recommend?

The answers to these questions will help you create your own assessment and plan.

Step 8: Present the information and offer your assessment and plan to the resident. Use the information from your patient template to help you present an organized H & P. Ask the resident for feedback, especially about your assessment and plan.

Step 9: Write the admission orders if permitted.

Step 10: Read in depth about your patient's specific issues.

On Call: 10 Tips for Success

Tip # 1 Learn your on-call responsibilities. At the beginning of your rotation, meet with your resident and intern to learn what's expected of you.

Tip # 2 Prepare for call by bringing all necessary items. This includes a change of clothes, personal hygiene items, snacks, and books.

Tip # 3 When the resident informs you of a new patient admission, write down the patient's essential information. Note the full name, medical record number, and location on a patient card or note card.

Tip # 4 Patients often can't remember everything about their medical history, so having information from the medical record, when available, can be extremely useful for filling in the gaps.

Tip # 5 If you can't obtain a reliable history from the patient, don't stop there. Attempt to contact family members. If the patient lives in a nursing home, call the nursing home. If the patient was recently discharged from another hospital, call the medical records department at that hospital to have the discharge summary or records sent to you.

Tip # 6 Find out what was done for the patient in the ER or clinic prior to your involvement. Be familiar with the evaluation performed there, including the lab and diagnostic studies obtained and the medications and therapies administered. In order to provide the best possible care, it is essential that you know this information. Your attending will ask for it during your oral case presentation.

Tip # 7 Interpret all lab and diagnostic studies on your own. Then ask your intern or resident to review the studies with you. Also review imaging tests with the radiologist so you have a better understanding of the findings.

Tip # 8 If time permits, present the case to your intern. They may provide you with tips and hints on what the resident or attending may ask about your patient.

Tip # 9 If patients or family members ask you specific questions about the treatment plan or prognosis, defer the answers to your intern or resident.

Tip # 10: When you complete your work, don't just leave without offering to help other team members. The on-call day is busy and stressful for the entire team. Any assistance that you provide will be appreciated.

Writing Admit Orders

ABC VANDALISM is a popular mnemonic to help remember the contents of the admission orders.

Admit to: location, service, attending physician

Because: admitting diagnosis/problem

Condition: good, fair, poor, serious/guarded, critical

Vitals: parameters, frequency

Allergies: medication allergies

Nursing: blood glucose checks, foley to gravity, intake/output, daily weights, patient positioning/turning, wound care, nasogastric tube, precautions

Diet:

Activity: bed rest, bed rest with bathroom privileges/bedside commode, up in chair, walk with help, up ad lib

Labs: e.g. CBC in the AM

Intravenous fluids: composition, rate of administration, quantity

Studies: e.g. ECG in the AM, CT Scan of the Chest

Medications: dosage, route of administration, frequency

Checklist for Internal Medicine Write-Up

The writeup, or written case presentation, is a detailed account of the patient's clinical presentation. You were probably introduced to the process of writing a case presentation during your physical diagnosis course. During the Internal Medicine clerkship, you will be asked to submit writeups on patients you admit. One of the major purposes of the writeup is to help you develop the written communication skills needed to take care of patients. These are skills that will serve you and your patients well throughout your medical career. For many attendings, the oral case presentation and patient writeup are two major determinants of a student's clerkship grade. Below is a checklist you can use to ensure your writeup is complete.

Chief Complaint (CC)

___ Chief complaint is included.
___ Source of the history is included.

History of Present Illness (HPI)

___ First sentence includes the necessary and relevant information: age, gender, chief complaint, duration of chief complaint, relevant PMH.
___ HPI is presented in a chronological fashion beginning with when patient was at baseline or usual state of health.
___ Chief complaint is defined properly: location, quality or character, frequency, onset, course, duration, severity, radiation (of pain), precipitating factors, alleviating factors, associated symptoms.
___ Description of how the symptom has affected the patient and his or her life: physically, emotionally, social relationships, others
___ Includes what the patient thinks has caused the problem as well as the patient's concerns
___ Addresses why the patient sought medical attention now rather than earlier
___ Elements of the PMH, social history, and family history that are relevant to the HPI are incorporated.
___ Information from the review of systems pertinent to the chief complaint is included.

Past medical history (PMH)

___ Complete with sufficient detail for each diagnosis, including date of diagnosis, how the diagnosis was made, past studies done for evaluation, dates of any surgeries or hospitalizations, therapy previously received, current therapy, and current status of the problem.

Medications

___ Includes dose, route, and frequency of each medication
___ Includes over the counter and herbal preparations and PRN medications
___ Medications being given for the same condition are grouped together

Allergies

___ Includes nature of adverse reaction

Social History

___ Occupation
___ Marital status
___ Tobacco, alcohol, and substance abuse
___ Living situation
___ Functional status

Family History

___ Includes state of health of parents, siblings, children
___ Lists age of family members at the time of diagnosis with important conditions
___ Explores family history of CAD, DM, HTN, and cancer beyond first degree relatives

Review of systems (ROS)

___ All systems are included.
___ Each system is explored in sufficient depth.
___ ROS does not include information already given in HPI.

Physical examination

___ Description of patient's general appearance
___ Includes vital signs (O_2 saturation, orthostatics if pertinent)
___ Physical examination does not include any judgments or interpretations (e.g. wheezing consistent with asthma)
___ Complete, including the following that are commonly omitted from the exam:
- Skin examination
- Thyroid examination
- Lymph node survey beyond just "neck nodes"
- Neck veins
- Distal pulses
- Liver span

- Rectal exam (if not done, offer reason)
- Mental status
- Cranial nerves
- Strength/sensation
- Cerebellar function
- Reflexes

Laboratory and other studies

___ All lab and diagnostic test results are reported.
___ Basic lab test results are reported first.

Problem list

___ All active medical problems are included.
___ All abnormalities in the physical exam are included.
___ All abnormal lab test results are included.

Assessment & Plan

___ Begins with summary statement with key history, physical exam, and lab data.
___ Assessment & Plan is problem-based rather than systems or organ-based.
___ Problems are listed in descending order of importance.
___ Assessment is provided for every problem.
___ Differential diagnosis is offered for major problems.
___ Differential diagnosis includes potentially life-threatening causes of the patient's symptoms.
___ Diagnostic and therapeutic plan is included for every problem, along with rationale

General

___ Writeup is legible, and free of spelling or grammatical errors
___ Medical abbreviations are recognized as appropriate ___ References are included

For more detailed information on completing the patient writeup, see Chapter 16.

Presenting newly admitted patients

The day after you evaluate a new patient is the post-call day. On post-call days, the attending expects formal presentations on newly admitted patients. You are responsible for presenting your patients. Before presenting, you should learn your attending's preferences. A step-by-step method of presenting newly admitted patients is described below.

Step 1: State the patient's full name, room number, and medical record number (if needed to identify the patient at the hospital).

Step 2: State the chief complaint in the patient's own words.

Step 3: State the history of present illness (HPI) in chronological order:

First sentence should include patient's age, gender, and relevant past medical history. What is relevant past medical history? An example: if the patient's chief complaint is chest pain, you should include major cardiac risk factors in the first line, since one of your considerations is angina or myocardial infarction. "Patient is a 54year old white male with PMH significant for hypertension and diabetes who presents with one day history of chest pain." If the same patient had a history of acne, it wouldn't be included in the first line, because it isn't relevant to the chief complaint of chest pain.

Never use days of the week when conveying the HPI. Instead, use the words "prior to admission." If the patient tells you his chest pain started on Thursday and it's now Saturday, don't say that the pain started on Thursday. Instead, state that the pain started two days prior to admission.

Last sentence of the HPI should end with "and that prompted the patient to present to the hospital."

Step 4: Provide complete past medical history (PMH)

Step 5: Provide complete past surgical history (PSH)

Step 6: List medications. Include dosage, frequency, and route if attending prefers this information. Include herbal and over-the-counter medications; if the patient isn't taking any, state so.

Step 7: List allergies, along with the reaction.

Step 8: Provide relevant social history

Step 9: Provide relevant family history

Step 10: Provide review of systems. You should do a complete review of systems. Even though it should be complete, your attending may not wish to hear the entire ROS because it takes too much time. Ask their preference.

Step 11: Provide the physical exam

- Start with the general appearance and vital signs, which should be your own.
- You should do a complete exam. Even though it should be complete, your attending may not wish to hear the entire exam. Ask their preference.

Step 12: Provide laboratory test results

- Make sure you have all the results
- Before presenting, check to see if any new results have returned
- If your patient has abnormal test results, make sure you have the old results for comparison.

Step 13: State ECG findings, if applicable to patient. Bring the ECG to rounds

Step 14: State chest x-ray and/or other imaging test results. Bring the chest x-ray or other imaging tests to rounds

Step 15: Provide an assessment and plan. For every problem on the problem list, there should be an assessment and plan.

For further information, see Chapter 15 on Oral Case Presentation

Step-by-Step Approach to Presenting Established Patients

Presenting patients who have been in the hospital for some time (established patients) differs from presenting newly admitted patients. Whereas the new patient presentation requires more details on all aspects of the history, physical, assessment, and plan, the oral presentation on an established patient focuses on providing an update on the patient's hospital course.

Step 1: Always start with a one-line statement that includes the patient's name and why the patient is here. This reminds the audience of the patient.

Mr. Jones is a 55-year-old man with diabetes and a history of peptic ulcer disease who was admitted yesterday with melena.

Then proceed with the rest of your presentation using the SOAP format. This stands for Subjective, Objective, Assessment and Plan.

Step 2: Present all the "Subjective" data. A common preference is to start with how the patient is currently doing and then present a summary of events since you last discussed the patient. Some students include any new information or recommendations from consultants in this summary.

The patient is currently doing well with no complaints. He denies any further episodes of melena. GI evaluated the patient yesterday and is planning to do an EGD this morning.

Step 3: Report all the "Objective" Data. This includes the vital signs, the physical exam, and results of labs and studies.

First, present the vital signs, using numbers. Don't say, "Vital signs are stable." Don't forget to mention the blood glucose, daily weight, and oxygen saturation, if applicable. Also pay attention to trends, particularly in the vital signs and in the lab values.

He has been afebrile with Tmax 99 and Tcurrent 98.6. His blood pressure is currently 140/80 with a pulse of 70. Respirations are 12. His blood glucose has been 108 and 115, and is 120 this morning.

Next, present the physical exam. You don't have to present a detailed and thorough physical exam again, such as the one you presented when the patient was first admitted to the hospital. Instead, present a focused physical exam, always

including the general appearance, heart, lung, abdomen, and extremity exam. If they are unremarkable and unchanged since admission, a common preference is to say that they are unchanged since admission. If there are remarkable findings, then describe them.

On exam, the patient appears well. His heart, lung, and abdominal exams are unchanged since admission. He still has trace pretibial edema on his bilateral lower extremities and the left foot ulcer appears worse today. There is worsening erythema…

When presenting labs, don't present old test results unless they're pertinent. Present the latest lab results. This is another area where noting trends is very important. The team needs to know how the pertinent lab values have changed, which helps indicate if the condition is improving or worsening.

Step 4: Present the assessment and plan of established patients by starting with a one line summary of the patient and reason for admission. Present the assessment and plan as you would with a new patient; however, the emphasis should be on presenting follow up information and on the plan of action.

Step by Step Approach to Writing the Daily Progress Note

You will be expected to write a daily progress note for every patient you follow. You are "following" a patient if you are participating in his or her care. The purpose of the daily progress note is to update readers of the patient's hospital course since the last progress note was written. Meet with the resident or intern at the beginning of the rotation to discuss how the daily progress note should be written. Even if you know how to write a progress note, realize that residents often have their own preferences.

Step 1: Follow the proper order. Daily progress notes should be written using the SOAP format. SOAP is an acronym for "**s**ubjective, **o**bjective, **a**ssessment, and **p**lan."

Order of the daily progress notes

Date and time of the progress note
Title (level of training, type of note)
Subjective statement
Medication list
Physical examination
Laboratory/diagnostic test results
Assessment and plan
Signature

Step 2: In the subjective portion of the note, describe the patient's complaints. For example, if the patient was hospitalized for abdominal pain, comment on whether it is still present and, if so, how it has changed. Also include any pertinent positives and negatives. New patient complaints should be listed here as well.

Step 3: Depending on the attending, medication may be listed.

Step 4: In the objective section of the note, begin with the physical exam. Always include the patient's general appearance and vital signs. After reporting the vital signs, list the 24hour intake and output (I & O), daily weight, IV fluid rates, and other objective values (i.e. accuchecks) that pertain.

Step 5: After reporting the physical exam, move on to the laboratory and other diagnostic data. Always begin with lab test results. Generally, only lab test results that have returned since the previous day's progress note require inclusion. If results are pending at the time the note is written, indicate that the status

is pending. When the results return later, the information can be charted in the form of an addendum.

Step 6: Results of other diagnostic studies should follow the lab test results: ECG, chest x-ray.

Step 7: Finish your note with the assessment and plan. Most attendings prefer that the assessment and plan be written in a problem list format. In this format, the patient's medical problems are listed in descending order of importance. Keep the following points in mind:

- Be as specific as possible in your labeling of problems. For example, if your patient was admitted with shortness of breath and the etiology was unclear, shortness of breath would be acceptable to list as the problem. However, if you have determined that the shortness of breath is due to COPD exacerbation, then COPD exacerbation should be the listed problem.
- For each problem, offer an assessment
- Following the assessment, document the plan. The plan may consist of further diagnostic testing and/or changes in management.

Sample Daily Progress Note

S: SOB with walking to the bathroom but no longer SOB at rest. No orthopnea or PND overnight. Swelling in legs continues to improve.

O: BP 128/79 (range 115/72 – 138/82) P 68 (range 62 – 78) R 14
T 97 (Tmax 98.9)
Weight 102.3 kg (103.6 kg yesterday) I/O 2200cc/3600cc
Fingerstick blood sugars 101 121

Gen: Alert and oriented X 3, NAD
CV: RRR, + S3, no murmurs or rubs
Resp: Clear to auscultation bilaterally
Abd: + BS, NT, ND
Ext:+ 1 pitting edema to knees bilaterally

Lab test results (5/17 6:30 AM results):

Serum chemistry: Na^+ 141, K^+ 4.4. Cl 105, HCO_3 27, BUN 25, creatinine 0.9, glucose 129 (high)

Complete blood count: WBC 6.2, Hgb 14.8, Hct 42.3, platelet count 176, MCV 93.6, RDW 13.4

A/P: Patient is a 47year old male with CHF, DM, HTN, and GERD who was hospitalized with CHF exacerbation

1. CHF exacerbation

   Overall, condition is improving – patient has less SOB and edema, weight is decreasing. Will continue intravenous furosemide, low Na diet, strict I/O, and daily weight. Echo done four years ago demonstrated findings consistent with diastolic heart failure. Will repeat echo today to assess for any change in heart function.

2. Diabetes mellitus

   Review of blood glucose values over the past 24 hours shows good glycemic control with FSBS ranging between 101 and 121. Will continue current insulin regimen and make adjustment to dosage as necessary based on FSBS.

3. Hypertension

   Blood pressure has been well controlled over the past 24 hours with no readings above 138/82. Will continue metoprolol therapy

4. GERD

   No symptoms since admission. Continue omeprazole.

Rule # 3 Strategize now if you're interested in internal medicine as a career.

During or following their internal medicine clerkship, many students decide to pursue a career in internal medicine or one of its subspecialties. In the 2010 NRMP Match, 2,722 U.S. seniors secured positions in categorical internal medicine residency programs.[4]

Of U.S. senior applicants who matched in 2009, the mean USMLE Step 1 score was 222.[5]

Of U.S. senior applicants who matched in 2009, 12.6% were members of the honor organization AOA.[5]

How hard is it to secure a position in an internal medicine residency program?

In the 2010 NRMP Match, 4,999 positions were offered. Close to 55% of these positions were filled by U.S. senior medical students.[4] Therefore, for U.S. applicants, it is indeed a buyer's market, and most students are able to secure a position at their top choice.

However, getting into a top tier internal medicine residency program remains very difficult, and a well-thought-out strategy for success is required if you covet one of these positions. According to the Clerkship Directors of Internal Medicine, "students who match at top internal medicine programs often have sustained superior clinical performance on their clerkships and fourth-year rotations, obtained Alpha Omega Alpha (AOA) Honor Medical Society status, scored well on the United States Medical Licensing Examination Step I and Step II, and secured strong letters of recommendation."[6]

When should I ask for a letter of recommendation?

If your internal medicine attending physician has been impressed with the quality of your work, ask for a strong letter of recommendation at the end of your clerkship. There's no need to wait until the fourth year of medical school, when it's time to submit applications. According to the Department of Medicine at the University of Washington School of Medicine, "faculty get many requests for letters, and we are happy to do them – but they are much better if written soon after working with a student. If you work closely with one of the faculty during your clerkship, and they give you good verbal feedback at the end of the block, it's fine to ask if they would be willing to write a letter for you (if they say yes, thank them, and tell them you will send them an email soon)."[3]

Did you know...

Internal Medicine residency programs require students applying for preliminary (one-year) or categorical (three-year) positions to submit a Department of Medicine letter. Also known as the "Chairman's letter," this letter is written by the chairman or his or her designee.

How can I strengthen my application for residency?

The process begins with an accurate and objective analysis of your background, accomplishments, and credentials. Since we are often not the best judges of the strength of our candidacy, it's preferable to seek the opinion of faculty involved in the residency selection process. The chairman, program director, and clerkship director at your school would be ideal faculty members to approach.

Tip # 1

If you're considering a career in internal medicine, identify an advisor who can help you explore the specialty further, plan your fourth-year electives, and develop your application strategy.

These individuals will have advised students with profiles similar to yours over a period of many years, and will therefore be readily able to estimate your chances at different programs. Of obvious importance is your performance on the USMLE, junior core clerkship grade in internal medicine, and subinternship grade. However, residency programs are also interested in your letters of recommendation, Dean's letter, leadership potential, research experience, volunteerism, and interpersonal skills. According to Dr. Karen Hauer, internal medicine clerkship director at UCSF, distinguishing accomplishments in the areas of research, leadership, curriculum work, advocacy, and policy can enhance the application.[7]

Did you know…

While USMLE scores are used in the residency selection process, the way in which these scores are used will vary from program to program. At some internal medicine residency programs, a cut off or threshold score will be used to screen applicants. Only applicants exceeding the score will be considered for interviews. Other programs have no threshold score.

Should I do a subinternship in internal medicine?

During a subinternship rotation, the medical student is a "subintern," and assumes the roles and responsibilities of an intern. Nearly all U.S. medical schools offer internal medicine subinternships, and some schools require all students to complete one before graduation.[8]

While few residency programs require students to complete an IM subinternship, most program directors recommend that students complete a subinternship in the specialty they have chosen.[9] This offers students benefits beyond enhancement of the residency application. In a survey of senior medical students at the Boston University School of Medicine, the subinternship was found to "be effective in preparing stu

dents for many of the challenges they will face as an intern and beyond."[10]

Tip # 2

Dr. Jeffrey Wiese, associate chairman of medicine and internal medicine program director at Tulane University, offers this tip for medical students. "There is a lot going on during fourth year, but do not let it interfere with your subI. You must perform well here; this is your chance to show how well you function as an intern. To do so, you must focus 100% of your efforts on the subI."[11]

Did you know…

Unlike the junior medicine clerkship, the internal medicine subinternship grade is often solely based on attending or resident evaluations. One fourth or less of medical schools use objective measures such as written examinations.[8] In a survey of clerkship directors, subinternship grade inflation was found to be quite common. "Half of subinternship students receive Honors and one third receive HighPass."[12]

When should I do an internal medicine subinternship?

Aim to schedule your subinternship in the early part of your fourth year. Doing so offers a number of advantages. First, the rotation will allow you to confirm your specialty choice. If you decide that internal medicine isn't for you, you have some time to consider other career options. Second, there will be enough time to include your evaluation and rotation grade in your Dean's letter and medical school transcript. Third, a strong clinical performance will help you obtain an additional letter of recommendation. Finally, students who schedule their subinternship in the later months of November, December, or January may have difficulties arranging interviews.

How important are away electives in internal medicine?

In general, it isn't necessary to do an away elective to match at a program. Per the Drexel University College of Medicine: "Internal Medicine programs do not expect students to do rotations at their site in order to match at the program." However, some students may not be attractive candidates at certain programs. For these students, a strong performance during an away rotation can improve their odds of receiving an interview invitation.

What fourth year electives are recommended for students pursuing internal medicine as a career?

Based on a survey of 11 internal medicine residency program directors, the following electives were recommended:[13]

- Cardiology
- Infectious disease
- Critical care
- Emergency medicine
- Endocrinology
- Rheumatology
- Nephrology
- Pulmonology
- Radiology
- Medicine subinternship

Other rotations that are commonly recommended include dermatology, office-based orthopedics or sports medicine, neurology, psychiatry, office-based gynecology, anesthesiology, ENT, ophthalmology, and urology.

References

[1]What medical students need to know about the internal medicine rotation. http://www.acponline.org/pressroom/ess_clerk.htm. Accessed January 30, 2011.

[2]Green M, Jones P, Thomas J. Selection criteria for residency: results of a national program directors survey. *Acad Med* 2009; 84(3): 3627.

[3]University of Washington Medicine Clerkship Website. http://depts.washington.edu/medclerk/drupal/pages/CareersInternalMedicine. Accessed January 28, 2011.

[4]National Resident Matching Program. *Results and Data: 2010 Main Residency Match*. 2010. http://www.nrmp.org/data/resultsanddata2010.pdf. Accessed January 30, 2011.

[5]Charting outcomes in the match, 2007. http://www.nrmp.org/data/chartingoutcomes2007.pdf. Accessed January 31, 2011.

[6]Clerkship Directors of Internal Medicine. *Primer to the Internal Medicine Clerkship, Second Edition*. 2008. http://www.im.org/Publications/PhysiciansInTraining/Documents/Primer2ndEd.pdf. Accessed January 14, 2011.

[7]UCSF Career Advisors. http://medschool.ucsf.edu/professional_development/advisors/hauer.aspx. Updated May 17, 2007. Accessed January 27, 2011.

[8]Sidlow R. The structure and content of the medical subinternship: a national survey. *J Gen Int Med* 2001; 16: 5503.

[9]LyssLerman P, Teherani A, Aagaard E, Loeser H, Cooke M, Harper G. What training is needed in the fourth year of medical school? Views of residency program directors. *Acad Med* 2009; 84(7): 8239.

[10]Green E, Hershman W, Sarfaty S. The value of the subinternship. *Med Educ Online* 2004; 9: 7.

[11]Wiese J. Planning a 4th year curriculum for your career. http://www.tulanemedicine.com/PDFs/Step%203%20Schedule%20advice.pdf. 2006. Accessed January 27, 2011.

[12]Cacamese S, Elnicki M, Speer A. Grade inflation and the internal medicine subinternship: a national survey of clerkship directors. *Teach Learn Med* 2007; 19(4): 3436.

[13]Residency Program Directors' Expectations of Incoming Residents. http://www.siumed.edu/oec/Year4/ResidencyProgramSurveyGeneralists090501.pdf. Accessed January 28, 2011.