Internal Medicine

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Internal medicine provides an important foundation for your future rotations and career. The "bread and butter" medicine are some of the most common ailments of patients, and the skills of history taking, organization (note writing), and presentation are used in every part of medicine.

1. Start your day - eat some breakfast, get into a routine, do whatever you need to do to stay well. **Protip:** Sleep early to wake up early.

- 2. Chart Review
 - This should only take a few minutes per patient, although it depends on how much happened overnight. Check notes from overnight, vitals, MAR (receive any new meds? Any meds being consistently declined?), Intake/Output (if tracking), Lab Results or Imaging
 - Print your list of patients
 - **Protip:** Either handwritten on scrap paper or typed on the EHR's census print-out (ex. Epic Sticky Notes), organize your patient concisely for rounding.
 - Begin with 1 liner (PMHx, admission dx). Then List Problem and plan below.
 - Ex: "COPD, former smoker (60py) acute hypoxic respiratory failure"
 - $\circ~$ AHRF-prednisone burst, azithromycin, Duonebs, PTA Inhalers, O2 88-92%
 - Problem #2 etc.
 - Only list things you'll mention during rounds, not your whole progress note. Use abbreviations here to minimize amount you have to write or if the EHR notes section has a character limit
 - Use extra space to create a to-do list.
 - Your To-Do list can help you shine. Making sure you know things like when to order potassium repletion, bowel meds, or new recommendations from consultants. The resident always keeps track of these, but it's impressive if you're capable of this independently
 - Handwrite vitals, labs, patient subjective from pre-rounding
 - Having your 1 liner, problems+plans already written/typed minimizes the amount you have to write later to prepare your presentation
- 3. 7:00 AM Sign out Note any overnight events for your patients from the night team
- 4. Finish Chart Review (can start editing/prepping progress notes)
- 5. 7:30/8 AM Pre-Round (go see your patients)
 - Generally, ask your patients how they did overnight, how they currently feel. Ask about symptoms they have been feeling or are related to their condition. If here for heart failure, ask about breathing, swelling, chest pain, urinating. You don't have to do a long ROS for every single patient. Keep this focused and concise.
 - General questions to consider for all patients include pooping, peeing, eating, walking (don't need to ask everyday though)

- At some point ask about their living situation so you can make recommendations of if it is safe to return home or if subacute rehabilitation (SAR) is needed to help bridge their safe return home
- If the patient is altered or has poor memory, check in with the patient's contact person or visitor to get an idea of how the patient is doing and what their baseline is
- **Protip:** After asking how they are doing as described above, jump into:
 - "Have a TIED up plan" (credit Dr. Carolyn Boscia) this is where you tell the patient how they are looking clinically and what to expect
 - Trajectory are they getting better, same, worse?
 - Issues Briefly go over each problem you're managing (status, plan)
 - Expectations What should the patient expect for the day? (blood draws, imaging, PT?)
 - We do a lot of things to patients (poke, scan, etc) without telling them first. Let the patient know what they can *physically* expect for the day
 - Discharge give a general idea about discharge date (can defer if you don't know)
- 6. ~9:00 AM Rounding (seeing/talking about patients with the attending)
 - Note: Rounding can be long, so take care of yourself. Use the bathroom, eat a snack, sit down when you need to.
 - A note on presentations. Internal medicine is notoriously known for long presentations. Don't let this intimidate you and don't let this cause your presentations to be too long and boring. They're longer than surgery, but you should only include pertinent information and still keep your presentations as short and concise as possible. Keep things organized too. Jot down bullets of what you'll present or use the protip on sticky note text to help keep things short and organized.
 - If your attending/resident asks for more information and you didn't check, just be honest and don't make up information or physical exam findings. Just make note to keep track of that information in the future.
 - I'll share a generally accepted approach, but be prepared if your attending prefers presentations in a slightly different way such as presenting only pertinent information (in which case just share information you're closely tracking for that patient or important abnormals).
 - Example:

Start with a short 1 liner to set the stage	Jane Doe is a 70 year old female with a PMHx of COPD and 60 py smoking admitted for acute hypoxic respiratory failure.
State overnight events - if nothing, just say no acute events overnight -Protip: can also quickly mention major studies/results here and repeat later in designated sections	No acute events overnight Her CT PE was negative

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Subjective - How are they today? (keep this short, can expand in progress note)	Ms. Doe says she feels okay this morning. She says that her breathing has been improving with the nebulizer treatments. Still feeling short of breath when walking to the bathroom. No fevers, chills, chest pain.
Objective - Vitals (add intake/outake if following here)	Objectively, her vitals are Temp 37, HR 86, RR 20, BP 120/80, O2 sat 92% on 2L.
Physical exam	On exam, she was breathing comfortably with nasal cannula, lungs still with diffuse expiratory wheezes and low inspiratory volume. Heart with regular rate, no murmurs. Abdomen non-tender, non-distended. No lower extremity swelling or redness.
Labs - provide context (how compares to yesterday) if abnormal or changing	Labs notable for sodium 134 (down from 135 yesterday), HGB 12 (steady from 12 yesterday), White count 6, Strep pneumo antigen negative
Imaging (brief summary of report, or what you interpret if report not in yet)	CT PE negative, though with emphysematous changes. CXR without signs of consolidation or effusion.
EKG	EKG sinus tach without ST elevations, depressions, or T-wave inversions.
Assessment - Start with a 1 liner and then summarize the patient's condition, requirements, and expectations. It's awkward transitioning to this part, you can say, "My assessment is that" or "In summary" or "For assessment and plan"	My assessment is that Jane Doe is a 70 year old female with a PMHx of COPD and 60 py smoking admitted for acute hypoxic respiratory failure secondary to COPD exacerbation, currently improving with Duonebs, azithromycin, prednisone, though still requiring 2L nasal cannula. She will likely will be able to discharge home in the next 1-2 days once oxygen requirements resolve.
Plan - Note status (improving?) and use framework DDx, Dx, Tx (see below) -Stating the plan is most important for conditions you're actively managing. Don't need to mention chronic conditions everyday. -DDx, Dx, Tx means differential, diagnosis, treatment - what is your differential? What further studies are you doing for diagnosis? What are you doing to treat the disease? - Protip - to shine, share any important literature, clinical pearls you learn about, or	Problem 1 is Acute hypoxic respiratory failure secondary to COPD exacerbation. Appears to be improving, she has gone from 4L to 2L oxygen requirement since admission. Unclear etiology for exacerbation, DDx includes viral infection, medication non-adherence, environmental factors, progression of disease. Plan to continue Duonebs q6h, prednisone 60 mg for 5 days total, azithromycin 250 mg for 5 days total, home

anticipate any questions people may have about your management decisions (why this and not this?). Ex. why do patients with COPD exacerbation get azithromycin if viral illness is suspected?	inhalers, wean O2 as tolerated for goal O2 88-92%. For her T2DM, her A1C was 7.5 on
	admission. Continue sliding scale insulin. Depending on glucose curve, consider bolus + SSI

- A word about A&P: This is difficult for everyone
- I think it's difficult for everyone because it feels unstructured and bits of the plan get thrown into the assessment portion and bits of the assessment get put in the plan portion...Think of it like this.
 - There's a global assessment that comes first. 1 liner and then global assessment of how they're status is. Are they overall stable, worsening, or improving? You can add on more details like, improving, but still requiring 2L oxygen, or improving, but still remains intermittently febrile. You can speak to tentative discharge thoughts here (or save for very end of presentation).
 - After global assessment, you do a A&P for every single problem, with the most active problems at the top. A good structure for these is DDx, Dx, Tx - What is your differential? What further studies are you doing for diagnosis? What are you doing to treat the disease?
- There's a sense of pressure to try to be as independent as possible, but don't be afraid to ask questions, especially about the A&P. Ask your resident or the attending. Don't just agree. Learn why certain decisions are being made.

7. 12/1PM - Take a break, eat some lunch, and then work on notes, orders, handoffs, discharge summaries.

Your progress notes should be more comprehensive than your presentation, but don't spend forever on it. Update it everyday, cut out extraneous details when able. Make sure it's done before you go home so the care team knows the plan.

Example Progress Note:

Overnight events

- No acute events overnight
- CT PE negative

Subjective:

Ms. Doe says she feels okay this morning. She says that her breathing has been improving with the nebulizer treatments. Still feeling short of breath when walking to the bathroom. She has been eating without nausea. Last bowel movement was on 10/8/21. No fevers, chills, chest pain.

Objective:

Vitals - automatically pulled in

Intake/Output, oxygen device not automatic - can type in freehand if desired. Physical exam:

General: Awake, sitting comfortably in bed, in no apparent distress.

HEENT: Head normocephalic, moist mucous membranes

Respiratory: Breathing comfortably on 2L nasal cannula, lungs with diffuse expiratory wheezes and low inspiratory volume.

Cardiovascular: Heart with regular rate, no murmurs.

Abdomen: non-tender, non-distended, normoactive bowel sounds.

Extremities: No lower extremity swelling or redness.

Labs:

Use a dot phrase to automatically bring in most labs (CBC, BMP, etc). Can manually type and update unique labs as needed.

Imaging: CT PE 10/8/21 (Copy and paste Impression description here, or type a summary)

CXR 10/8/21

(Copy and paste Impression description here, or type a summary)

EKG 10/9/21

101BPM, sinus rhythm, normal axis, normal intervals, no ST elevations, depressions, or T-wave inversions. (can freehand write this)

Assessment/Plan

Jane Doe is a 70 year old female with a PMHx of COPD, 60 py smoking, and T2DM (A1C 7.5) admitted for acute hypoxic respiratory failure secondary to COPD exacerbation, currently improving with Duonebs, azithromycin, prednisone, though still requiring 2L nasal cannula. Likely will be able to discharge home in the next 1-2 days once oxygen requirements resolve.

#Acute hypoxic respiratory failure secondary to COPD exacerbation. Appears to be improving, she has gone from 4L to 2L oxygen requirement since admission. Unclear etiology for exacerbation, DDx includes viral infection, medication non-adherence, environmental factors, progression of disease.

- Continue Duonebs q6h while awake
- Prednisone 60 mg for 5 days total (last dose 10/12)
- Azithromycin 250 mg for 5 days total (last dose 10/12), home inhalers, wean O2 as tolerated for goal O2 88-92%.
- Encourage smoking cessation, Covid, Pneumococcal, Influenza vaccines

#T2DM. A1C 7.5 on admission.

- Sliding scale insulin
- Hold home metformin

8. After discussing your patient with your intern and on rounds, pend orders to be signed and let someone know. Pending orders may seem tedious, but it's good practice understanding how to place orders. Don't be discouraged if the intern/resident orders things on their own to save time.

9. Update your handoff for the cross-covering team. They cover 80+ patients, so keep it concise. Use the clinical status "Stable vs. watcher" to signify if the covering team needs to watch this patient closely (signify watcher). Type "Stable" for most patients. For patient summary, type concise 1-liner and abbreviated plan. Check out examples of other patients on your team to see how residents organize it. For the hand off "To-Do," only list things you specifically want the covering team to follow up on (ex. f/u CT PE, f/u repeat hemoglobin). For "contingencies," type something like, "If hemoglobin returns < 7, transfuse 1 unit PRBC" but you may not need contingencies for every patient.

10. Discharge summaries. Residents do these differently, so feel free to find what works for you. For the Hospital Course section, start with a 1 liner and then write ~1 paragraph about what happened in the hospital until discharge. This makes it easy for the PCP on discharge to quickly understand what happened. No need to summarize the H&P or ED course unless it's important information not covered elsewhere. Include what they were treated with and describe how their condition improved until discharge. Include any complications/setbacks too.

11. Admissions. This is where you really get a chance to shine. It's one thing to present an old patient who already has a plan and the team is familiar with. It's another thing to gather information from your own history and physical and use information from this along with vitals, labs, and imaging to figure out what's going on and how to treat it. The nice thing about admissions is that *You* get to figure out what's wrong with the patient and *You* get to decide how to treat them. As a 3rd year, you may not have the chance to admit a patient because interns and Acting Interns mostly do these, but if you get a chance, here's a framework for it.

- Chart review first. Read the ED notes to get a general idea what they're here for. Review vitals, labs, imaging like you would with any other patient. Especially helpful for admissions is looking back in the chart for any prior hospitalizations or recent clinic visits. It's helpful to see what's been done in the past for this same problem or to notice if it's been getting worse.
- Then, go see the patient and get the story from them. Trust, but verify information from the medical record. You'll frequently come across inaccuracies. You can say, "I've reviewed your chart thoroughly, but I'd like to hear what's been going on directly from you. Can you tell me what brings you in today, from when it started up until now?" Asking an open ended question like that will get most of the HPI, follow it up with questions that get at information that may still be missing: OLDChARTS is a good mnemonic (onset, location, duration, character, aggravating/relieving factors, timing, severity), other symptoms? Anything like this happen in the past? What makes them seek medical attention now? These are pretty broad, but get more specific based on your differential (if differentiating MI vs. gastric reflux, ask typical anginal symptoms (substernal, worse with exertion, better with rest) or GI symptoms (worse lying down, after eating, etc). Basically think of it as gathering 2 types of information 1. Describe the

problem and 2. What evidence/information can you gather to support your diagnosis? Because in your note and presentation, you'll have to commit to a diagnosis and support it, so if you still haven't asked questions/gathered data to rule out an alternative diagnosis, you may still be missing important information.

- Then go into medications they take (including doses and frequency, can call pharmacy to do a medicine reconciliation if they don't know), medication allergies, past med history, family history, social history (living situation, alcohol, tobacco, recreational drug use)
- Then perform a physical exam, pay special attention to findings that support or refute what you think is going on. For all patients, at a minimum, listen to their heart, lungs, examine abdomen, legs, and add any other exams you find relevant.
- Towards the end, inquire about code status. This can be a whole separate discussion on its own, but to keep it brief, remember all patients being admitted to the hospital need to have a code status. Don't assume full code in everyone cause CPR may cause more harm than good. It may feel weird asking this to someone who you don't expect to get sick enough to have their heart stop, but just as it as, "Something we ask of all patients who are admitted to the hospital is if your heart stops, if you stop breathing, would you like us to perform chest compressions and put in a breathing tube?"

12. Writing and presenting a H&P: Now, you finish interviewing the patient and you go write your note and organize your thoughts. For the HPI, start with a one liner, describe symptoms and illness development until ED presentation. Focus on symptoms that address your diagnosis and differential.

- Address what happened in the ED. Start with vitals, then mention notable labs and imaging.
 - Side note: this always felt super weird putting data in the HPI because it's usually mostly subjective information, but ED info and data are really helpful upfront. Also, past history of this current issue (prior hospitalizations for same thing). Since it's called "History of Present Illness" think back to relevant past history of this illness causing them to be admitted to the hospital
- Describe PMHx, medications+allergies, FHx, Social Hx
- Then continue the rest of the note as you would any progress note.

Additional resources: <u>CPSolvers Schema</u> (Helps create your differential), UpToDate, <u>Access</u> <u>Medicine Infographics</u> (think uptodate but graphics), <u>Thumbroll app</u> for procedures, <u>Run the List</u> (Podcast w good infographics), <u>Internet Book of Critical Care</u> (Great blog of pathophysiology and treatment by UVM's own Josh Farkas)