How to do an Internal Medicine Consult

Peter Birks, RCH CMR 2014-15
Updated: Wayne Hung, RCH CMR 2018-19, Teresa Tai, RCH CMR 2022-2023

Overall Tips:

You are telling a story and conveying your thought process. Before presenting think if the story would make sense to you if you were hearing it for the first time. If it doesn't make sense to you, it won't to your senior and staff.

Be organized. This often means writing the note after you have seen the patient and formulated your thoughts. If you need to jot notes down during the consult that is fine. However, do not re-write the entire consult!

A consult should take maximum 4 hours, and closer to 3 hours by end of your rotation.

This should be a focused history and physical based on your approach to the referring problem, but also need to be inclusive and thorough (we often don't know what we don't know). Try to think about an approach before your see the patient as this will help focus your assessment to ask about pertinent positive/negatives, and do a focused physical exam.

Always eyeball the patient initially to make sure they are stable. You then can step away to gather information prior to fully assessing them. Resources include Meditech (old discharge summaries and consults, old radiology and microbiology, ECHO and cath results, PFTs, ECGs), Careconnect (access to other hospitals records/labs including BC Cancer Agency), the nursing chart (vitals, Pharmanet, EHS note, and what has been given in ER such as IVF, meds, antibiotics)

THE CONSULT

Identification:

1-2 lines. Include important demographic info (age and ethnicity), crucial background info, and reason for referral/presenting complaint.

Examples:

1. Mr. A is a 35-year-old gentleman from China with HIV who presents with fever, shortness of breath, and hemoptysis.
2. Ms C is a 70 male with history of ischemic cardiomyopathy and CHF, presenting with shortness of breath on exertion, orthopnea, and PND.
3. Mr M is a 20 M with longstanding alcohol abuse presenting with tremor, agitation, and hallucinations.

HPI:

The HPI should capture the most important components of the presentation. By the end of the HPI, your listener/reader should have a sense of what is going on with the patient. If something is crucial to the story, even if it is past medical history, labs, or course in hospital, it should be included in the HPI.

I use the "**3 C approach"**

1. **Characterize:** Describe a chronological sequence of events that led the patient to the hospital. You can start from the last time they were well if relevant, and go until when they were referred to you. Characterize the present complaint.
   Example: if they are coming in with shortness of breath, ask about when it started, its progression, severity, frequency, their baseline, etc
2. **Causes:** You are going to describe pertinent positives and negatives related to the patient's presentation. This shows you have a differential, and you are using questions to rule things in and out.
   Example: If patient presents with AKI you want to ask about dehydration, vomiting, diarrhea, ACEi and NSAID use, obstructive symptoms, recent contrast, antibiotics, rheum ROS, etc**.** If they present with SOB, ask about orthopnea/PND/edema for heart failure, rhinorrhea/cough/fever for pneumonia, etc
3. **Consequences:** any consequences of their disease presentation.
   Example: syncope: did they fall and bleed? Ask about neuro signs, headache, etc Eg: AKI: ask about confusion, volume overload symptoms

   Make sure you include a course in ER. I usually include this in the Characterize section at the end

Past Medical History:

***When presenting, many staff like to hear the PHx before the HPI to give them context on the patient. You can ask the staff what their preference is before presenting**

Provide most relevant ones first. Both medical and surgical. Need to also provide context (*see the PMhx Cheat Sheet*)

1. CAD: include date of past MI/ACS, CCS class, angiograms/pci/cabg, last ECHO, who is the cardiologist
2. CHF: Last ECHO, EF, significant valvular disease, etiology of CHF, recent exacerbations
3. COPD/Asthma: PFTs, hospitalizations, intubations, ICU, Respirologist. Triggers for asthma
4. CKD: baseline GFR, etiology (DM? HTN?), proteinuria, nephrologist, dialysis or past transplant
5. DM: Type 1 or 2, insulin?, last A1C, endocrinologist, microvascular (nephropathy, neuropathy, retinopathy) and macrovascular (CAD, PVD, CVA) complications.

Allergies and Intolerance: List med and reaction

Family History: Patients often don't volunteer all the info, may need to ask specific questions.

Social History: Ethnicity, where they were born, recent travel. Occupation (now and previous), environment exposures, living situation, social supports, substance use (smoking, etoh, drugs)

- **Functional History** (ALDs and iADLs): if elderly/frail

ROS: Review of systems. This can potentially be done at the end of HPI. Also should be focused to relevant things when presenting to staff and Sr – You don't need to go through the entire ROS from head to toe if the presenting problem is very focused!

Physical Exam: (focused based on presenting complaint)

Admission Vitals: HR/BP/RR/SPO2/Temp
Current Vitals (for example if received treatment/fluid in the meantime)
Orthostatic vitals if syncope or hypovolemic

General: How do they look. Well/unwell/distress. Alert and Oriented? GCS, Warm vs cold, diaphoretic, jaundice

HEENT: Eyes, mouth/oropharynx, ears if relevant, lymphadenopathy, trachea midline

CVS: Volume assessment: orthostatic VS as above, JVP, edema, axilla dry or moist. Precordial exam, pulses, bruits, peripheral vascular assessment

Resp: inspection for increased WOB, accessory muscle use, chest wall abnormalities, percussion, expansion, auscultation

GI: soft or hard, distended or flat, any organomegaly, tenderness to percussion/palpation, specific tests based on presenting complaint (eg. Murphy's, Psoas)

GU: CVA tenderness, genital exam if clinically relevant

Neuro, MSK, Derm: if relevant

Investigations:

<u>Bloodwork:</u>

CBC: include differential if WBC elevated, include MCV and baseline Hb if anemic

Electrolytes/renal: use the HCO3 from the venous electrolyte draw, it is more accurate. If creatinine is elevated, mention baseline Cr

Liver enzymes: AST, ALT, GGT, ALP
Liver function: Bili, INR, Albumin
Lactate: elevated can be due to tissue hypoperfusion/sepsis/liver failure/ischemic gut/meds etc

Blood gas: interpret it!

Microbiology: Important if infection. Also can include old micro (indicate date and sensitivities). Important to know if patient has had a resistant organism such as MRSA/VRE/ESBL in the past when choosing antibiotics

ECG: rate, rhythm, axis, PR, QRS, QT, T wave, chamber enlargement, ischemic changes

Imaging: look at CXR image yourself, don't just read the interpretation

Impression and Plan:

Everything prior to this was objective (although should be presented in a way that illustrates your organized and focused thought process).

This is your time to be subjective and make interpretations and plans. Even if you are uncertain, you should still try to come up with a diagnosis and treatment plan. Your Sr and staff can always correct/modify it if necessary

The **impression** should be 1-2 lines, and summarize the patient's presentation and provisional diagnosis

> Example:
>
> This is a 58 year old male with a history of ischemic cardiomyopathy who presents with a two week of progressive shortness of breath on exertion, orthopnea, PND; He is volume overloaded clinically and has evidence of pulmonary edema on CXR consistent with a diagnosis of a CHF exacerbation.

You then should formulate a **problem list** encompassing all the problems identified during your assessment. The first issue on the problem list shou ld be the main problem for which the patient is being admitted (which is often but not always the reason for referral). Every problem list should also include "best practices" or "housekeeping" at the end

For each problem on the list, organize it by: etiology, workup, and management

> For example:

1. Acute Kidney injury
    - My provisional diagnosis is pre-renal secondary to hypervolemia from vomiting as well as NSAID use. My differential diagnosis includes ATN or post renal obstruction.
    - further workup will include urinalysis and microscopy, urine lytes, and renal ultrasound
    - Management will include IVF, foley catheter, and stopping nephrotoxic meds. The patient has no indications for acute dialysis and we will closely monitor their volume, acid-base status, electrolytes, and LOC.
2. Normocytic anemia…
3. Best Practices – include the following on all patients
    - DVTp – calculate the IMPROVE-IT score to see if they need DVT prophylaxis. If not. SCDs.
    - Diet – NPO, healthy heart, diabetic, renal, etc
    - Allied health consults – PT, OT, SLP, Detician, SW
    - Code status
    - Dispo – what's the barrier to the patient's discharge?

Always date and sign the note