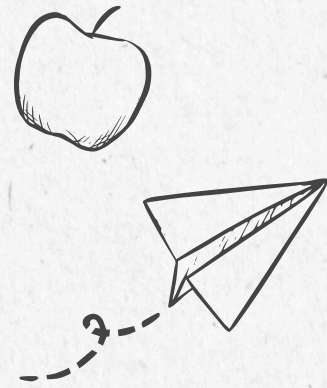


Charting Your Course



A QUICK GUIDE FOR NAVIGATING
MEDICAL ENGLISH FOR IMGs

Common abbreviations:

ABG	arterial blood gas
a.c.	before meals
ADLs	activities of daily living
AFib	atrial fibrillation
AKA	above-the-knee amputation
ALS	amyotrophic lateral sclerosis
AMA	against medical advice
A&O	alert and oriented
A/P	anterior–posterior
AROM	active range of motion
ASAP	as soon as possible
BIBEMS	brought in by EMS

BID	twice a day
BKA	below-knee amputation
BL	bilateral
BLBS	bilateral breath sounds
BMP	Basic metabolic panel
BP	blood pressure
bx	biopsy
CA, ca	cancer, carcinoma
CABG	coronary artery bypass graft
CAD	coronary artery disease
Cath	Catheter or catheterization
CBC	complete blood count
CC	chief complaint
CHF	congestive heart failure
CCU	coronary care unit/cardiac ICU
CN	cranial nerve
CNS	central nervous system
c/o	complains of

COPD	chronic obstructive pulmonary disease
CPAP	continuous positive airway pressure
CPR	cardiopulmonary resuscitation
CKD	chronic renal disease
CSF	cerebrospinal fluid
CT	computerized tomography
CV	cardiovascular
CVA	cerebral vascular accident
c/w or c/b	Complicated with, complicated by
CXR	chest X-ray
d/c	discontinue
DC	discharge
DM	diabetes mellitus (T1DM = type 1, T2DM = type 2)
DNI	Do not intubate
DNR	do not resuscitate
DOA	dead on arrival
DOB	date of birth
DOE	dyspnea on exertion

d/t	due to
Dx	diagnosis
ECC, EKG	electrocardiogram
ED	emergency department
EEG	electroencephalogram
EMG	electromyogram
ENT	ears, nose, throat
ER	emergency room
ETOH	ethanol (alcohol)
FH	family history
f/u	follow-up
GCS	Glasgow Coma Scale
GI	gastroenterology
GERD	gastroesophageal reflux disease
GSW	gunshot wound
H/A	headache
HAV	hepatitis A virus
Hb	hemoglobin

HB	heart block
HBP	high blood pressure
h.d.	at bedtime
HEENT	head, eyes, ears, nose, throat
HFrEF/ HFpEF	Heart failure with reduced ejection fraction (read “hefref”), or preserved ejection fraction (“hefpef”)
h/o	history of
HOB	head of bed
H&P	history and physical
HR	heart rate
HTN	hypertension
Hx	history
ICM	Ischemic cardiomyopathy
ICP	intracranial pressure
ICU	intensive care unit
I&O	intake and output
LE	lower extremities (LLE = left, RLE = right)
LOC	loss of consciousness, level of consciousness, laxative of choice
LOS	length of stay

LP	lumbar puncture
MBSS	modified barium swallow study
MCA	middle cerebral artery
MI	myocardial infarction
MICU	medical intensive care unit
MRI	magnetic resonance imaging
MRSA	methicillin-resistant Staphylococcus aureus
MVA	motor vehicle accident
NAD	no abnormality detected or no apparent distress
NG	nasogastric
NIC	neonatal intensive care
NICU	neonatal intensive care unit
NKA	no known allergies
NOS	not otherwise specified
NPO	nothing by mouth
N&V	nausea and vomiting
NVD	nausea, vomiting, diarrhea
OA	osteoarthritis

OM	otitis media
OOB	out of bed
OTC	over-the-counter (pharmaceuticals)
OT	occupational therapy
OR	operating room
PACU	post anesthesia care unit
PE	physical exam, pulmonary embolism
PEEP	positive end-expiratory pressure
PEG	percutaneous endoscopic gastrostomy (PEG tube)
PET	positron emission tomography
PH	past history
PID	pelvic inflammatory disease
PMH	past medical history
PNA	pneumonia
p.o.	by mouth
p.o.d.	postoperative day
PRN	as often as necessary, as needed
PROM	passive range of motion

PSH	past surgical history
PT	physical therapy
PUD	peptic ulcer disease
PVD	peripheral vascular disease
q	every
q.h.	every hour
q.i.d.	four times a day
RA	rheumatoid arthritis, right atrium
RBC	red blood cell
RCA	right coronary artery
RO, R/O	rule out
ROM	range of motion, rupture of membranes
ROS	review of symptoms
RT	radiation therapy, respiratory therapy
SGA	small for gestational age
SH	social history
SI	Suicidal ideation
SICU	surgical intensive care unit

SL	sublingual/ under the tongue
SLP	speech-language pathologist
SNF	skilled nursing facility
SOAP	subjective, objective, assessment, plan
SOB	shortness of breath
S/P, s/p	status post
s/s	signs and symptoms
STAT	immediately
STD	sexually transmitted disease
Sx	symptoms
T	temperature
TB	tuberculosis
TBI	traumatic brain injury
TIA	transient ischemic attack
TKR	total knee replacement
TNM	tumor, nodes, and metastases
TPN	total parenteral nutrition
U/A	urinalysis

URI	upper respiratory infection
UTI	urinary tract infection
VS, V.S.	vital signs
WNL	within normal limits
yo	years old

Examples:

“66 yo male w/ PMH of HFrEF, COPD, CKD, coming in with a 2-week history of SOB and BLE edema.”

“There are concerns for dysphagia. Please make patient NPO and consult SLP to get an MBSS.”

“Patient had a BKA after GSW to L foot c/b osteomyelitis.”

PATIENT PRESENTATION

The SOAP (Subjective, Objective, Assessment and Plan) note represents a widely used method of documentation for healthcare providers. Documentation is very important and taken very seriously in the US. Not only for billing and legal purposes, but also to organize thoughts, ideas, and provide good patient care. A well written history and plan assures that other teams and providers that take care of a patient know their past medical history and the reasoning behind every conduct taken during a hospitalization.

The patient presentation is also structured in the SOAP way, and attendings will expect that residents follow this structure when presenting patients.

For new patients, the presentation is obviously more thorough and detailed, whereas for “old” patients, residents are expected to summarize recent events and only go over active issues when updating the plan.

Let’s go over a new patient presentation, which is the most important, detailed, and demanding during intern year.

Subjective:

This will contain the chief complaint (CC); history of present illness (HPI), which contains the one liner; past medical history (PMH), surgical history, family history (FH), social history (SH); review of systems (ROS); medications and allergies.

CC: the main complaint/ the problem needing attention.

Ex. shortness of breath

* obs: in the ICU, the CC can also be followed by “ICU indication”. Ex. SOB requiring BiPAP.

HPI:

The HPI begins with a “one-liner” opening statement including the patient's age, sex, significant medical conditions, and reason for the visit/presentation.

The goal of the HPI is to provide a comprehensive overview of the patient's current health status, setting the stage for the rest of their medical evaluation and treatment.

It's a narrative about the CURRENT presentation, with all the relevant information attached to it.

It covers:

- Onset: When did the CC begin?
- Location: Where is the CC located?
- Duration: How long has the CC been going on for?
- Characterization: How does the patient describe the CC?
- Alleviating and Aggravating factors: What makes the CC better? Worse?
- Associated symptoms
- Radiation: Does the CC move or stay in one location?
- Temporal factor: Is the CC worse (or better) at a certain time of the day?
- Severity
- Context: Any events that could be associated with it.

Ex.

Mr. Smith is a 65-year-old male with PMH of NSTEMI s/p PCI (to LAD in 2018), CAD, HFrEF (EF 40% 11/2023) T2DM, and CKD3 who presents to the ED with worsening SOB and BLE edema over the past week.

He reports a gradual onset of dyspnea on exertion that has progressed to dyspnea at rest. He denies any chest pain or palpitations but notes increased fatigue and orthopnea, requiring him to sleep in a more upright position. He has also experienced paroxysmal nocturnal dyspnea, awakening him from sleep gasping for air, accompanied by episodes of nocturia. He reports bilateral lower extremity edema that has worsened progressively, making it difficult for him to ambulate. There is no associated cough, fever, or chills. He denies any recent travel, or sick contacts. He admits non-compliance with his prescribed medications, due to financial constraints. He denies any recent alcohol or illicit drug use.

Review of Systems (ROS): This is where you list any other symptoms the patient may be experiencing, even if they're seemingly unrelated to the chief complaint. This helps to paint a comprehensive picture of the patient's overall health. If you have already described the patient's pertinent positives and negatives in our HPI, you can say "All systems negative except as stated on HPI"

Past Medical History (PMH): Briefly summarize the patient's relevant medical history, including any chronic conditions, surgeries, or significant illnesses.

Ex:

1. CAD
2. HFrEF
3. T2DM
4. CKD3

Medications: List any current medications the patient is taking, including dosage and frequency.

Ex:

For CAD patient takes ASA 81mg and atorvastatin 80mg.

For HFrEF, he is on metoprolol XL 100mg daily, Losartan 50mg daily, Spironolactone 50mg daily, Jardiance 10mg daily, Furosemide 40mg BID.

For T2DM he takes metformin 1000mg BID with meals, and Jardiance 10mg as above.

Allergies: Note any known allergies the patient has, including medication, food, or environmental allergies.

Social History: Mention relevant social factors such as smoking status, alcohol consumption, drug use, occupation, and living situation.

Ex: The patient denies drinking alcohol. He is a former smoker (~40pack year hx) but stopped in 2018 after his NSTEMI. He is retired and currently living with his daughter. He is uninsured.

Family History: Include any pertinent family medical history, especially if there are hereditary conditions or diseases.

Ex: Hx of heart disease in his father and T2DM in his mother.

Objective

This will contain objective data such as vital signs, physical examination, labs, imaging exams.

Vital Signs: Record the patient's vital signs, including temperature, blood pressure, heart rate, respiratory rate, and oxygen saturation upon presentation.

Ex: Blood pressure: 150/90 mmHg | Heart rate: 100 bpm | Respiratory rate: 24 breaths per minute | Temperature: 37.0°C (98.6°F) | Oxygen saturation: 89% on room air -> 96% on 2L NC

Physical Examination: Document the findings from the physical examination, including any abnormalities or notable observations in each body system.

Ex:

General: Alert and oriented, but appears fatigued and uncomfortable.

Cardiovascular: regular rate and rhythm, S3 gallop present, no murmurs or thrills appreciated, bilateral lower extremity edema.

- Respiratory: Increased respiratory effort, bilateral coarse crackles on lung bases, no wheezes.

- Abdomen: Soft, non-distended, normoactive bowel sounds, no tenderness or organomegaly appreciated.

- Extremities: Bilateral pitting edema extending to knees, intact pulses.

- Neurological: Alert and oriented, no focal deficits appreciated.

- Skin: Warm and dry, no diaphoresis or rashes appreciated.

Laboratory and other diagnostic tests: Summarize the results of any laboratory tests, imaging studies, or other diagnostic procedures ordered for the patient. You don't necessarily need to go over all labs, but you should mention all the abnormal ones as well as pertinent negatives for your differential:

Ex: Labs notable for: Na 130; K 5.0; Cr 1.8; other electrolytes unremarkable.

CBC unremarkable. NT-proBNP 1500. Troponins negative x3.

EKG demonstrating T wave inversions in V1-V3 which are unchanged from prior, sinus tachycardia.

CXR demonstrating bilateral congestion consistent with pulmonary edema.

Assessment and Plan

Writing a good assessment and plan (A&P) for a patient admission involves summarizing the patient's medical history, current condition, and outlining the proposed course of action. Here's how to do it effectively:

- Rephrase your one liner adding your initial diagnostic impression in a very brief manner.

Ex. 65-year-old male with PMH of NSTEMI s/p PCI (to LAD in 2018), CAD, HFrEF (EF 40% 11/2023) T2DM, and CKD3 who presents with one week of worsening SOB and BLE edema concerning for heart failure exacerbation.

Now you will divide the patient's problem list in a way it makes sense (symptoms associated with the same underlying problem can be grouped together). Provide a concise assessment of the patient's current medical condition, including any diagnoses or differential diagnoses, and use the objective data to support your hypothesis. Outline any immediate interventions or treatments needed to stabilize the patient, such as medications, procedures, or consultations, and describe the proposed plan for ongoing management, including medications, therapies, and monitoring.

Ex:

- # Hypoxemic Respiratory Failure

- # BLE edema

- # Heart failure exacerbation

Presentation most consistent with HF exacerbation given known diagnosis, progression of symptoms, and non-adherence with medical regimen. CXR showing bilateral pulmonary edema, BNP elevated to 1.5K, crackles on auscultation, and elevated JVP support diagnosis. Less likely COPD given no productive cough, fever, or WBC count. Low concern for PE at this time, wells score 1.5 (for tachycardia, low risk).

- Will diurese with IV Lasix 80mg bid and monitor UO

- Strict I/Os with FBG of -1 to -2L per day

- Repeat TTE

- Keep on telemetry monitoring

- Monitor electrolytes and replete for K>4 and Mg>2

- PT/OT

CAD s/p PCI

Hx of NSTEMI

Low concerns for ACS at this time given absence of chest pain, negative troponins x3, and unchanged EKG.

-Continue home aspirin and atorvastatin.

AKI on CKD

Most likely cardio-renal syndrome given visible signs of congestion. Defer urine electrolytes given treatment won't change based on results.

-Diurese as per above

-Hold Jardiance, losartan, and spironolactone until creatinine back to baseline

-Monitor BMP daily

-Avoid nephrotoxins and contrast

-Consider further workup with renal US if Cr not improving despite diuresis

T2DM

Last A1c 7.2 on outpatient visit. Home regimen includes metformin 1g BID and Jardiance.

-Hold Metformin while hospitalized, and Jardiance as above

-Will put in sliding scale and monitor need for basal bolus regimen

Uninsured

-Obtain social work consult.

-Anticipated Disposition: Provide an anticipated disposition plan, such as discharge home, transfer to another facility, or admission to a specific service within the hospital.

-Contingency Plans: Address any potential complications or changes in the patient's condition and outline contingency plans accordingly

Placement

Patient placement refers to the process of determining the most appropriate setting for a patient's care after they have been hospitalized. This decision is based on various factors, including the patient's medical condition, treatment needs, functional status, and available resources. Here are some possible places patients can go after hospitalization:

1. Home: Many patients are discharged directly to their homes, especially if they have a stable medical condition and adequate support from family members or home healthcare services. In some cases, patients may require assistance with activities of daily living or medical care at home.

*Home with home health: Home health care offers medical services at home, including nursing, therapy, and assistance with daily tasks. It's ideal for patients who need medical care but prefer to stay in familiar surroundings, such as those recovering from surgery, managing chronic conditions, receiving IV medications, or needing rehabilitation after hospitalization.

2. Inpatient Rehabilitation Facility (IPR): Patients who require intensive therapy or rehabilitation to regain strength, mobility, or function may be transferred to a rehabilitation facility. These facilities provide specialized therapies such as physical therapy, occupational therapy, and speech therapy to help patients recover from injuries, surgeries, or medical conditions.

3. Skilled Nursing Facility (SNF – we pronounce “sniff”): Patients who need ongoing medical care and monitoring but do not require hospital-level care may be transferred to a skilled nursing facility. SNFs provide round-the-clock nursing care, rehabilitation services, and assistance with activities of daily living for patients who are recovering from acute illness, surgery, or injury.

4. Assisted Living Facility (ALF): Assisted living facilities offer housing, meals, and supportive services for elderly or disabled individuals who need assistance with activities of daily living but do not require skilled nursing care. These facilities provide a level of independence while offering assistance with tasks such as medication management, meal preparation, and personal care.

5. Long-Term Care Facility: Patients who have complex medical needs or require ongoing assistance with activities of daily living may be placed in a long-term care facility. These facilities provide comprehensive medical care, assistance with personal care, and social activities for residents who are unable to live independently.

6. Hospice Care: Patients with terminal illnesses or life-limiting conditions may choose to receive hospice care for end-of-life comfort and support. Hospice care focuses on providing pain management, symptom control, emotional support, and spiritual care for patients and their families in their homes, hospice facilities, or nursing homes.

Code status

"Code status" refers to a medical directive that indicates a patient's preferences regarding resuscitation efforts in the event of cardiac or respiratory arrest. It determines whether healthcare providers should initiate cardiopulmonary resuscitation (CPR) or other life-saving measures if a patient's heart stops beating or if they stop breathing. Common code status options include "Full Code," indicating that all resuscitative measures should be taken, and "Do Not Resuscitate (DNR)," indicating that the patient does not wish to receive CPR or other aggressive interventions, "do not intubate" (DNI), when a patient does not wish to be intubated. Code status discussions often occur between patients, their families, and healthcare providers to ensure that medical care aligns with the patient's wishes and values.

Of note, a patient can be DNR only, without being DNI (if decompensated from a respiratory standpoint, ok to be intubated when there's a perspective of improvement, but does not wish to receive CPR). On the other hand, it should be made clear that being DNI but not DNR is not appropriate.

The decision about patient placement is made collaboratively by the patient, their family members, healthcare providers, and care coordinators, taking into account the patient's preferences, medical needs, insurance coverage, and available resources. The goal is to ensure that patients receive the appropriate level of care in a safe and supportive environment to facilitate their recovery and well-being.

Advance directives

Advance directives are legal documents allowing individuals to outline their preferences for medical treatment if they become unable to communicate. They include a living will specifying medical interventions desired or refused, a durable power of attorney for healthcare appointing a trusted decision-maker, and a do-not-resuscitate (DNR) order instructing against CPR. These documents ensure that healthcare decisions align with the person's wishes and values even if they cannot express them at the time.

POA

Power of attorney (POA) is a legal document where someone (the "principal") gives another person (the "agent") the authority to act on their behalf in legal, financial, or healthcare matters. There are different types, including general, limited, durable, and healthcare power of attorney, each granting specific powers to the agent. POA documents must be signed and notarized, and it's crucial to carefully consider who to appoint as an agent to ensure that decisions align with the principal's wishes.



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