Write Ups

The written History and Physical (H&P) serves several purposes:

- Y. It is an important reference document that gives concise information about a patient's history and exam findings at the time of admission. In addition, it outlines a plan for addressing the issues which prompted the hospitalization/visit. This information should be presented in a logical fashion that prominently features all data immediately relevant to the patient's condition.
- ⁵. It is a means of communicating information to all providers who are involved in the care of a particular patient.
- *. It allows students and house staff an opportunity to demonstrate their ability to accumulate historical and examination based information, make use of their medical fund of knowledge, and derive a logical plan of attack.
- [£]. It is an important medical-legal document.

The H&P is not:

- 1. An instrument designed to torture Medical Students and Interns.
- ^Y. Meant to cover unrelated bits of historical information.
- *. Should neither require the killing of more then one tree nor the use of more then one pen to write!

Knowing what to include and what to leave out will be largely dependent on experience and your understanding of illness and pathophysiology. If, for example, you were unaware that chest pain is commonly associated with coronary artery disease, you would be unlikely to mention other coronary risk-factors when writing the history. Until you gain experience, your write-ups will be somewhat poorly focused. Not to worry; this will change with time and exposure. Several sample student write-ups can be found at the end of this section.

Chief Complaint or Chief Concern (CC):

One sentence that covers the dominant reason(s) for hospitalization. While this has traditionally been referred to as the Chief Complaint, Chief Concern may be a better description as it is perhaps less pejorative/confrontational sounding.

"Mr. Smith is a γ year old male admitted for evaluation of increasing chest pain."

History of Present Illness (HPI):

The HPI should provide enough information without being too inclusive. Traditionally, this covers all events leading to the patient's arrival in the ER (or the floor, if admission was arranged without an ER visit). Events that occurred after arrival are covered in a separate summary paragraph that follows the pre-hospital history. Some HPIs are rather straight forward. If, for example, you are describing the course of an otherwise healthy $\forall \cdot$ year old who presents with \forall days of cough, fever, and shortness of breath, you can focus on that time frame alone. It gets a bit more tricky when writing up patients with pre-existing illness(es) or a chronic, relapsing problem. In such cases, it is important to give relevant past history "up front," as having an awareness of this data will provide contextual information that will allow the reader to better understand the most recent complaint. If, for example, a patient with a long history of coronary artery disease presents with chest pain and shortness of breath, it might be written as follows:

"Mr. S is a γ yr old male with known coronary artery disease who is: -Status Post τ vessel CABG in $\epsilon/\Lambda \tau$.

-Suffered recurrent chest pain in 17/97 which ultimately lead to catheterization and stent placement in a mid-LAD lesion.

-Recathed in $1/9\circ$ for recurrent chest pain at rest; at that time there was no significant change compared to cath of 17/97; patient was therefore continued on medical therapy. -Known to have an Ejection Fraction of $7\cdot$? with inferior and lateral akinesis by echo in 7/97

-No prior episodes of heart failure.

-Last Exercise Tolerance Test was performed in 1/9V and showed no ischemia at $1 \cdot METS$ of activity.

Mr. S was well until last week ($^{4/4}$), when he began to experience recurrent episodes of chest pain, exactly like his past angina, after walking only one block. This represented a significant change in his anginal pattern, which is normally characterized as mild discomfort which occurs after walking vigorously for A or 4 blocks. In addition, 1 day prior to admission, the pain briefly occurred while the patient was reading a book. He has also noted swelling in his legs over this same time period and has awakened several times in the middle of the night, gasping for breath. In order to breathe comfortably at night, Mr. S now requires the use of r pillows, whereas in the past he was always able to lie flat on his back without difficulty. Mr. S is known to have poorly controlled diabetes and hypertension. He currently smokes r packs of cigarettes/day. He denies fevers, chills, cough, wheezing, nausea vomiting or other complaints."

That's a rather complicated history. However, it is obviously of great importance to include all of the past cardiac information "up front" so that the reader can accurately interpret the patient's new symptom complex. From a purely mechanical standpoint, note that historical information can be presented as a list (in the case of Mr. S, this refers to his cardiac catheterizations and other related data). This format is easy to read and makes bytes of chronological information readily apparent to your audience. While this data is technically part of the patient's "Past Medical History," it would be inappropriate to not feature this prominently in the HPI. Without this knowledge, the reader would be significantly handicapped in their ability to understand the patient's current condition. Knowing which past medical events are relevant to their area of current concern takes experience. In order to gain insight into what to include in the HPI, continually ask yourself, "If I was reading this, what historical information would I like to know?" Note also that the patient's baseline health status is described in some detail so that the level of impairment caused by their current problem is readily apparent to the reader.

The remainder of the HPI is dedicated to the further description of the presenting complaint. As the story teller you are expected to put your own spin on the write-up. That is, the history is written with some bias. You will be directing the reader towards what you feel is the likely diagnosis by virtue of the way in which you tell the tale. If, for example, you believed that the patient's chest pain was of cardiac origin, you would highlight features that supported this notion (e.g. crushing chest pain with activity, relieved with nitroglycerin, preponderance of coronary risk factors etc.). These are referred to as "pertinent positives." This is not misleading; all of the details written are based on facts and no important features have been omitted. The reader retains the ability to provide an alternative interpretation of the data if he/she so wishes. A brief review of systems related to the current complaint is generally noted at the end of the HPI. This also includes "pertinent negatives" (i.e. symptoms which the

patient does not have). If present, these symptoms might lead the reader to entertain alternative diagnoses. Their absence, then, lends support to the candidate diagnosis suggested in the HPI.

Occasionally, patients will present with two (or more) dominant, truly unrelated problems. First, spend some extra time and effort assuring yourself that they are truly unconnected and worthy of addressing in the HPI. That being the case, present them as separate HPIs, each with its own paragraph.

Past Medical History (PMH):

This should include any illness (past or present) for which the patient has received treatment. Items which were noted in the HPI (e.g. the cardiac catheterization history mentioned previously) do not have to be re-stated. You may simply write "See above" in reference to these events. All other historical information should be listed. Detailed descriptions are generally not required. If, for example, the patient has hypertension, it is acceptable to simply write "HTN" without giving an in-depth report on the duration of this problem, medications used to treat it, etc. (unless this has been a dominant problem, requiring extensive evaluation...as might occur in the setting of Secondary Hypertension resulting from Renal Artery Stenosis). Also, get in the habit of looking for the data that supports each diagnosis that the patient is purported to have. It is not uncommon for misinformation to be perpetuated when past write-ups are used as the template for new H&Ps. When this occurs, a patient may be tagged with (and perhaps even treated for) an illness which they do not have! For example, many patients are noted to have Chronic Obstructive Pulmonary Disease (COPD). This is, in fact, a rather common diagnosis but one which can only be made on the basis of Pulmonary Function Tests (PFTs). While a Chest X-Ray and smoking history offer important supporting data, they are not diagnostic. Thus, it is not unusual to see "COPD" repeatedly appear under a patient's PMH on the basis of a suggestive CXR and known smoking history, despite the fact that they have never had PFTs! So, maintain a healthy dose of skepticism when reviewing old records and get in the habit of checking on the primary information yourself.

Past Surgical History (PSH):

All past surgeries should be listed, along with the rough date when they occurred.

Medications (MEDS):

Includes all currently prescribed medications as well as over the counter and non-traditional therapies. Dosage and frequency should be noted.

Allergies/Reactions (All/RXNs):

Identify the specific reaction that occurred with each medication.

Social History (SH):

This is a broad category which includes:

- Alcohol Intake: Specify the type and quantity.
- Cigarette smoking: Determine the number of packs used per day and the number of years which the patient has smoked. When multiplied this is referred to as "pack years." If they have quit, make note of when this occurred.
- Other Drug Use: Specify type, frequency and duration.
- Marital Status:
- Sexual History:

- Work History (type, duration, exposures):
- Other (e.g. travel, pets, hobbies):

Family History (FH):

This includes history of illnesses within the patient's immediate family. In particular, seach for a history of cancer, coronary artery disease or other heritable diseases among first degree relatives.

Obstetrical History (where appropriate):

Review of Systems (ROS): As mentioned previously, the most important ROS questioning (i.e. pertinent positives and negatives related to the chief complaint) is generally noted at the end of the HPI. The responses to a more extensive review which covers all organ systems are placed in this "ROS" area of the write-up. In actual practice, most providers do not document such an inclusive ROS. The ROS questions, however, are the same ones that, in a different setting, are used to unravel the cause of a patient's chief complaint. Thus, at this stage of your careers it is probably a good idea to practice asking all of these questions as well as noting the responses so that you will be better able to use them for obtaining historical information when interviewing future patients.

Physical Exam:

Generally begins with a one sentence description of the patient's appearance. Vital Signs: HEENT: Includes head, eyes, ears, nose, throat, oro-pharynx, thyroid. Lymph Nodes: Lungs: Heart: Carotids: Abdomen: Rectum: Genitalia/Pelvic: Extremities, Including Pulses: Neurologic:

- Mental Status
- Cranial Nerves
- Motor Strength
- Sensation (light touch, pin prick, vibration and position)
- Reflexes, Babinski
- Cerebellar Function, Observed Ambulation

Lab Results, Radiologic Studies, EKG Interpretation, Etc.:

Assessment and Plan:

It's worth noting that the above format is in no way written in stone. When you're exposed to other styles, think about whether the proposed system is logical and readily comprehensible. Then incorporate those elements that make sense into your future write-ups.

SAMPLE WRITE UP #1

Location: A-GM

Mr. "B" is a $\forall \forall$ yo man with h/o CHF and CAD, who presented with increasing lower extremity edema and weight gain.

HPI: Mr. "B" has a long history of CHF subsequent to multiple MI's last in 1991. Cardiac cath at that time revealed occlusions in LAD, OMB, and circ with EF of $\circ \cdot$. ECHO in 1997 showed a dilated LV, EF of $7 \cdot -7 \circ$., diffuse regional wall motion abnormalities, 7 + MR and trace TR. His CHF has been managed medically with captopril, lasix, metolazone, and digoxin. Over the past 7 mos he has required increasing doses of lasix to control his edema. He was seen 7 wks ago by his Cardiologist, at which time he was noted to have leg, scrotal and penile edema. His lasix dose was increased to $17 \cdot$ bid without relief of his swelling.

Over the past week he and his wife have noticed an increase in his LE edema which then became markedly worse in the past two days. The swelling was accompanied by a weight gain of \cdot lb in \cdot days ($\cdot \vee \circ \cdot \wedge \circ$ lb) as well as a decrease in his exercise tolerance. He now becomes dyspneic when rising to get out of bed and has to rest due to SOB when walking on flat ground. He has \cdot pillow orthopnea, denies PND. His chronic cough has worsened and is now productive of "transparent" sputum with no hemoptysis. He has occ audible wheeze. Denies CP/pressure/palpitations/diaphoresis. Occ nausea/no vomiting. He eats limited quantities but does not salt or fluid restrict--eating canned soup and drinking $\cdot - \wedge$ glasses liquid/day. He has increased urinary freq. but decreased amount. He states he has been taking all prescribed medications.

PMH:	CHF: as above MI Afib: on coumadin Pacemaker placed in $^{r}/^{r}$ for afib/flutter and slow ventricular response HTN Chronic renal insufficiency: BUN/Cr stable on $^{1/r}/^{r}$, $^{r}/^{r}$, $^{r}/^{r}$, DM: controlled with glyburide. Admitted for hypoglycemia in $^{r}/^{r}$.
PSH:	Tonsillectomy
MED:	Lasix ۱۲ · mg BID Metolazone ° mg gd Captopril ° · mg TID Digoxin · , ۱۲ ° mg qd KCl coumadin [£] mg qd Glyburide ^۲ , ° mg BID Colace ¹ · · mg BID
ALLERGIES:	No Known Drug Allergies
SMOKING	None
ALCOHOL	None
OTHER	None

SUBSTANCE USE	
SOCIAL HISTORY:	Married for ε° years, sexual active with wife. Three children, γ grandchildren, all healthy and well; all live within $\circ \cdot$ miles. Retired school teacher. Enjoys model car building. Walks around home, shopping but otherwise not physically active.
FAMILY HISTORY	+ sister and mother with DM, father with CAD, age onset $\circ \cdot$. Brother with leukemia.
ROS	If written, would be present here.
PE:	 VS: T ٩٧, ١, P٦°, BP ١١٦/٦٦, OYSat ٩٨% on YL NC GEN: elderly man lying in bed with head up, NAD HEENT: NCAT, multiple telangiectasias on face and nose, EOMi, PERRL, OP-benign NECK: thyroid not palpable, no LAD, carotic pulse Y+B, no bruits, no JVD RESP: +dullness to perc at right base, +ant wheezes, +crackles \/Y way up chest bilat. COR: rrr, +Y/٦ holosystolic murmur at apex radiating to axilla, no gallops ABD: +BS, distended, nontender, no HSM, liver percussed to ⁴cm at MCL PULSES: Y+femoral B, Y+ PT/DP B EXT: Y+ edema to lower back, abdomen including genitals, hyperemia over ant., legs bilat, warm, non-tender; non clubbing, cyanosis SKIN: 4 cm ulcer on R buttock with central scabbing, non- tender, no discharge NEURO: AOXY; difficulty remembering events, dates; remainder of exam nonfocal
LABS/ DATA:	 Na ^{\γ}^A, C[\]^q[¬], BUn ^{oq}, Glu ^q^γ, K ^ε, ^ε, CO^γ ^ε, ^A, CR ^ε, WBC ^q, PLT ^{\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\}
ACCECCMENTE/	$\sqrt{2}$

ASSESSMENT/ $\gamma\gamma$ year old man with h/o CHF following MI, chronic renal

insufficiency and venous stasis admitted with worsening edema and DOE. His symptoms are most consistent with incrasing CHF-biventricular-which would account for both his pulmonary congestion as well as his peripheral edema. His renal disease is a less likely explanation for his extensive edema as his BUN/Cr have remained stable throughout. However, his low albumin which could contribute to his edema may be due to renal losses.

PLAN

So if his edema is due to CHF, why has it become gradually and now acutely worse? Possibilities include: `) worsening LV function, `) another MI, ") worsening valvular disease, \pm) poor compliance with medications or °) excess salt and water intake. His ECHO today shows no change in his EF, but there is marked wall motion abnormalities with akinesis. There is no evidence in his history, EKG, or enzymes for current ischemia/infarct. He does have MR and TR and his valvular disease may in part account for his worsening symptoms though his estimated PA pressure is unchanged and his LA is not dilated. The most likely precipitant of his failure is a combination of poor compliance with medication and fluid overload from excessive intake. We will continue to investigate the possibility of a structural precipitant for his deterioration and treat his current symptoms.

- Pulm: his wheezing, crackles, and oxygen requirement are all likely due to pulmonary congestion from LV dysfunction. He has no signs, symptoms of pulm infection.
 - \circ 7 to maintain sat greater than 90%
 - treat cardiac disease as below
- Y. Cardiac: As above his picture is consistent with CHF with no clear precipitant. Will continue to evaluate structural disease as precipitating factor and treat fluid overload.
 - Strict I/O's. Daily weights
 - Fluid restriction to \,•L
 - Low salt diet
 - Lasix [∧] · mg IV with IV Metolatzone now and Q[∧].. With goal diuresis of ^γ ^r L/day
 - Increase digoxin to ۲°mg qd
 - Continue captropril •• mg TID
 - Check electrolytes, renal fxn and digoxin level in am
 - Education about appropriate diet
 - Repeat Echo and compare with old film
 - Consider Cardiology consult if fails to improve, needs invasive hemodynamic monitoring or cath
- ۳. GI
- Continue colace
- Renal: We will continue to evaluate whether he could be losing protein from his kidney leading to his increasing

edema.

- Check urine prot/cr ratio
- \circ UA
- •. DM: His sugars have been well-controlled on current regimen
 - Continue glyburide
 - ADA YV•• calorie diet
 - FS BS qac and qhs

Signed by:

SAMPLE WRITE-UP #۲

۱/۱۹/۹۸, ۲۱:٤٤ MEDICAL SERVICE STUDENT ADMISSION NOTE

Location: A-GM

Mr. "S" is a 3° year old man with a history of Atrial Fibrillation, S/P Distant stroke, who has been off anticoagulation for ξ mos during evaluation of slow GI Bleed. He presents with 3° complaints:

1. Acute eye pain with difficulty seeing.

^Y. Several day history of a cough.

HPI: \land Visual changes: Patient has a known history of atherosclerotic and hypertensive cerebrovascular disease: workup for dizziness/?TIA's in ${}^{4}{}^{/9}{}^{\circ}$ revealed critical carotid stenosis and old R basal ganglia and L occipital infarcts on CT. A cerebral angiogram was complicated by a CVA manifested as R arm weakness with resolution. He subsequently had a R CEA in ${}^{199}{}^{\circ}$ and no further TIA's.

Patient has had PAF for past ⁷+ years. ECHO in ¹⁹⁹⁷ showed nl EF and marked LA enlargement (⁷cm) with mild-mod MR. Hehad been anticoagulated with coumadin until last summer. Developed GIB and chronic iron def. anemia. Coumadin d/c'd prior to colonscopy in Sept. and has not been restarted.

Yesterday morning while eating lunch patient had the sudden onset of sharp, R eye pain accompanied by decrease in vision. Pain was worse with coughing, unchanged by position, unrelieved by tylenol, aspirin or percocet. When the pain started, he "couldn't see the clock." He also had difficulty determining the numbers on the telephone. No blurred vision or diplopia. Vision is the same whether he covers right or left eye. He had nausea and vomiting x^{γ} --NB/NB at the onset of the pain. Was unable to give niece directions to hospital--unable to decide whether to make right or left turns. Pain and visual changes persisted through the night. No photophobia. No dizziness, weakness, dysarthria, CP, palpitations.

^Y. Cough: Patient has history of COPD with ^Y + pack year smoking history and most recent PFT's showing mild deficits. Over the past few days he has noted increased dyspnea, wheezing, and sputum production. Sputum still clear, no hemoptysis and no fevers noted. No orthopnea or PND.

PMH: PAF

	? CAD: ETT ^{\/\quarterlinestimestimestimestimestimestimestimestim}
PSH:	R CEA R orchiectomy at age ° for traumatic injury Cataract s/p removal and implant placement on right
MEDS:	Ecotrin ^۳ [°] mg po qd Verapamil SA ¹ ^A · po qd Lansoprazole ¹ ^o po qd Dilantin ^r [•] · po qhs Atrovent [£] puffs QID Vanceril [£] puffs BID Colace ¹ [•] · mg po BID
ALLERGIES:	No Known Drug Allergies
SMOKING	י pack year hx, now י pack per day.
ALCOHOL	Heavy use in past, quit ° years ago. None current.
OTHER SUBSTANCE USE	None
SOCIAL HISTORY:	Lives with roommate in Rockland, MA. Heterosexual, not currently active. Never married, no children. Worked in past as architect, though currently on disability. Enjoys walking and reading.
FAMILY HISTORY	Brother and father with CAD. Brother with CABG at age °°. Father with multiple strokes. Mother with DM.
PE:	VS: T ``, PA9, irreg irreg BP ``, RR "° O' Sat ٩٨% RA GEN: Obese, pale man turning his head side to side to see us with labored breathing. HEENT: NCAT, pupils L larger than R. Both reactive to light. Discs sharp. EOMI. Left Homonymous hemianopia. Temporal arteries nontender. Conjunctiva clear. Decreased hearing of high

	freq on left. OP-benign NECK: CEA scar on right. No LAD. No JVD. Carotic pulse $^{+}$ on right, $^{+}$ on left. RESP: CTP. + audible wheeze. Good aearation. Occ. Wheezes on ausc throughout. Coarse insp crackles at bases CAR: PMI at L lower sternal border. nl s $^{+}$ s $^{+}$. II/VI systolic crescendo-decrescendo murmur at LUSB. ABD: Obese + nl BS. Soft. Nontender. Liver nonpalpable. Liver $^{+}$ cm at MCL. RECTAL: OV neg in ER MS: Decreased ROM at shoulders PULSES: Fem R $^{+}$ L + $^{+}$. DP $^{+}$ H. PT $^{+}$ H EXT: ? clubbing, no cyanosis. No edema. Warm, well-perfused. NEURO: AOX $^{+}$; Able to see clock, unable to tell time. Unable to give directions from home to grocery store. Speech intact. Naming intact. Drawing clockface required prompting to put in numbers on left side. Min neglect for left side. CN: II: as above III, IV, VI: as above V: decreased light touch on right, MM $^{\circ/^{\circ}}$ B VII: muscles of facila expression intact IX, X: palate symmetric XI: SCM, Trap $^{\circ/^{\circ}}$: XIII: Tongue midline Motor: Strength $^{\circ/^{\circ}}$: biceps, triceps, grip, quad, hamstring, plantarflex, dorsiflex. F-N slight int. tremor on left. RAM: slowed on left. ? pronator drift on left. Gait: unsteady. Able to walk on heels not toes. Sensory: Slightly decreased light touch on right. Romberg neg.
LABS/ DATA:	Reflexes. Biceps/Bracho. $(+ B. Khee/ankle. + 10es)$ equivocal. Labs $1/1^{9}$. Na $(\%, C) (, BUn)(\%, Glu)(\%, K), cO()(0, 2), CO ()(0$
	Head CT: new well-demarcated infarct in R occipitoparietal region. Old lacunar infarcts and L occipital infarct. No evidence hemorrhage. No shift in midline.
ASSESSMENT/ PLAN:	'o year old man with h/o PAF, HTN, CVA now presents with visual field deficits and spatial perception difficulty. Story of the sudden onset of neurologic deficits while awake, eating lunch in the setting of chronic intermittent atrial fibrillation is most consistent with embolic stroke. Infarction was confirmed with CT showing lesion in R PCA distribution. Patient has multiple risk factors for cardiogenic embolization from afib: h/o previous

stroke, hypertension, age over *io*, increased LV size, and valvular disease. Given his carotid disease artery-artery embolization is possibility but less likely becasue *i*) less common than cardiac embolization and *i*) his current infarct is in the posterior curculation.

Visual disturbances could also be caused by temporal arteritis: though he does have a temporal headache, he has no tenderness and his visual defect is a bilateral loss of the left visual fields which is consistent with a cortical as opposed to a retinal injury.

- 1. Neuro: story and imaging consistent with ischemic stroke to R PCA. Currently no signs of cerebral edema increased ICP.
 - \circ Head of bed elevated $\gamma \cdot$ degrees
 - Given duration of symptoms and location of infarction would not anticoagulate immediately. Will discuss when to restart coumadin to preent further embolization.
 - Continue aspirin
 - Monitor level of consciousness
 - Monitor electrolytes for signs SIADH
 - Consult occupational therapy for assistance with managing deficits
 - Continue dilantin for ?seizure disorder
 - Tylenol for headache
 - OOB with assistance only
- ^Y. Pulm: Currently febrile and with increased SOB and cough, all suggestive of Bronchitis/COPD flare.
 - Continue inhalers
 - Bactrim DS ¹ tab bid
 - Prednisone $\mathbf{1} \cdot \mathbf{mg}$ qd
 - Re-evaluate CXR this am. Consider change to IC abx if clear infiltrate
 - Encourage to stop smoking while in hospital
- ۳. CVS
 - Continue verapamil for hypertension
 - A Fib well rate controled
 - Anti-coagulation as discussed above and below
- ٤. GI
 - Arrange for Colonoscopy/EGD during this evaluation to complete evaluation GIB. Can use this information to make most informed decision about safety of reinitiating anti-coagulation
 - Continue lansoprazole
 - Guaiac all stools and follow for signs/sx ongoing GI bleeding
- HEME: Longstanding anemia now significantly worse. Given cerebral infarction and worsening dyspnea will transfuse for HCT over ^r ...

- Transfuse two units PRBC's
- Start multivitamin
- \circ Check CBC in am
- ID: Currently febrile. Likely due to COPD flare.
 Start bactrim
- Rheum: Shoulder pain consistent with subacromial bursitis.
 - Offer subacromial steroid injection.

Signed by: