

Guidelines for Writeups

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Principles

1. Purpose of the write-up
 1. to record your patient's story in a concise, legible and well-organized manner
 2. to demonstrate your fund of knowledge and problem-solving skills
2. Although there is no single authority on write-ups, these guidelines will help you avoid common mistakes. Further specific feedback from your teachers will illustrate the diversity of styles used in the successful write-up.
3. Overall length should be 3 - 6 pages.
4. The write-up's basic structure (suggested length of each section)
 1. Identifying information/chief complaint (1 - 2 lines)
 2. History of present illness ($\frac{1}{2}$ - 1 $\frac{1}{2}$ pages)
 3. Past medical history ($\frac{1}{4}$ - 1 page)
 4. Family history (5 - 10 lines)
 5. Social history (5 - 10 lines)
 6. Review of systems ($\frac{1}{4}$ - $\frac{1}{2}$ page)
 7. Physical examination ($\frac{1}{2}$ - 1 $\frac{1}{2}$ pages)
 8. Laboratory ($\frac{1}{4}$ - $\frac{1}{2}$ page)
 9. Assessment/Plan ($\frac{1}{2}$ - 1 $\frac{1}{2}$ pages)

Organization

1. Identifying information/chief complaint (II/CC)

"a 27 yo man with acute lymphocytic leukemia presents with 3 days of fever and chills" (*specific infections affect patients with leukemia*)

"a 64 yo woman with diabetes and steroid-dependent chronic obstructive lung disease presents with dysuria and hematuria" (*diabetes and lung disease will require active management in the hospital*)

"a 54 yo man with nephrolithiasis in 1982 who presents with acute shortness of breath" (*the nephrolithiasis is neither active nor relevant and belongs in PMH, not the II/CC*)

1. Principle: include the patient's
 1. age

2. sex
3. country of origin or race (if relevant)
4. other active and relevant medical problems (no more than 4)
5. summary of chief complaint, i.e., which symptoms are responsible for the hospitalization?

"Mr. Jackson is a 50 yo man with a 5 year history of ulcerative colitis who presents with a 2 day history of fever, lower abdominal pain and diarrhea."

2. Which "active and relevant medical problems" should appear in the H/CC? Include those that
 1. are critical to the understanding of the chief complaint, or
 2. will influence the management of the patient in the hospital.

Good examples:

Not-so-good example:

History of present illness (HPI)

1. Principles

1. describe the story chronologically
2. be attentive to detail
3. include pertinent negatives

2. Chronology

1. after review of your patient's case, you believe the chief complaint ("diarrhea and abdominal pain") may be a direct extension of his ongoing chronic problem ("ulcerative colitis"). Therefore, the HPI begins with the chronic problem.

HPI: "Mr. Jackson has a long history of ulcerative colitis, diagnosed 5y PTA by colonoscopy after he presented with bloody diarrhea and tenesmus. He has been taking sulfasalazine 2 g/d and steroid enemas prn since then and experiences bloody stools every 6-8 months. There have been no complications of sclerosing cholangitis, arthritis, toxic megacolon or skin/eye changes. His most recent colonoscopy 6 mo PTA was remarkable only for mild mucosal friability. He was in this usual state of health until..."

2. summaries of chronic problems include:
 1. original diagnosis – date of diagnosis, presenting symptoms and signs, diagnostic test
 2. current management and control of symptoms
 3. complications
 4. most recent objective measure of disease
3. Attention to detail – the well-characterized history includes:
 1. setting of the complaint
 2. intermittent/constant
 3. progressive, stable or improving
 4. any prior episodes
 5. duration
 6. aggravating or alleviating features
 7. associated symptoms
 8. If the complaint is pain, add:
 1. deep or superficial
 2. well or poorly localized
 3. radiation

"...He was in this usual state of health until 2 days PTA when, while sitting in a chair watching television, he developed the gradual onset of deep poorly localized LLQ abdominal discomfort without radiation, associated with the onset of fever to 101 and 4-5 watery and bloody bowel movements/d. The pain was 5/10, described as "cramps", occurred about 10 times/day and lasted 15-20 minutes. It was relieved temporarily by BMs, and unaffected by food or position..."

4. Pertinent negatives
 1. Principles - they include:
 1. symptoms related to the same organ system as the chief complaint (in this case, the gastrointestinal system)
 2. constitutional symptoms – fever, chills, weight change
 3. relevant epidemiologic data, risk factors and exposures

" There was no history of weight change, chills, dysphagia, odynophagia, nausea, vomiting, jaundice or melena. There was no history of ingestion of unpasteurized dairy products, well water or raw meat/fish; no exposures to antibiotics or other new medications; no homosexual activity; no camping or recent travel outside the city and no family members who became ill..."

2. The "pertinent negatives" reflect the differential diagnosis. The causes of abdominal pain, diarrhea and fever are bacterial or protozoan infections (well water, raw foods, dairy products, homosexual activity, travel, camping), antibiotic colitis (recent antibiotics) or food poisoning (similar illness in family members).
3. Only negative statements belong in the "pertinent negative" section. If you discover your patient ate unpasteurized goat cheese 1 day before the onset of his symptoms, you would tell the story chronologically:
"...on 3 d PTA the patient ate 4 slices of unpasteurized goat cheese given to him by a friend just returning from San Diego. He was in his usual state of health until 2d PTA when, while watching television...(etc)"
4. A common exception is to list all risk factors for a disease, whether positive or negative, in the "pertinent negatives" section (for example, in the HPI of a patient with chest pain, the discussion of risk factors for coronary artery disease --- high cholesterol, positive family history, diabetes, hypertension, smoking --- even if they are positive, appears at the "pertinent negatives" section).
5. Conclude the HPI with an explanation why the patient came to the hospital that day."...Because these symptoms did not improve with his usual steroid enemas, he came to the hospital for further evaluation."
6. See [Appendix 1](#) for complete HPI
7. Special HPI problem #1: PATIENT WAS EVALUATED ELSEWHERE AND TRANSFERRED TO YOUR SERVICE
 1. This best appears in the concluding remarks of the HPI:
"..recent travel outside the city, and no family members who became ill. Because these symptoms did not improve with his usual steroid enemas,

he went to his local physician who hospitalized him at St. Mary's hospital 1 d PTA. Evaluation there revealed moderate LLQ tenderness, g+ stool, +fecal leukocytes, Hct-33, WBC-11.2 and Creat 1.7. Plain films of the abdomen revealed a nonspecific gas pattern without dilated loops of bowel. He was given the working diagnosis of ulcerative colitis and treated with predisone 60mg/d. He was transferred to our hospital for further evaluation."

2. Relevant data collected before your evaluation (or your ER's evaluation), even if it includes physical findings and labs, belongs in the concluding remarks of the HPI.
8. Special HPI problem #2: TWO EQUALLY SIGNIFICANT PROBLEMS WERE RESPONSIBLE FOR THE PRESENT ADMISSION.

II/CC Mr. Jackson is a 50 yo man with long standing ulcerative colitis and diabetes who presents with a 2 d h/o fever, abdominal pain, diarrhea and poorly controlled diabetes.

HPI

1) Fever, abdominal pain, diarrhea – (as above)

2) Diabetes – Mr. Jackson has a 20 yo h/o diabetes, diagnosed after presenting to this hospital in 1972 with polyuria, weight loss and a glucose of 720.

Complications have included neuropathy (with frequent foot ulcers) and retinopathy (background only). There is no evidence of nephropathy (Creat – 1.0, no proteinuria 4 mo PTA). His current fasting blood sugars have been 180-240 on NPH insulin, 30/AM and 15/PM. Two days PTA, coincident with the diarrhea, he noted polyuria, nocturia x 2, and an increase in his fasting sugar to 350. On the morning of admission the glucose was 600. His oral intake is unchanged.

1. Many patients have more than one active medical problem, but in most, only one led to the admission (HPI), and the remainder (even though they are active) are recorded in the PMH. On rare occasions, two problems have required admission.
2. *Solution #1* (best solution). Record the appearance of symptoms chronologically.

- For example, if Mr. Jackson developed significant angina on the day before admission:

"...Mr. Jackson was in his usual state of health until 2 d PTA when, while watching television...LLQ pain...associated with watery...These symptoms continued until 1 d PTA when he developed the abrupt onset deep substernal pressure radiating to his left arm... There was no history of (pertinent negatives, which now must reflect, in addition to those above, the differential of chest pain)..."

- If you conclude the diarrhea and chest pains are separate medical problems, you will discuss them separately in the assessment, i.e.,

Assessment

1) Abdominal pain, diarrhea and fever – the differential diagnosis of this is...

2) Chest pain – the differential diagnosis of this is...

3. *Solution #2:* Sometimes both problems are direct extensions of different chronic problems. The simplest way to describe these is to list them separately.

Past medical history (PMH)

1. Other medical problems

1. Include all medical problems (active or remote) that were not responsible for the hospitalization.
2. Outline the problems from the most recent to the most remote. Many clinicians call this a "problem list" and insert it between the II/CC and HPI.
3. Include data listed under II-B-2-b above. Examples:

1) COPD: diagnosed 1985, presented with chronic cough; experiences two block DOE with current treatment of metaproterenol inhaler and Theodur; never required steroids, never intubated, hospitalized x 2 for exacerbations 1986 and 1989; 1991 PFTs FEV1 = 1.8 L, FEV1/FVC = 0.65; 8/92 CXR = hyperinflated, normal heart.

2) Cellulitis: 1981, group A streptococcal bacteremia, treated with IV PCN, no recurrences.

2. Childhood illnesses and immunizations
3. Prior surgeries and deliveries
4. Medications - list all medications and doses
5. Allergies - record the reaction experienced
6. Substance abuse
7. Transfusions
8. Sexual history

Family history

1. construct a family tree
2. specify whether there is a family history of DM, HTN, CA, heart disease, or illness similar to HPI.

Social history

1. occupation(s)
2. social support
3. travel
4. religious affiliation

Review of systems

1. discuss all systems not already discussed in the HPI. Pertinent positive and negative symptoms dealing with the present illness belong in the HPI, not the ROS
2. one suggested format appears in [Appendix 2](#). Some teachers may show you an abbreviated form.

Physical examination

1. record the physical findings in outline form. One suggested format appears in [Appendix 3](#)
2. be attentive to detail
3. be complete, describing positive and negative findings

Laboratory data

1. record data from your (or your ERís) evaluation of the patient.
2. a commonly used order is:
 1. electrolytes

2. complete blood count + differential
 3. urinalysis
 4. CXR
 5. EKG
 6. Microbiology
 7. Other
3. compare abnormal results to previous results from old records (e.g., CXR 2 cm diameter calcified right pulmonary nodule, unchanged from 1988; or EKG: Q waves in 2, 3 and F, which are new compared to 1/92)

Assessment/Plan: [see also the [Tips for Assessment/Plan page](#)] A complete assessment will:

1. state the problem, which usually is a symptom, sign, abnormal laboratory result or diagnosis
2. list a differential diagnosis for that problem
3. state which diagnosis is most likely and why, drawing on information from your recorded history and physical
4. state why other diagnoses in the differential are less likely
5. discuss the plan
 1. divide the plan in diagnostic (dx) and therapeutic (rx) sections
 2. state the reasoning behind this plan

1) Abdominal pain, diarrhea, fever: the presence of fever and blood in the stool suggests active inflammation of the intestinal mucosa, either due to ulcerative colitis, infections with invasive organisms, or ischemic colitis. Common invasive pathogens include *Campylobacter jejuni*, *Salmonella*, *Shigella*, enteroinvasive *E. coli*, *Clostridium difficile* and *Entameba histolytica*. The blood in the stool argues against *Giardia* and enterotoxigenic *E. coli*.

I favor the diagnosis of ulcerative colitis, because his symptoms are identical to prior episodes that responded to systematic steroids. Infectious diarrhea seems less likely because the patient lacks relevant exposures (i.e., ingestion of well water, unpasteurized dairy products, travel, homosexual activity) though these diagnoses are impossible to exclude without culturing the stool. The absence of a recent course of

antibiotics argues against *C. difficile*, and the young age and absence of other evidence of vascular disease argues against ischemic colitis.

Plan:

Dx:

1) Culture stool for enteric pathogens. Blood cultures since he is febrile and may be bacteremic.

2) Flat plate of abdomen to look for dilated loops of bowel (toxic megacolon is a complication of ulcerative colitis).

Rx:

1) Administer intravenous fluids: D5NS + 40 mEq KCL/L at 200 cc/h until patient is no longer postural, then switch to D5 1/2NS at 125cc/h. Will closely monitor the serum potassium, creatinine, blood pressure and will watch the patient for signs of volume overload (elevated CVP, lung crackles, S3).

2) Give methylprednisolone, 60 mg IV/d. Systemic steroids are indicated in patients with active ulcerative colitis when topical steroids are ineffective.

3) Avoid antidiarrheal agents because they may precipitate toxic megacolon.

Common mistakes

1. Pertinent negatives are missing. This section is difficult and requires that we thoroughly understand the differential diagnosis of our patient's complaint. To complete this section you must read about your patient's problem and discuss it with your resident.
2. Related complaints are discussed separately in the HPI. A patient with expanding ascites, for example, may experience simultaneous dyspnea, abdominal pain and edema. To discuss these 3 symptoms as separate problems in the HPI (i.e., as in II-B-8-b) would be a mistake. When in doubt whether symptoms are related, discuss the case with your resident.
3. Long narrative descriptions of physical signs prevent your reader from finding a particular sign at a glance. Not-so-good example:

Cardiac: neck veins at 6 cm of water, drop with inspiration, A > V wave. PMI: well-localized 5th ICS, 9 cm from midsternal line. Radial, brachial, femoral pulses 2 +. Left popliteal not felt. Right femoral

bruit. Posttibial and dorsalis pedis pulses 1+. S1 single, S2 physiologic split. 2/6 midsystolic murmur at LLSB and apex increases with Valsalva.

Better example:

Cardiac:

CVP - 6 cm water, decrease with inspiration, A > V

PMI - well-localized 5th ICS, 9 cm from midsternum

Ausc - S1 single, S2 physiologic split. 2/6 midsystolic murmur at LLSB and apex increases with Valsalva.

Pulses	DP	PT	P	F	R	B	C
Right	1+	1+	2+	2+	2+	2+	2+
Left	1+	1+	0	2+	2+	2+	2+

- Inattention to detail: a "soft systolic murmur" is inferior to "a 2/6 midsystolic murmur at the left lower sternal border, without radiation, that decreases with handgrip and Valsalva."
- Failure to use parallel reference points: in your chronologic HPI, describe all events as _____ (minutes/hours/days/months/years) prior to admission (PTA).
- Use of unfamiliar abbreviations: "the pt is STH prbm c SOB" is inferior to "the patient became dyspneic" Many abbreviations commonly used in other specialties are unknown in internal medicine. When in doubt, spell out the word. Briefhand and unfamiliar abbreviations will only bewilder your reader.
- Recording a "diagnosis" instead of a "finding" in your physical examination: Writing "findings consistent with RLL pneumonia" is inferior to:

8. Chest:

9. Inspection: symmetric excursion

10. Palpation: increased fremitus right posterior base; no crepitus/tenderness

11. Percussion: dullness right posterior base

12. Auscultation: bronchial breath sounds with occasional mid-inspiration crackles

13. at right posterior base

- Incomplete assessment/plan: "Hematemesis: probably varices. Plan: T & C 4 units, 2 16g IVs, consult GI" is only appropriate when you are experienced house officer on a busy call night. As a third year clerk, you should become a scholar on your patient's problems and demonstrate this in your assessment, discussing the complete differential diagnosis, separating the likely from the unlikely diagnoses and emphasizing the reasoning behind your plan.

Appendices

Appendix 1: The Complete HPI

"Mr. Jackson has a long history of ulcerative colitis, diagnosed 5y PTA by colonoscopy after he presented with bloody diarrhea and tenesmus. He has been taking sulfasalazine 2 g/d and steroid enemas prn since then and experiences bloody stools every 6-8 months. There have been no complications of sclerosing cholangitis, arthritis, toxic megacolon or skin/eye changes. His most recent colonoscopy 6 mo PTA was remarkable only for mild mucosal friability.

He was in this usual state of health until 2 days PTA when, while sitting in a chair watching television, he developed the gradual onset of deep poorly localized LLQ abdominal discomfort without radiation, associated with the onset of fever to 101 and 4-5 watery and bloody bowel movements/d. The pain was 5/10, described as "cramps", occurred about 10 times/day and lasted 15-20 minutes. It was relieved temporarily by BMs and unaffected by food or position. There was no history of weight change, chills, dysphagia, odynophagia, nausea, vomiting, jaundice or melena. There was no history of ingestion of unpasteurized dairy products, well water or raw meat/fish; no exposures to antibiotics or other new medications; no homosexual activity; no camping or recent travel outside the city, and; no family members who became ill. Because these symptoms did not improve with his usual steroid enemas, he came to the hospital for further evaluation."

Appendix 2: Sample format for Review of Systems

Gen: appetite, weight change, fevers night sweats

Head: headache, loss of consciousness, seizures, trauma

EENT: blindness, hearing loss, tinnitus, vertigo, otitis, sinusitis, frequent sore throats, oral sores, epistaxis

Resp: hemoptysis, cough, dyspnea, wheezing, pleurisy

CV: chest pain, dyspnea, palpitations, known murmur, edema, claudication

GI: hematemesis, melena, hematochezia, abdominal pain, dysphagia, change in bowel habits, jaundice

Menses: menarche, amount, irregularity, menopause, post menstrual bleeding

Rheum: pain, swelling, stiffness, locking of joint

Endo: polyuria, polydipsia, heat or cold intolerance

Hemat: prolonged bleeding, easy bruising, known anemia

Derm: rashes, pruritus, prior removal of mole or tumor

Neuro: paralysis, weakness, numbness, involuntary movements

Appendix 3: Suggested format for Physical Examination

1. General description

2. Vital signs

1. pulse and blood pressure - supine, seated, standing; rhythm of pulse

2. temperature

3. respiratory rate
3. Skin
 1. number of lesions
 2. description of lesions (macules, papules, etc)
 3. distribution
4. HEENT
 1. Cranium - shape, hair
 2. Eyes - conjunctiva/sclera, eye movements, pupils, retina (many discuss "eye movements, pupils, retina" under "neuro")
 3. Ears - auricle, tympanic membranes
 4. Nose - mucosa
 5. Throat - teeth, mucosa
 6. Neck - swellings, thyroid
5. Lymph - cervical, axillary, epitrochlear, inguinal
 1. Breasts
6. Respiratory
 1. inspection - symmetry
 2. palpation - crepitus, fremitus, tenderness
 3. percussion - resonance vs dullness, symmetry, position of diaphragms
 4. auscultation - vesicular vs bronchial sounds, adventitial sounds
7. Heart
 1. CVP - level, change with respiration, waves
 2. PMI - diffuse/well-localized, location
 3. Auscultation - S1, S2 (splitting); gallops, rubs, murmurs (grade, location, timing, quality, radiation, effect of maneuvers/respiration/position)
 4. Pulses
8. Abdomen
 1. inspection
 2. palpation - masses, tenderness, organomegaly
 3. percussion - liver span, flank or shifting dullness
 4. auscultation - bruits, bowel sounds, rubs
9. Genital/Pelvic
10. Rectal

11. Extremities

1. inspection - deformity, nodules, cyanosis, clubbing
2. palpation - pitting edema, joint effusions, tenderness
3. range of motion

12. Neurologic

1. mental status
2. stance/gait
3. skull/spine (many discuss this under "cranium" and "back")
4. cranial nerves
5. meninges (many discuss this under "neck")
6. motor
7. sensory
8. reflexes
9. coordination