# UNIVERSITY OF HAWAII
# JOHN A. BURNS SCHOOL OF MEDICINE
# DEPARTMENT OF MEDICINE

## THIRD-YEAR CLERKSHIP IN INTERNAL MEDICINE

## MEDICINE 532

# CLERKSHIP HANDBOOK

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## TOP 10 WAYS TO EXCEL ON THE INTERNAL MEDICINE CLERKSHIP

1. Set clear expectations with your residents and attendings. Strive to exceed their expectations and follow through on every assigned task.

2. Be actively involved in the care of your patients to the greatest extent possible. Go the extra mile. You will benefit as much as they will.

3. Always put forth your best effort for the team. Learning will follow. The more you put in, the more you will gain.

4. Read consistently and deeply about the problems your patients face. Raise what you learn in your discussions with your team and in your notes. Educate your team members about what you learn whenever possible.

5. Learn to deliver excellent presentations as early as possible. This will make you more effective in patient care and gain the confidence of your supervisors to allow you more involvement in patient care.

6. Ask questions when you don't understand something, can't figure something out, or feel lost or confused.

7. Speak up! Share your thoughts in teaching sessions, share your opinions about your patients' care, constructively discuss how to improve the education you are receiving and the systems around you.

8. Actively seek feedback from ALL your supervisors and take time to reflect on your experiences.

9. Keep your goals focused on the right priorities, in the following order: patient care, learning, and personal satisfaction. Keeping your priority focused on patient care will actually help you to meet all three goals.

10. Always be enthusiastic. Be caring and conscientious, and strive to deliver outstanding quality to your patients as you learn as much as you can from every experience.

*Adapted from*: Primer to the Internal Medicine Clerkship, Second Edition, A Guide Produced by the Clerkship Directors in Internal Medicine (CDIM), c2008, 2nd edition

# DESCRIPTION OF THE THIRD-YEAR CLERKSHIP IN INTERNAL MEDICINE

# INTRODUCTION

## Goal of Clerkship

The goal of the Third-Year Clerkship in Internal Medicine (a.k.a Medicine Clerkship) is to introduce students to the breadth and depth of Inpatient and Ambulatory Internal Medicine, the foundation for all clinical specialties.

Students will refine their clinical skills and knowledge through patient encounters, develop effective oral and written communication, demonstrate professional and ethical behavior, learn their role in the care team and demonstrate life-long learning. It is the student's responsibility to utilize this clerkship experience to accomplish these goals, and it is the Department of Medicine's responsibility to assure that every graduate of the John A. Burns School of Medicine has obtained Graduation Level competency in Internal Medicine.

Under the direction of JABSOM clinical faculty members, students will experience "patient-based learning" which includes, but is not limited to, evaluating patients through history-taking and physical examinations, developing comprehensive assessments with appropriate differential diagnoses, generating diagnostic and therapeutic plans, providing care and follow up appropriate to the clinical setting.

## Design of the Clerkship

Medicine Clerkship consists of 3.5-4 weeks of Inpatient Medicine (Inpatient Block) and 21 half-days of Ambulatory Medicine clinics (19 IM + 2 Neuro).

## Work Hours

The Internal Medicine Clerkship adheres to the JABSOM Statement of Student Workload:

> "In recognition of the multiple expectations placed on students in all JABSOM clinical rotations, including the need to acquire knowledge and clinical skills, attend conferences, read about patients and research learning issues, it is important to support students in ways that will optimize their ability to accomplish the above. Therefore, at a minimum:
>
> 1. On-call and post-call hours will be limited to allow students to learn effectively the following day;
> 2. Adequate time will be allocated as designated study time in all required clerkships; and
> 3. All experiences, including clinical responsibilities, will be reviewed periodically to determine the educational value."

The Clerkship complies with the following:

1. Work hours are limited to 80 hours/week, averaged over the duration of the rotation;
2. Students are given at least one 24-hour period off every 7 days;
3. Ambulatory third year students are excused from their clerkships to attend Friday Afternoon Didactics

Students are required to log their Inpatient work hours, and Inpatient & Ambulatory workload is periodically monitored by the Clerkship.

## Designated Study Time

Students are provided one **(1) half-day** of "designated study time" per week, **averaged** over the course of the clerkship. Students should be aware that during busier weeks of Inpatient Medicine, there may not be one full half-day per week available, so some weeks of Ambulatory Medicine may have multiple half-days for study. "Designated study time" is defined as time Monday through Friday and morning through afternoon away from patient care responsibilities that is **dedicated to studying**. This **includes** reading, completing write-ups, preparing for required clerkship activities, etc. Time should be used for educational activities as described above, not for leisure activities. Study time is granted when patient care tasks and any required activities have been completed.

Students are advised to notify their team and/or preceptor(s) when they are leaving to study.

Academic action may be initiated against students who abuse the "designated study time," as determined by the Department of Medicine Student Education Committee. Likewise, sites that do not follow the guidelines on "designated study time" should be brought to the attention of the clerkship director.

The day prior to the NBME Exam is designated a full day of “designated study time” for clerkship students.

## Days Off

Students will have at least **one (1)** day off per week, ***averaged*** over the course of the clerkship.

On Inpatient Medicine, there is one (1) day off each week, usually a Saturday or a Sunday. The day off will be determined by the site’s Hospital Site Coordinator and Chief Medical Resident.

On Ambulatory Medicine, there are usually two (2) days off each week, usually Saturday and Sunday.

## Holidays

Students will follow the holiday schedule that is observed at their training site.

## Attendance

Attendance is mandatory for <u>all</u> Medicine Clerkship orientations, lectures, and exams.

Students may take time away from clinical responsibilities when needed to access health care without fear of academic penalty. The Clerkship Director must be notified in advance.

## Absences

On each day you are absent, the Chief Medical Resident, Hospital Site Coordinator/Ambulatory Preceptor and Clerkship Coordinator must be notified. You will be required to make up any time missed unless otherwise informed.

If you are absent for more than three (3) days, totaled over the course of the clerkship, the clerkship is required to report this to the Office of Student Affairs.

Required make up for time missed <u>must</u> be completed by the end of Medicine Clerkship to receive Credit for the clerkship.

The Internal Medicine Clerkship adheres to the JABSOM Absentee Policy.

# CURRICULUM

JABSOM's Medicine Clerkship curriculum is based on the **Clerkship Directors in Internal Medicine (CDIM) Core Medicine Clerkship Curriculum Guide Version 4.0**. The CDIM Guide lists twenty-two (22) **Diagnoses**, twenty-six (26) **Clinical Conditions** and twenty-one (21) **Core Competencies**, with Learning Objectives for each.

JABSOM's Medicine Clerkship has consolidated the twenty-two (22) **Diagnoses** and twenty-six (26) **Clinical Conditions** into one list (see **List of Diagnoses and Clinical Conditions**).

JABSOM's Medicine Clerkship curriculum has been reviewed by JABSOM's Department of Medicine Student Education Committee (SEC) and is aligned with and fulfills JABSOM's Graduation Objectives. The JABSOM Graduation Objective(s) addressed by each curricular component are noted by roman numerals in parentheses.

## Learning Objectives

1. Each of the twenty-two (22) **Diagnoses** and twenty-six (26) **Clinical Conditions** on the **List of Diagnoses and Clinical Conditions** has specific Learning Objectives. These can be found in the **CDIM Core Medicine Clerkship Curriculum Guide Version 4.0**. (I-III)

2. Each of the twenty-one (21) **Core Competencies** has specific Learning Objectives. These can be found in the **CDIM Core Medicine Clerkship Curriculum Guide Version 4.0**. (I-VII)

## Learning Strategies

1. In both the inpatient and ambulatory setting, students should identify patients' relevant **Diagnoses** and **Clinical Conditions** and aim to meet the specific Learning Objectives for each, as outlined in the **CDIM Core Medicine Clerkship Curriculum Guide Version 4.0**. (I-III)

2. Students should aim to meet the Learning Objectives for each of the twenty-one (21) **Core Competencies** in the **CDIM Core Medicine Clerkship Curriculum Guide Version 4.0**. (I-VII)

3. Students should refer to the **References** found throughout the **CDIM Core Medicine Clerkship Curriculum Guide Version 4.0**. for further reading. (I-VII)

## Learning Environment

The learning environment for the Medicine Clerkship includes selected inpatient and ambulatory settings which promote life-long learning and development of appropriate professional behaviors in our students. We encourage students' ongoing feedback to identify and promptly correct any violations of professional standards. Any such concerns may be directed to the Clerkship Director at any time and/or anonymously submitted via the end-of-clerkship survey forms.

# ASSESSMENT IN THE THIRD-YEAR CLERKSHIP IN INTERNAL MEDICINE

## General Guidelines

The clerkship uses a "competency-based" system to assess whether students are meeting the **JABSOM Graduation Objectives** (Lifelong Learning Skills, Foundational Knowledge and Discovery, Patient Care, Communication and Interpersonal Skills, Population and Community Health, and Professionalism). This is based on:

a. Direct observation of the student's **clinical performance** throughout the clerkship
b. Performance on the **NBME Subject Examination** in Internal Medicine at the end of the clerkship
c. Observation of the student's fulfilling and following up on **Administrative and Professional responsibilities** on a timely basis, with respect, honesty, altruism, accountability, honor, excellence, integrity, and humility

## Clerkship Assessment Metrics

For each of the **JABSOM Graduation Objectives** (Lifelong Learning Skills, Foundational Knowledge and Discovery, Patient Care, Communication and Interpersonal Skills, Population and Community Health, and Professionalism), each student's **clinical performance** will be assessed as "does not meet," "approaches," "meets" or "exceeds" expectations. Please refer to the Medicine Clerkship Assessment Metrics for detailed explanations for each Graduation Objective and assessment rating.

During Inpatient Medicine and Ambulatory Medicine, students should actively and frequently (at least weekly) seek feedback from faculty, including attendings and residents. Hospital Site Coordinators and Ambulatory Preceptors should provide students with formal Mid-Clerkship feedback and end-of-Block or end-of-Clinics feedback, respectively. Finally, at the end of the Medicine Clerkship, the Department of Medicine Student Education Committee (SEC) will review each student's entire Medicine Clerkship performance, including their clinical performance (Inpatient and Ambulatory), NBME Exam score, and Professionalism.

## Credit

To earn Credit for Medicine Clerkship, students must "**Meet Expectations**" for all the JABSOM Graduation Objectives (see the Clerkship Assessment Metrics).

On the NBME Exam, students must score **60** or higher.

In addition, students must demonstrate competency in **Professionalism**, including fulfilling and following up on Administrative and Professional responsibilities on a timely basis, which is assessed throughout the clerkship.

## High Pass

To earn a High Pass, students must satisfy **2 of 3** criteria – 1) a recommendation for Honors by Inpatient Medicine, 2) a recommendation for Honors by Ambulatory Medicine, and 3) score **79** or higher on the NBME Exam.

In addition, they must demonstrate excellence in **Professionalism**, including fulfilling and following up on Administrative and Professional responsibilities on a timely basis, which is assessed throughout the clerkship.

## Honors

To earn Honors, students must satisfy **3 of 3** criteria – 1) a recommendation for Honors by Inpatient Medicine, 2) a recommendation for Honors by Ambulatory Medicine, and 3) score **79** or higher on the NBME Exam.

In other words, students must be recommended for Honors by both Inpatient and Ambulatory Medicine and score **79** or higher on the NBME Exam.

In addition, they must demonstrate excellence in **Professionalism**, including fulfilling and following up on Administrative and Professional responsibilities on a timely basis, which is assessed throughout the clerkship.

# INPATIENT MEDICINE: SPECIFIC REQUIREMENTS AND GUIDELINES

## Location

Sites: Students will be assigned to Kuakini Medical Center (KMC), Queen's Medical Center (QMC), and Kaiser Permanente Medical Center (KP).

Orientation: Students will be oriented to the site by its Hospital Site Coordinator(s) (HSC) and Chief Medical Resident(s) (CMR).

Team Assignment: Students will be assigned to a medical team where an Upper Level Resident (ULR) will be directly responsible for the student's supervision. Students will also work with the Interns on the team. The assigned ULRs are expected to sign and adhere to the Resident Agreement Form.

## Call

Students must take call every day that their team is on call, until 10 p.m. at the latest. Students may leave earlier with approval from the Upper Level Resident if their patient care responsibilities are complete.

## Work Hours (See Work Hours, Dedicated Study Time and Days Off)

The earliest time students are permitted to arrive at the hospital is 5:00 a.m and to see patients is 5:30 a.m. (excluding emergency situations such as Code Blues). Work hours will be documented on the **Work Hours Log** and submitted weekly. Kuakini students should log the number of ICU patients managed each week.

The Hospital Site Coordinators, Chief Medical Residents and Upper Level Residents are aware of these work hour guidelines. Students are advised to meet with the aforementioned individuals if they are unable to complete all work within these guidelines. If a student does not follow these work hour guidelines, the HSC, CMR and ULR are required to advise the student and notify the clerkship director.

## Patient Assignments

The Upper Level Resident and/or Attending are responsible for assigning patients to the student. Patients should be selected for their ability to cooperate and communicate, as well as for their specific medical problems.

The student has a **List of Diagnoses and Clinical Conditions** upon which the Third-Year Clerkship in Internal Medicine curriculum and specific learning objectives are based.

The clerkship's goal is that students see patients with the listed Diagnoses and Clinical Conditions. The patient's Chief Complaint does not have to be limited to one of the listed Diagnoses and Clinical Conditions. In fact, a patient may present with several of the listed Diagnoses and Clinical Conditions. (See List of Diagnoses and Clinical Conditions)

The student is expected to log every patient in the Patient Tracking System. The log should be kept up to date as this may be requested for review by the Clerkship Director or HSC at any time during the rotation.

## Patient Census

The student should admit 1–2 patients per call day and actively follow an average of three (3) patients at all times.

## Patient Care Responsibilities

1. History & Physical: The student should complete an **independent** Initial History and Physical on each patient assigned, including those received as holdovers the next morning. This includes a complete history-taking and BPES with branch steps as appropriate either precepted or while directly observed by an ULR or attending. Observation of a resident/attending or a "group" H+P does not qualify as the student's own H+P (i.e. the student should perform at least 90% independently), and he/she must return at another time to perform this independently. If the student can not complete the entire H+P at one time, it is permissible to return to the bedside to complete the task. (III, IV, VI)
2. Physical exam: The student should perform the Basic Physical Exam Sequence (BPES) as was taught in the pre-clinical years with branch steps as needed (the funduscopic exam is included in the BPES). The ULR or attending is responsible for ensuring proper supervision of the following parts of the physical exam which may be performed by the student if clinically indicated: female breast exam, female genital and/or pelvic exam, male genital and/or prostate exam, and female & male rectal exam. The student must be supervised by a physician (interns, upper level residents, chief residents or attendings) who is certified or has expertise to competently perform the exam in question. (III, IV, VI)
3. Pre-Rounding: The student is expected to pre-round (see patients independently prior to rounding with the team) and write independent daily progress notes on all his/her assigned patients unless previously instructed to do otherwise. The student is encouraged to seek out the Intern or ULR prior to formal team rounds to review daily patient care plans. The Intern or ULR should review the notes with the student, give constructive feedback and countersign but NOT attest notes. Any missed history or physical exam finding should be noted, corrected and demonstrated as needed. (I, II, III, IV, VI)
4. Rounds: The student is expected to round with the team and take the lead in discussing his/her patients, including delivering an independent assessment of the patient's problems and the student's plans. In addition, the student is expected to have a general knowledge of the other patients on the team so that he/she can be included in the team's discussions and can assist in the care of all the team's patients. The student is expected to actively participate in teaching attending rounds with the team. (I, II, III, IV, V, VI)
5. Patient management: The student is expected to assume as much patient care responsibility as the team feels is appropriate for the individual student's level of training and competence. The student is expected to participate in patient education and counseling; work with nursing staff, dieticians, respiratory therapists, physical and occupational therapists, social workers, hospital chaplains, etc; and to assist in discharge planning. (I, II, III, IV, V, VI)
6. Procedures: There are no required procedures for third-year medical students to perform during this rotation. The student may perform or assist in the performance of procedures that the team feels are appropriate for the student's level of training and competence. The student must be supervised by a physician who is certified or has expertise to competently perform the procedure in question, which includes interns, upper level residents, chief residents or attendings. The ULR is responsible for ensuring proper supervision of any procedure performed or assisted by the student. (I, II, III, IV, VI)
7. Orders: The student should learn how to write Orders on his/her assigned patients. The student will observe the residents entering orders electronically and should practice documenting orders in his/her Comprehensive Write-ups & daily Progress Notes (in the Plans section) The Hospital Site Coordinator and residents should review the student's orders with the student and correct them as needed. (I, II, III)

## Required Submissions

## Comprehensive Write-ups

The student is required to submit a minimum of **3** write-ups by the end of the inpatient rotation. The HSC will read & review each write-up with the student and provide constructive feedback. The HSC will also decide whether these 3 write-ups are satisfactory; if they are deemed unsatisfactory, the student will be required to submit 1–3 additional write-ups, as determined by the Hospital Site Coordinator, up to a maximum of 6. Write-up #1 must be a traditional, Inpatient Medicine H&P with an expanded assessment & plan for at least three (3) problems. Write-ups #2 and #3 will be an H&P printed directly from the inpatient site's Electronic Medical Record. These write-ups will be reviewed in detail by the HSC to assess the student's competency in using the EMR to document a patient history.

All reviewed/edited comprehensive write-ups must be submitted to the student's file to receive credit. (I, II, III, IV)

## Patient Narrative

The student is required to submit one (**1**) one-page narrative by the end of Week 2 that tells a meaningful "story" of one of their patients. An extended social history interview is conducted and transformed into a written piece to be shared with and read by the inpatient team; the patient selected should be able and willing to provide sufficient answers to open-ended questions (or have family that is able to do so). This is inspired by the "My Life, My Story" Project being conducted at the Wisconsin VA in hopes of promoting patient-centered care. (III, V, VI)

## Required Clerkship Activities specific to Inpatient Medicine

1. Chief Medical Resident Rounds (I, III, IV, VI)

    a) All students on Inpatient Medicine attend weekly Chief Rounds with the CMR to give students the opportunity to specify topics they would like to learn about in a small group setting.

    b) The CMR and ULR are responsible for ensuring that students are instructed in, but not limited to, the following:

        - Case presentations
        - Interpretation of basic EKGs
        - Interpretation of common imaging
        - Physiology and management of fluids and electrolytes
        - Interpretation of arterial blood gases
        - Basic physiology and management of shock
        - Basic understanding and management of ventilators (at KMC)

2. Student Report (I, II, IV, VI)
    a) The student is expected to prepare one formal case to be presented at a weekly conference with other students on the rotation.

b) A didactic should be included at the end of the presentation which relates to the case.

3. POCUS (Point of Care Ultrasound) Exercise

This exercise gives students the opportunity to further practice and refine their POCUS skills during their internal medicine clerkship. Point of Care Ultrasound is becoming more increasingly valued in internal medicine and other specialties. The goal is to 1) understand ultrasound principles; 2) acquire images; 3) interpret images; and 4) correlate images to the clinical picture. During Inpatient Medicine, students are required to use POCUS on two (2) out of the three (3) systems: cardiovascular, pulmonary, and gastrointestinal (abdominal), based on the patient's chief complaint.

4. HIPSTER (Hawaii InterProfessional Simulation Training for Emergency Response) (I, II, III, IV, VI)
    a) Students will work with the UH Schools of Nursing and Pharmacy students in simulated emergency situations. Students from the medical school are expected to take on the role of team leader and triage various high acuity situations.
    b) HIPSTER is a mandatory learning activity that must be completed satisfactorily in order to receive credit for the clerkship. There are prerequisite course materials that must be reviewed prior to participating.
    c) Dress code including use of appropriate PPE will be enforced.

5. Bedside Clinical Skills (format is site-specific)

    a) Students on Inpatient Medicine will participate in weekly Bedside Clinical Skills.

    b) Each week, students will see patients at the bedside with an attending or CMR to review the cardiovascular, pulmonary and abdominal examinations in concert with the **Observed History and Physical**.

    c) Students are expected to review the appropriate chapters in Bate's Guide to Physical Examination and History prior to each session.

## Assessments and Feedback to Students

The student is expected to ask for feedback weekly on their performance and progress from team residents and attendings. This feedback should identify the student's strengths and weaknesses in order to identify areas for improvement and growth.

**Observed Focused History and Physical Examination**: This will focus on the cardiovascular, pulmonary and abdominal physical examinations. It is the student's responsibility to arrange for a time when the student and CMR (or HSC or attending) are available to observe the student if this is not completed as part of Bedside Clinical Skills. The observing faculty member or CMR will complete the evaluation form and provide *immediate* feedback. If the student's performance is not satisfactory, the student must repeat the section until their performance is satisfactory. (I, III, IV, VI)

**Mid-Clerkship Feedback Form**: Midway through the Inpatient block, the Hospital Site Coordinator will complete this form and review it with the student. The HSC will assess whether the student meets or does not meet expectations for each of the six JABSOM Graduation Objectives, adding comments on areas to improve

on (see Mid-Clerkship Feedback Form).

**Medicine Clerkship Assessment Form**: Interns, ULRs and Attendings who work with the student for one (1) week or more are expected to evaluate the student by completing independent written evaluations submitted via OASIS. The HSC will summarize all evaluations and complete a final assessment which is submitted to the clerkship director.

# AMBULATORY MEDICINE: SPECIFIC REQUIREMENTS AND GUIDELINES

## Location

Ambulatory Medicine sites include Queen Emma Clinics, community health clinics, Kaiser Permanente and private physician offices on Oahu or neighboring islands. Although each site has unique features, the clerkship's goal is to provide students with as uniform a learning experience as possible based on identical learning objectives, while allowing students the opportunity to take advantage of the strengths of each site.

## Work Hours

During the ambulatory semester, students must complete 21 half-days of Ambulatory Medicine clinics (19 IM + 2 Neuro). There will be flexibility in the schedule with 2 open half-days weekly, usable for rescheduling if the preceptor is out of town, for holidays, or for exploring other specialties with appropriate department approvals. Students should refrain from front-loading their clinic schedule - they may not finish clinics more than 2 weeks before the ambulatory semester concludes.

## Patient Assignment

Ambulatory preceptors are responsible for assigning patients to the student. Patients should be selected for their ability to cooperate and communicate, as well as for their specific medical problems.

The student has a **List of Diagnoses and Clinical Conditions** upon which the Third-Year Clerkship in Internal Medicine curriculum and specific learning objectives are based.

The clerkship's goal is that students see patients with the listed Diagnoses and Clinical Conditions. The patient's Chief Complaint does not have to be limited to one of the listed Diagnoses and Clinical Conditions. In fact, a patient may present with several of the listed Diagnoses and Clinical Conditions. (See List of Diagnoses and Clinical Conditions)

The student is expected to log every patient in the Patient Tracking System. The log should be kept up to date as this may be requested for review by the Clerkship Director or Preceptor at any time during the rotation.

## Patient Census

The student should evaluate a minimum of t**wo (2)** patients each half day.

## Patient Care Responsibilities

The student may see new or returning patients for complete examinations or problem-focused visits. Ideally, the student will see patients in continuity when they return for follow-up visits.

After reviewing the patient's chart as necessary, the student will perform an appropriate history and

physical examination. The student will present the case to the preceptor who should correct and demonstrate any missed history or physical exam findings and review the student's assessment & plans.

The student will write an appropriate History & Physical or Progress Note for each patient. The preceptor will review the write-up with the student and give constructive feedback.

The student is expected to carry out the patient care responsibilities their preceptor feels is appropriate for the student's level of training and competence. The student should try to assume as much responsibility as is appropriate and possible. The student is expected to participate in patient education & counseling, work with office/clinic staff, and to assist in follow-up planning. If the student's patient requires any consultations or procedures, the student is highly encouraged to be present if the patient agrees. If the student's patient is hospitalized, the student is highly encouraged to follow the patient during the hospitalization (for those preceptors who also have hospital privileges).

## Comprehensive Write-ups

Students are required to complete **one (1)** comprehensive write-up each month for a total of **5** over the course of the Ambulatory portion. These comprehensive write-ups may be slightly shorter than Inpatient write-ups but should still contain all of the elements of a complete. H + P. Students may include content from their EMR documentation on the patient and expand on any problem(s) in the Assessment and Plan as Learning Issues. These learning issues require additional reading and thought. Students should aim to submit one write-up during their first week to their Preceptor so early feedback can be provided, and expectations for the write-ups are clarified by the Preceptor.

The Ambulatory Preceptor should read, correct and review each comprehensive write-up with the student and give verbal and written (in the form of corrections written directly on the writeup) constructive feedback. All reviewed/edited write-ups must be submitted to the clerkship coordinator. (I, II, III, IV, V, VI)

## Neurology Clinic Requirement

Students will attend two (2) half-days of clinic with a neurology preceptor during their ambulatory semester. This will be on a sign-up basis at the beginning of the semester. Neighbor island students will work with the clerkship to complete this requirement and may be able to follow with a preceptor at their site. (I, III, IV, VI)

Students should contact their neurology preceptor at least 48 hours ahead of time to confirm the time and place of their experience. Before each clinic half-day, students should review how to perform the screening neurological examination by reviewing the tutorial at http://NeuroExamTutorial.com.

Students should arrive at the neurology office 10 minutes prior to the start of the clinic half-day, and inform the office staff that they will be working with the neurology preceptor.
Students should always bring their reflex hammer as well as any other neurological tools they have access to. Dress code is clinic professional. Students should bring their white coat, and ask their neurology preceptor whether or not they should wear it.

During each clinic half-day, students are expected to see at least 1-2 patients on their own, conducting the entire history and physical exam (with focus on neuro exam), and to present the patients to their neurology preceptor. Students are encouraged, but not required, to write a patient note.

If students experience any issues, they should discuss this with their neurology preceptor or with Dr. Miles (jdmiles@hawaii.edu).

## Assessment and Feedback to Students

The student is expected to ask for feedback, ideally monthly, on their performance and progress from the Ambulatory Preceptor. This feedback should identify the student's strengths and weaknesses in order to identify areas for improvement and growth.

**Observed Patient Counseling Evaluation Form**: The student is required to be formally observed counseling a patient and/or family on two separate occasions. Together, the student and preceptor should choose a counseling activity that is appropriate for the clinical scenario. (I, III, IV, V, VI)

**Mid-Clerkship Feedback Form**: Midway through the Ambulatory semester, the student should provide the Ambulatory Preceptor with this form to complete and review with the student. The preceptor will assess whether the student meets or does not meet expectations for each of the six JABSOM Graduation Objectives, adding comments on areas to improve on (see Mid-Clerkship Feedback Form).

**Student Assessment Form**: During the last week of the Ambulatory portion, the Ambulatory Preceptor will complete an evaluation form of the student's overall performance. The preceptor should review the completed form with the student.

## GUIDELINES FOR APPROPRIATE APPEARANCE AND ATTIRE (VI)

These guidelines are intended to contribute to your overall professional development as students in training to become physicians. The Third Year Clerkship in Internal Medicine expects students to appear and dress in a professional manner. Your appearance and attire should reflect respect towards faculty, staff, classmates, patients and the general public.

It is recognized that different attire will be necessary for different settings, depending on factors such as student activities and responsibilities, training sites, patient and public contact. Student attire should always be appropriate and not interfere with the activities and responsibilities expected of them.

**General guidelines for all Medicine Clerkship students:**

- Students are expected to wear:
    - JABSOM name tag with photo ID
    - University of Hawaii-issued white medical coat
    - Closed-toe footwear
- Students should maintain an optimum level of personal hygiene and grooming
- Strong odors and fragrances should be avoided
- Clothes, hair, fingernails and footwear should be clean and neat
- Clothing should not be suggestive, revealing or tight-fitting
- Clothing should not have offensive images or language

**Site-specific (inpatient and ambulatory) guidelines for Medicine Clerkship students:**

- Students should adhere to the dress code/policy in place at their training site

# U.H. John A. Burns School of Medicine
# Third-Year Clerkship in Internal Medicine
## REQUIRED EQUIPMENT

1. White coat
2. JABSOM nametag
3. Stethoscope
5. Penlight
6. Reflex hammer
7. Tuning fork 128 Hz for vibratory exam
8. Tape measure
9. Visual acuity card
10. Small magnifier lens
11. Disposable tongue blades
12. Cotton-tipped swabs for sensory exam
13. Watch with second and minute marks to record vital signs, etc.

Students are expected to have ALL the equipment and bring everything to their assigned training sites daily. The equipment should be readily accessible (i.e. worn, carried in a bag or in/on a white coat).

All students on Inpatient Medicine are required to carry ALL the listed equipment ALWAYS while on the wards.

Students on Ambulatory Medicine may find their assigned sites have some, but not all, of the listed equipment available for student use. If the listed equipment is NOT readily accessible at the site, it is the student's responsibility to carry the equipment AT ALL TIMES.

The possible consequences of not having required equipment are (1) being immediately sent to purchase items (requiring the student to make up the missed time) and (2) receiving unsatisfactory evaluations in the areas of (a) Clinical Skills – physical examinations and (b) Professionalism – dependability, professional appearance and attire.

# EXPOSURE TO BLOOD/BODY FLUIDS PROTOCOL

1. IMMEDIATELY following the exposure:
    a. Flush the exposed skin or mucous membrane with water or saline. If exposure to the eyes has occurred, use wash station or nearest sink to flush eyes with water for at least 5 minutes.
    b. Wash any needle stick, puncture, cut or abrasion with soap and water.
2. Initiate the host agency protocol for hazardous exposure to blood/body fluids by following the instructions outlined in the table below.
3. If the exposure is in a *non-hospital setting* (for example, ambulatory site not associated with a hospital, in a JABSOM lab, class, or other non-hospital-based exposure), you or your preceptor/supervisor can call Queens ED (547-4311) to review current protocol for immediate needs in such a circumstance, and begin the process, (**AFTER #1**). You may go to an Emergency Department, or during open hours, contact the University Health Services (Manoa Campus) 956-8965, and ask for immediate attention.

| FACILITY | CONTACT or GO TO | PHONE |
|---|---|---|
| Castle Medical Center | Report incident to supervisor. Obtain care from Employee Health Coordinator or hospital supervisor who will assist in filing incident report. Contact JABSOM OSA to report incident. | 263-5159 or hospital supervisor<br>263-5329<br>(5 pm-8 am) |
| HOME Clinic | Notify attending physician and complete incident report. Call Dr. Jill Omori to report exposure. | 221-0685 |
| Kaiser Permanente Medical Center | Report incident within 2 hours of exposure. Call operator in house "0" and ask for infection control personnel on duty. | 432-0000 |
| Kapiolani Medical Center | Report to Employee Health. Go to Emergency Dept, if EH closed, also call on-call Employee Health Coordinator, 983-6000). | 983-8525 |
| Kuakini Medical Center | Occupational Health Services.<br>When closed, go to ED, and also notify Nursing Supervisor (through Operator, dial "O"). | 547-9531 |
| Pali Momi Medical Center | Employee Health during regular work hours or Emergency Department when exposure occurs after hours. Notify supervisor. Report incident Work Injury Line. | 535-7200 |
| The Queen's Medical Center | Employee Health/PEP Team. | 547-4004 |
| Straub Clinic and Hospital | Employee Health during business hours, go directly to ED after business hours. | 522-3481 |
| Tripler Army Medical Center | Let care team know of exposure. Report to the ER.<br>Report exposure to, or go to, Occupational Health the next business day. | 433-6235 |
| VA Clinic | Contact EHU during business hours. Go to TAMC ER after hours. | 433-0091 |
| Wahiawa General Hospital | Go to ER; also notify Nursing Supervisor (through operator) of exposure. | 621-4230 |

You may also seek care and information from University Health Services (956-8965), your personal physician, or any emergency department, **but seek immediate evaluation and counseling**. All follow-up care after immediate evaluation services is the responsibility of the student

4. Report exposure to;
    a. Your supervising faculty member and course/clerkship director
    b. Medical School Office of Student Affairs @ 692-1000;
    c. For URGENT after hours needs, call 692-0912, ask for Dr Takanishi or Administrator on-call
5. Students should be knowledgeable about their health insurance coverage, and should know what their plan will cover related to occupational exposures. Remind anyone billing for follow-up that it is NOT an Occupational Exposure, but medical follow-up, or the insurer may not want to pay for services.

*JABSOM's Affiliation Agreement with Health Care Facilities (HCF) state:*
***"Environmental exposure**. In the event a medical student is exposed to an infectious, environmental, or occupational hazard at the HCF, the HCF shall be responsible for providing immediate evaluation and counseling as with employees of the HCF. Follow-up after the initial evaluation and counseling will not be the responsibility of the HCF, and will proceed according to University student health policies."*

# OASIS PATIENT TRACKING & LIST OF DIAGNOSES AND CLINICAL CONDITIONS

**General**

- Logging ALL of your patients is required to earn credit for Medicine Clerkship as well as for JABSOM accreditation.
- Log your patients every workday so you do not forget and fall behind.
- Failure to log properly and on a timely basis may lead to serious consequences for you and for JABSOM.

**Instructions**

- Please follow the guidelines listed by Office of Medical Education here: OASIS Patient Log Instructions

    - Go to "requirement checklists" under the "Announcements" box
    - Click on "Internal Medicine Clerkship Patient Requirements"
    - Click on the name of the main diagnoses or clinical condition for the patient you wish to log (i.e. IM-C4. Altered Mental Status). *A window will appear on the right, showing any prior entries under that specific diagnosis or condition.*
    - Click on "Add entry" at the top right corner of the window
    - Proceed with the new entry, including any explanatory notes and additional diagnoses and clinical conditions for that specific patient/entry.

Unlike other Clerkships, we don't have a "General Diagnoses" option on IM.

**List of Diagnoses and Clinical Conditions**

- Your patient logs will populate into your List of Diagnoses and Clinical Conditions on OASIS.

- You are **required** to see at least one (1) patient with each of the listed **Diagnoses** and **Clinical Conditions** (see **List of Diagnoses and Clinical Conditions** on the next page) over the course of this clerkship. This is the minimum requirement. Of course, the more patients you see, the more you will learn.

- The patient's Chief Complaint does not have to be limited to one of the listed Diagnoses and Clinical Conditions.

- A patient may present with several of the listed Diagnoses and Clinical Conditions.

- When new Diagnoses and Clinical Conditions present on a patient you have already logged, you should "Edit" your original entry on OASIS to add the new findings.

- Keep track of your patient encounters in OASIS. Indicate which encounters are:

    - **Precepted** – You evaluated the patient alone and then presented the patient to an attending or upper level resident.
    - **Observed** – You were directly observed evaluating a patient by an attending or upper level resident.
    - **Alternate/Special activity** – You participated in a patient activity that does not count towards either of the above categories (i.e. not Precepted and not Observed).

- It is your responsibility to ensure that you have fulfilled the clerkship requirement of seeing all of the listed Diagnoses and Clinical Conditions by the end of the clerkship. You are advised to communicate with your Inpatient team/CMR/Ambulatory Preceptor *as soon as possible* to assist in finding appropriate patients.

# List of Diagnoses and Clinical Conditions

You are required to see at least one (**1**) patient with each of the following 22 **Diagnoses** and 26 **Clinical Conditions** over the course of this clerkship. This is the list found under your requirement checklist on OASIS.

| **Diagnoses** | **Clinical Conditions** |
|---|---|
| D1. Acute Coronary Syndrome | C1. Abdominal Pain |
| D2. Chronic Kidney Disease | C2. Acid Base |
| D3. Chronic Obstructive Pulmonary Disease | C3. Acute Kidney Injury |
| D4. Cirrhosis | C4. Altered Mental Status |
| D5. Congestive Heart Failure | C5. Anemia |
| D6. Coronary Artery Disease | C6. Back Pain |
| D7. Dementia | C7. Cancer Screening |
| D8. Depression | C8. Chest Pain |
| D9. Diabetes | C9. Constipation |
| D10. Dyslipidemia | C10. Cough |
| D11. Gastroesophageal Reflux | C11. Diarrhea |
| D12. Hypertension | C12. Dyspnea |
| D13. Hyperthyroidism | C13. Edema |
| D14. Hypothyroidism | C14. Fatigue |
| D15. Osteoporosis | C15. Fever |
| D16. Pancreatitis | C16. Gastrointestinal Bleed |
| D17. Pneumonia | C17. Headache |
| D18. Substance Use | C18. Hyponatremia |
| D19. Tobacco Use | C19. Joint Pain |
| D20. Upper Respiratory Tract Infection | C20. Knee Pain |
| D21. Urinary Tract Infection | C21. Nosocomial Infections |
| D22. Venous Thromboembolism | C22. Obesity |
| | C23. Skin and Soft Tissue Infections |
| | C24. Skin Lesions |
| | C25. Syncope |
| | C26. Unintentional Weight Loss |

# Assessment Forms

U.H. John A. Burns School of Medicine
Third-Year Clerkship in Internal Medicine

# OBSERVED FOCUSED HISTORY AND PHYSICAL EXAMINATION
## Assessment Form

INSTRUCTIONS:

- The Observed History and Physical Sections should be performed during the clerkship on appropriate patients.
- An Upper-Level Resident, Chief Medical Resident, Site Coordinator or Attending may observe the student.
- The student should receive on-the-spot feedback on their performance. The observer may require the student to repeat a Section if further experience is felt to be necessary in performing the skill.
- The student must turn in **all** of their completed Observed History and Physical Sections Evaluation Form to the Hospital Site Coordinator by the end of the Inpatient portion.

OBSERVED FOCUS HISTORY-TAKING SKILLS

**Medical Interviewing** (Circle S=satisfactory, U=unsatisfactory, more practice needed)

- Student introduces self and explains his/her role correctly S U
- Elicits the History of Present Illness systematically and completely S U
- Delineates major symptoms systematically and completely (location, duration, radiation, quality, intensity, setting, onset, frequency, aggravating/alleviating factors, associated manifestations, functional impairment, etc) S U
- Facilitates accurate collection of a patient's history including PMHX, MEDS, ALL, FamHx, SocHx, ROS. S U

- Effectively uses questions/directions to obtain accurate information needed S U
- Responds appropriately to non-verbal cues S U
- Demonstrates effective listening skills S U
- Shows respect, compassion, empathy and establishes trust S U
- Attends to a patients needs of comfort, modesty, confidentiality and information S U
- Uses language that patient understands S U

**Physical Examination**: Thorax and Pulmonary

- Follows efficient, logical sequence S U
- Balances screening/diagnostic steps for problem S U
- Sensitive to a patient's modesty and comfort S U

THORAX/PULMONARY (sitting)

- Inspect posterior thorax with respiration S U

- Inspect anterior thorax with respiration S U
- Inspect/palpate spine S U
- Percuss costovertebral angles for tenderness S U
- Percuss posterior thorax bilaterally and symmetrically S U
- Auscultate posterior lung fields bilaterally S U
- Auscultate lateral lung fields bilaterally S U
- Auscultate anterior lung fields starting with supraclavicular area S U

EXAMINER COMMENTS:

EXAMINER SIGNATURE_____ DATE:_____

I have received feedback on my performance (student signature): _____

**Physical Examination**: Cardiovascular

- Follows efficient, logical sequence S U
- Balances screening/diagnostic steps for problem S U
- Sensitive to a patient's modesty and comfort S U

CARDIOVASCULAR (supine)

- Inspect neck veins S U
- Auscultate carotid arteries for bruits S U
- Inspect precordium S U
- Palpate PMI and precordium for lifts/heaves/thrills S U
- Auscultate with diaphragm at aortic, pulmonic areas, LSB and apex S U
- Auscultate for splitting of S2 in pulmonic area S U
- Auscultate with bell at apex (supine and LL decubitus positions) S U
- Inspect extremities for cyanosis, clubbing, venous varicosities, and edema S U
- Palpate distal pulses: Radial, Dorsalis Pedis, Posterior Tibial if unable to feel Dorsalis Pedis pulse) S U

EXAMINER COMMENTS:

EXAMINER SIGNATURE_____ DATE:_____

I have received feedback on my performance (student signature): _____

**Physical Examination**: Abdomen (supine, hips/knees flexed)

- Follows efficient, logical sequence S U
- Balances screening/diagnostic steps for problem S U
- Sensitive to a patient's modesty and comfort S U
- Alert patient to abdominal exam S U
- Inspect abdomen S U
- Auscultate epigastrium and aortic area for bruit S U
- Auscultate all 4 abdominal quadrants for bowel sounds S U
- Palpate superficially and deeply in all 4 quadrants S U
- Palpate and percuss for liver S U
- Palpate for aorta S U
- Palpate for spleen (supine and R lateral decubitus position) S U
- Palpate for inguinal nodes and femoral pulses bilaterally S U

EXAMINER COMMENTS:

EXAMINER SIGNATURE_____ DATE:_____

I have received feedback on my performance (student signature): _____

# U.H. John A. Burns School of Medicine
# Third-Year Clerkship in Internal Medicine
## **POCUS EXERCISE**
## Assessment Form

Complete 2 during Inpatient Medicine and turn in to your Site Coordinator.

Student: _____ Site: _____ Date: _____

Patient's Chief Complaint: _____

System (circle one): Cardiovascular Pulmonary Gastrointestinal

Findings:

| | Good | Needs Improvement |
|---|---|---|
| Student demonstrated basic understanding of ultrasound principles. | | |
| Student obtained and interpreted images. | | |
| Student correlated images to the clinical picture. | | |

Evaluator Comments:

Evaluator's name _____ Evaluator's signature _____

Student's signature _____

# U.H. John A. Burns School of Medicine
# Third-Year Clerkship in Internal Medicine
## **OBSERVED PATIENT COUNSELING**
## Assessment Form

Complete 2 during Ambulatory Medicine and turn in to your Ambulatory Preceptor.

Student: _____ Site: _____ Date: _____

Counseling was directed at: _____ Patient
(check one or both) _____ Patient's family

Counseling:
___ Explain diagnoses
___ Explain tests, procedures or surgery
___ Review results of tests, procedures or surgery
___ Review medications (indications, dosing, side effects, etc.)
___ Review diets, exercise or other lifestyle changes
___ Discuss smoking cessation
___ Discuss alcohol use
___ Discuss compliance (medications, follow-up, etc.)
___ Review discharge instructions
___ Other (specify) _____

| | Good | Needs Improvement |
|---|---|---|
| Student used clear and understandable language. | | |
| Student adapted to patient's/family's readiness to learn. | | |
| Student adapted to patient's/family's comprehension level | | |
| All pertinent information was presented accurately. | | |
| Student demonstrated empathy and compassion. | | |
| Patient's/family's comprehension was assessed. | | |

Evaluator Comments:

Evaluator's name _____ Evaluator's signature _____

Student's signature _____

I received constructive feedback on my Observed Patient Counseling (circle): Yes No

U.H. John A. Burns School of Medicine
Third-Year Clerkship in Internal Medicine
**MID-CLERKSHIP FEEDBACK FORM**

Student's name: _____

**Instructions for the Evaluator:**
Please comment on areas the student needs to work on improving, provide specific examples if possible and discuss them in detail with the student.

**Instructions for the Student:**
After your Hospital Site Coordinator or Ambulatory Preceptor completes and reviews this with you, you should keep a copy of this form and you should actively work on improving the areas identified below.

**Overall Assessment:**
**[ ] Meets expectations**
**[ ] Does not meet expectations**

| | | **Comments** (areas to improve on, etc.) |
|---|---|---|
| **Life Long Learning** | [ ] Meets expectations<br>[ ] Does not meet expectations<br>[ ] Not yet observed/assessed | |
| **Foundational Knowledge and Discovery** | [ ] Meets expectations<br>[ ] Does not meet expectations<br>[ ] Not yet observed/assessed | |
| **Patient Care** | [ ] Meets expectations<br>[ ] Does not meet expectations<br>[ ] Not yet observed/assessed | |
| **Communication and Interpersonal Skills** | [ ] Meets expectations<br>[ ] Does not meet expectations<br>[ ] Not yet observed/assessed | |
| **Population and Community Health** | [ ] Meets expectations<br>[ ] Does not meet expectations<br>[ ] Not yet observed/assessed | |
| **Professionalism** | [ ] Meets expectations<br>[ ] Does not meet expectations<br>[ ] Not yet observed/assessed | |

Evaluator's name: _____ Evaluator's signature: _____

Student's signature: _____ Date reviewed with student: _____

U.H. John A. Burns School of Medicine
Third-Year Clerkship in Internal Medicine

# MS3-RESIDENT
# INPATIENT MEDICINE AGREEMENT FORM

Name of MS3 _____

1. The upper level resident (ULR, Level 2 or 3) is responsible for the third-year medical student's iatient medicine experience. At the beginning and throughout the student's inpatient experience, **the ULR should set clear expectations for the student**.

2. The earliest time that the student is permitted to arrive at the hospital is **5:00 a.m.** The earliest time that the student is permitted to see patients is **5:30 a.m.**

3. The student must take every call with his/her team throughout his/her inpatient block, until 10 p.m. at the latest. The student may leave earlier than 10 p.m. if his/her patient care responsibilities are complete, with the Upper Level Resident's approval. If the student's team is not on call, the student should assist his/her team until after the team signs out. There is no overnight call.

4. The UL is responsible for assigning patients to the student (see Training Problems List). The student will **admit 1 - 2 patients** per call. The student should actively follow an average of **3** patients at all times (**maximum 5 patients**).

5. The student must interview and examine patients on his/her own. The student may observe the Intern and/or UL obtain the history and physical, but this observation does *not* qualify as the student's history and physical.

6. The student must pre-round and write daily Progress Notes on all his/her assigned patients *before* the Intern and/or UL write their notes. The UL should review the Progress Notes with the student, give constructive feedback and countersign the note.

7. The UL is responsible for ensuring proper supervision of the following parts of the physical exam performed by the student**: female breast exams, pelvic exams, rectal exams and prostate exams**. The supervision must be provided by a physician (such as Interns, ULRs, CMRs or Attendings).

8. The UL is responsible for ensuring proper supervision of any procedure performed by the student. The supervision must be provided by a physician (such as Interns, ULRs, CMRs or Attendings) who is certified or has expertise to competently perform the procedure in question. There are <u>no</u> required procedures for students.

9. The UL should assist the student in preparing case presentations at hospital rounds or conferences at a level that is appropriate for the student's training. Whenever a student's patient will be presented, the student is expected to be the one presenting the patient.

10. The student must have **one (1) day off per week**, either a Saturday or a Sunday. At Kuakini, the day off should be on Sunday - unless the student has call on Sunday, in which case the student will take Saturday off.

11. The student must inform the ULR of the student's activities and whereabouts at all times. Specifically, the student must notify the UL whenever leaving the hospital, including leaving to attend required 3rd year or clerkship activities or to study, and should discuss if or when he/she needs to return.

12. When the ULR is absent or off, the Intern should assume the ULR's role and responsibilities, including all those listed above, in supervising the student.

13. The Intern and ULR should discuss medical student issues and problems with the Chief Resident and/or Hospital Site Coordinator as soon as possible.

1st Upper Level Resident:

Name _____ Signature _____ Date _____
(Required by end of MS3's 1st week)

2nd Upper Level Resident:

Name _____ Signature _____ Date_____
(Required by end of UL's 1st week)

Third-Year Clerkship in Internal Medicine

# INPATIENT WORK HOURS LOG

Student _____ Inpatient site (circle) KMC QMC KP

Week ___ beginning ____/_____/____

| | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY | SUNDAY |
|---|---|---|---|---|---|---|---|
| **On Call?** | | | | | | | |
| **Other Activities?** | | | | | | | |
| # New Patients (admissions, transfers | | | | | | | |
| # Old Patients | | | | | | | |
| **TOTAL # PATIENTS** | | | | | | | |
| For KMC, # ICU Patients | | | | | | | |
| Time In | | | | | | | |
| Time Out | | | | | | | |
| **TOTAL # HOURS** | | | | | | | |

**TOTAL # HOURS FOR THE WEEK: _____**

- **Please log your hours *daily*** – otherwise it's difficult to remember.
- **You should log only the hours that you are "working"** which includes patient care and required 3rd year, hospital and clerkship activities such as Colloquia, rounds, conferences, Bedside Clinical Skills, Chief Rounds, Sim Session, etc.
- It's ok to include meals in the middle of your "work day" (as long as it's not a 1 hr lunch!) – It's too much trouble to clock out for lunch and then clock in afterwards.
- You should not include meals at the hospital before/after your "work day" or reading at the hospital before/after your "work day."
- You should not include writing your Comprehensive Write-ups and LIs – even if done at the hospital - since that is "home" work.
- You should work no more than **80 hours per week**, averaged over the course of the entire clerkship.
- You should have **1 day off per week**, usually a Sat or Sun.
- You should follow the holiday schedule observed by your site, since this varies by site.
- **On Call**? If relevant, please specify Short, Long, or Overnight.
- **Other Activities**? Please specify off-campus activities. Ex: Colloquia, HIV Medicine, HIPSTER, etc.
- **# Patients** is the # of patients (counted at the end of each day) that you are *actively* following - that is, pre-rounding on, writing notes on and presenting.

# CLERKSHIP ACTIVITIES & SUBMISSIONS CHECKLIST FOR INPATIENT MEDICINE

| | |
|---|---|
| WEEK 1 | |
| | Inpatient Medicine Agreement Form (Signature #1) |
| | Comprehensive H & P #1 |
| | Bedside Clinical Skills |
| | CMR Rounds |
| | Work Hours Log |
| WEEK 2 | |
| | Comprehensive H & P #2 |
| | Bedside Clinical Skills |
| | CMR Rounds |
| | Patient Narrative |
| | Work Hours Log |
| | Meet with Hospital Site Coordinator to review Mid-Clerkship Feedback Form |
| WEEK 3 | |
| | Comprehensive H & P #3 |
| | Bedside Clinical Skills |
| | CMR Rounds |
| | Work Hours Log |
| WEEK 4 | |
| | CMR Rounds |
| | Bedside Clinical Skills |
| | Work Hours Log |
| | Complete Patient Log/ OASIS Requirements Checklist |
| POST-CLERKSHIP | |
| | Meet with Hospital Site Coordinator to review end-of-Block feedback |
| | Evaluation of Teachers and Course (OASIS) |
| | Post-Clerkship Survey (from OME) |
| THROUGHOUT THE BLOCK | |
| | Student Morning Report + Didactic |
| | Observed Focused History & Physical |
| | Inpatient Medicine Agreement Form (Signature #2) |
| | POCUS Exercise |
| | HIPSTER (Hawaii InterProfessional Simulation Training for Emergency Response) |

# CLERKSHIP ACTIVITIES & SUBMISSIONS CHECKLIST FOR AMBULATORY MEDICINE

| | |
|---|---|
| MONTH 1 | |
| | Comprehensive H & P #1 |
| | Clinic goal = 4 half days |
| MONTH 2 | |
| | Comprehensive H & P #2 |
| | Clinic goal = 8 half days |
| MONTH 3 | |
| | Comprehensive H & P #3 |
| | Meet with Preceptor to review Mid-Clerkship Feedback Form |
| | Clinic goal = 12 half days |
| MONTH 4 | |
| | Comprehensive H & P #4 |
| | Clinic goal = 17 half days |
| MONTH 5 | |
| | Comprehensive H & P #5 |
| | Complete Patient Log/OASIS Requirements Checklist |
| | Clinic goal = 19 half days |
| POST-CLERKSHIP | |
| | Meet with Preceptor to review end-of-Clinics feedback |
| | Evaluation of Teachers and Course (OASIS) |
| | Post-Clerkship Survey (from OME) |
| THROUGHOUT CLINICS | |
| | Patient Counseling x2 |
| | Neurology Clinics x2 |

# COMPREHENSIVE WRITE-UPS

## Definition of Comprehensive Write-up

A Comprehensive Write-up is a complete history and physical or a problem-focused note in standard Problem-Oriented Medical Record form (see following examples) and includes:

1. A complete Problem List, with problems, designated as "active" or "inactive/resolved" with dates of onset and resolution, respectively

2. A comprehensive Assessment of at least three (3) problems from the Problem List, with discussion of differential diagnoses of undiagnosed problems (including rationale for including/excluding diagnoses) or discussion of diagnosed problems (such as course, complications, control and compliance)

3. Plans, divided into Diagnostic, Therapeutic and Education Plans

4. Resources and References

5. Student's name, printed and signed, followed by "MS3"

6. Abbreviations: Since medical records communicate important information and may be scrutinized, abbreviations should not be used because their meaning is not universal among all readers of the medical records. Specifically, students should not use error-prone abbreviations, symbols, and dose designations.

## Submission Requirements of Comprehensive Write-ups

1. Students on Inpatient Medicine are required to submit 3 write-ups (averaging 1 write-up each week). The Hospital Site Coordinator will decide whether these 3 write-ups are satisfactory. If they are deemed satisfactory, then the student will not be required to submit any more write-ups. If, however, they are deemed unsatisfactory, then the student will be required to submit additional write-ups, as determined by the Hospital Site Coordinator, up to a maximum of 6 write-ups.

2. Students on Ambulatory Medicine are required to submit 1 write-up each month for a total of 5 write-ups to their Ambulatory Preceptor.

3. All write-ups, either originals with corrections/comments from the preceptor or copies of the originals with corrections/comments, must be turned in by the last day of the respective inpatient or ambulatory component of the clerkship.

## Example of Inpatient History and Physical

Date of Admission: 11/01/02
Date of Exam: 11/01/02
**ID:** 78-yo Japanese woman who is a widow and a retired hotel worker
**S/R:** Patient and her daughter, who are fair historians. Medical records not available.
**RE:** Admission to Progressive Care Unit at Kuakini Medical Center

**CC:** Three episodes of "Bloody stools" since last night

**HPI:** The patient is a 78-year old woman with history of hypertension, hypercholesterolemia and two previous "mild strokes", who was in her usual state of health until October 29, 2002, three days prior to admission, when she began passing bright red blood per rectum along with "dark black clots" and "black stools", The patient claims to have had more than 10 bowel movements of this kind within 10 hours. She admits to feeling weak at this time with a "near-fainting" episode after which she found herself drenched with sweat, as if "someone dumped a bucket of water over my head". The patient's daughter claims that the patient may have experienced a brief loss of consciousness (less than 30 seconds.) during this "near-fainting" episode, as she stopped talking for a short period of time. On the morning of October 30, 2002, the patient went in to see her physician, Dr. Shozo Ogawa. At this time the bleeding had ceased and her only complaint was weakness. Dr. Ogawa found her to be stable, and found her hemoglobin to be 12.2, and arranged for her to follow-up with a gastroenterologist. On October 31$^{st}$, at around 5:00pm, the patient again began to pass bright red blood per rectum, but without black clots. She says she passed 3 bloody bowel movements since that time until she presented to the Emergency Room on the morning of November 1st. She admits to feeling weak and "lousy" and again feeling faint, but not actually fainting.

The patient denies any prior episodes of rectal bleeding. She had experienced some constipation the week before, and had used Metamucil, which had given relief. She denies fever, nausea, vomiting, diarrhea, sick contacts, chest pain, shortness of breath, recent weight changes or changes in appetite. She claims to have a chronic mild right lower quadrant abdominal pain which she attributes to her degenerative vertebral disc disease. She also admits to having "sour stomach" every few months, but no history of previously diagnosed GERD or peptic ulcer disease.

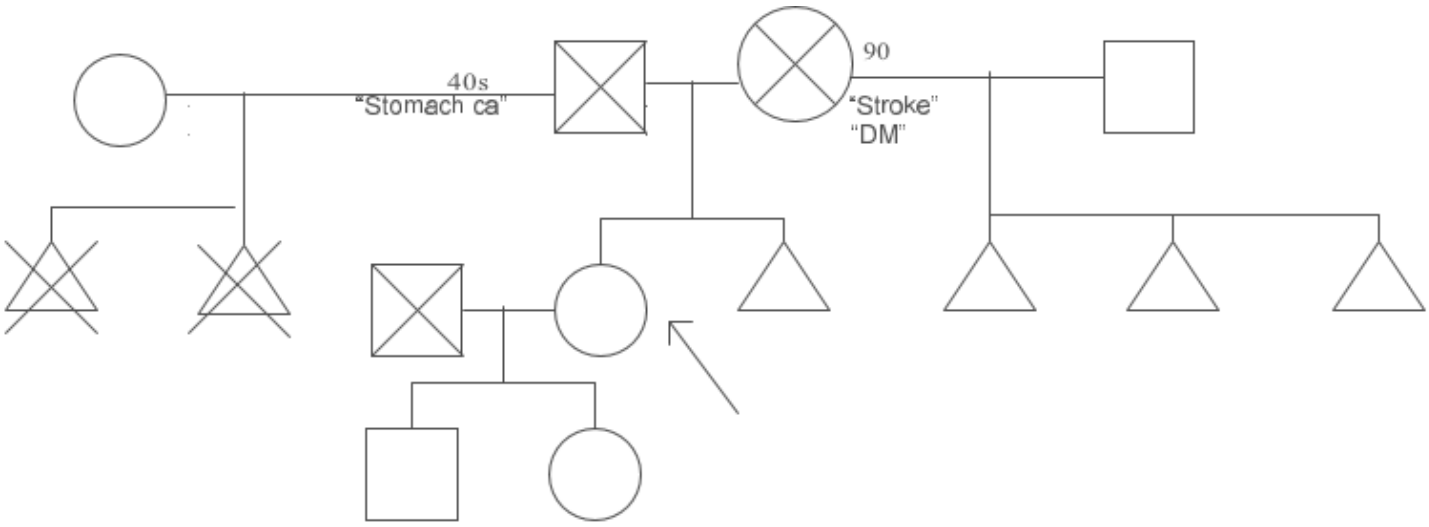
In 2000, the patient was diagnosed with "degenerative disc disease" in her lower spine. She claims to have had back pain since age 17, and utilizes a back brace and cane to assist in mobilization. She has been using aspirin for the pain, with her last dose taken 10 days ago. She was told by her physician at the office visit three days ago that "aspirin wasn't good for her stomach" and so she has since been taking Extra-Strength Tylenol, with gives her only partial relief.

**PMH:**
Childhood illnesses: Not asked
Immunizations: Not asked
Adult illnesses: Two "mild strokes" (Had slurred speech) in 1970s
Cervical cancer had possible cone biopsy in 1970s
Hypertension- first aware of diagnosis in 1970s
Degenerative disc disease- told of diagnosis in 2000; uses back brace, cane, occasional acupuncture
Cataracts bilaterally- date of diagnosis unknown
Hypercholesterolemia- date of diagnosis unknown
The patient has no history of bleeding disorder, liver disease, diabetes mellitus, myocardial infarction or renal

disease.

Hospitalizations/Surgeries:
1950s Kapiolani Medical Center- birth of her children
1960s Kapiolani Medical Center- Hysterectomy, reason for surgery unknown.
1998 Queens Medical Center- "surgery for the insides coming out the vagina"
Transfusions: Not asked
Current medications: Covera HS (verapamil) 240mg qd
Tylenol 1 tab every 4-6 hrs pm back pain, last dose taken 1 day ago
Aspirin – dosage unknown, last dose taken 10 days ago
Allergies: Penicillin □ reaction unknown; told by doctor not to take penicillin
Sulfa □ acute onset of "red rash and skin peeling in sheets" (1960s)
Cortisone □ face swelling

**FH:** Patient's father died in his 40s from "stomach cancer". Mother dies in her 90s of a "stroke", and had diabetes mellitus. The patient has numerous siblings, some of whom are step-siblings. One sister has diabetes. Two of the step-siblings have died, causes unknown. Health status of the other siblings are unknown. There is no family history of bleeding disorders.




**Personal Profile/SH:** The patient is a retired hotel worker and widow. She now lives with her daughter. She denies the use of cigarettes, alcohol or illicit drugs. Her diet consists mostly of cereals, oatmeal and bread. She doesn't each much fruit or vegetables.

**ROS:**
General: See HPI. Denies weight loss, fever.
Skin: Has no rash, itching, bruising.
Eyes: Reports no blurry vision, other visual disturbances.
Ears: Reports no hearing loss, tinnitus, pain, discharge, vertigo.
Nose: Has "allergies" which cause runny nose, sneezing and cough.
Mouth: Has no gingivitis, sore tongue, taste changes, dental problems
Throat: Reports no pain, voice changes
Pulmonary: Reports no chest pain, pneumonia, SOB, DOE, wheezing, sputum, hemoptysis

Circulatory system: Has no chest pain, palpitations, dyspnea, PND, orthopnea, edema, syncope
GI: See HPI; has no change in appetite, dysphagia, nausea, vomiting, rectal pain, hematemesis, diarrhea, peptic ulcer disease
GU: Reports no frequency, nocturia, polyuria, urgency, dysuria, hematuria, hesitancy, urinary flow changes, retention, incontinence; has no history of kidney problems
Female genitalia: See PMH.
Breast: Not asked
Sexual Hx: Not asked
Endocrine system: Reports no neck mass, thyroid problems, exophthalmos, heat/cold intolerance, thirst changes
Hematopoietic system: Has no lymph node enlargement, excessive bleeding, bruising, anemia
Musculoskeletal system: See HPI and PMH. Has other joint or muscle pain.
Nervous system: Has no history of head trauma, headaches, numbness, paralysis, convulsions, seizures, tremor, gait disturbances, coordination changes
Mood: Not asked.

**PE:**
General Appearance: Patient appears well-nourished, appearing her stated age. She is lying comfortably in bed, in no evident distress. She is alert, oriented and cooperative.
Vital Signs: Temp 96.0; Respirations 11; Oxygen sat 99% on Room Air; Supine- HR 89, BP 147/64; Standing- HR 110, BP 131/54
Skin: Warm, dry, pale
Head: Nontender over scalp
Eyes: Acuity not tested. PERRL. Extraocular muscles function intact. Fundi not visualized due to cataracts.
Ears: Acuity not tested. Pinna- no lesions, nontender. Canals- no bleeding. TMs not visualized due to cerumen obscuring view. Nose: normal pink mucosa nontender. No discharge.
Mouth: Mucosa pink, moist, slightly pale. No lesions or bleeding. No tonsillar erythema or exudates.
Neck: Supple. No thyromegaly, enlarged lymph nodes, jugular venous distention; no carotid bruits.
Pulmonary: Lungs clear to percussion and auscultation bilaterally, anteriorly and posteriorly
Cardiac: No thrills, lifts or heaves. PMI palpated in the left 5th ICS at the midclavicular line, non-bounding. Rate and rhythm are regular, normal S1 and S2. No murmurs, extra heart sounds heard.
Abdomen: Soft, non-tender, non-distended. Normoactive bowel sounds in four quadrants. No hepatosplenomegaly by palpation.
Rectal (done by ER physician- reported as showing no masses, with "pink stool". Bright red blood on glove, which tested positive with hemoccult.
Extremities: Full motion in all extremities. No clubbing, cyanosis, edema. Patient was slow to stand, and had an antalgic gait she attributed to back pain.
Neuro: Alert and oriented x 3. Cranial Nerves: II - XII grossly intact. Speech slightly slurred, difficult to comprehend at times. Sensation normal to light touch and 10 gram monofilament; motor 5/5 in all extremities. DTRs 2+ in biceps, triceps, knees and ankles. No Babinski response is noted.

**Admission lab results:**
CBC: WBC 7.9, differential: Bands 7, Segs 50, Lymphs 37, Monocytes 5, Eos O, Baso 1
Hgb 9.8 (was noted to have been 12.2, 2 days PTA), Hct 28.4
MCV 93.9
Platelet count 238

BMP: Na 140 BUN 20 PT 12.3
K 3.6 Creatinine 0.7 INR 1.0
Cl 110 Glucose 135 PTT 22
Bicarb 25

Problem List

| Problem No. | Date Onset | Active Problems | Date Resolved | Inactive/Resolved Problems |
|---|---|---|---|---|
| 1. | 1960s | Allergic reaction to sulfa (rash, peeling skin) | | |
| 2. | 1970s | | 1970s | Hx of cervical cancer s/p TAHBSO |
| 3. | 1970s | Hx of mild stroke x2<br>☐ Slurred speech | | |
| 4. | 1970s | Hypertension | | |
| 5. | 1998 | | | Bladder prolapse s/p corrective surgery |
| 6. | 2000 | Degenerative disc disease<br>chronic lower back pain | | |
| 7. | 10-29-02 | GI bleed | | |
| 8. | 11-01-02 | Anemia | | |
| 9. | Unknown | Hypercholesterolemia | | |
| 10. | Unknown | | Unknown | Bilateral cataracts s/p cataract surgery |
| 11. | Unknown | Allergy to penicillin (unknown reaction), cortisone (facial swelling) | | |

**Problem #1: Bleeding per rectum**

Assessment: The patient has experienced 2 episodes of bloody stools in the past three days, during which time she has had more bloody bowel movements. During the first episode, she describes bright red blood as well as "black clot". In the most recent episode, she reports only bright red blood. She has been feeling weak since these episodes. In addition, there is evidence that this patient has had substantial blood loss including: (1) a decrease in hemoglobin from 12.2 to 9.8 in two days with normal MCV, which suggest an acute bleed; (2) orthostatic changes with an increase in HR of >20 and decrease in Systolic BP > 15mmHg suggest that the patient is hypovolemic, with a blood loss of greater than 1 Liter. In trying to identify the source of the bleed we must attempt to differentiate an upper GI bleed from a lower GI bleed, as well as confirm that the bleeding is from the rectum and not from the vagina or urethral orifice. Because the rectal exam confirms that there is blood in the rectum, we can assume the patient does have a GI bleed. With the report of "bright red blood", it is likely the patient is having a lower GI bleed, although a brisk upper GI bleed could also present as bright red blood per rectum. The "black clots" seen in the first episode suggest a possible upper GI bleed, in which the "clots" may have been melenic stool.

The differential diagnosis of lower GI bleed include diverticulosis, colon cancer or polyps, ulcerative colitis, angiodysplasia, and hemorrhoids. **Diverticulosis** is likely as it most common in the elderly and can present

with painless bright red blood per rectum that can result in massive hemorrhage. A diverticular hemorrhage is usually caused by erosion of a blood vessel by a fecalith within the diverticular sac. The patient did have some recent constipation which could have led to the development of a fecalith. She took Metamucil for relief. It is unknown if the patient then had diarrhea, which can occur with Metamucil; but if she did, it is possible that the diarrhea in its rapid transit through the colon could have dislodged the fecalith resulting in injury to a blood vessel and hemorrhage. Diverticular bleeding stops spontaneously in the majority of patients. This was not the case for this patient. This could be due to the rupture of a large blood vessel in the colon, or it could be due to the patient's chronic use of aspirin (which can inhibit platelet aggregation resulting in decreased clotting ability for about 7-10 days, however, she claims to have not had aspirin for 10 days prior to admission).

**Colon cancer** is also possible. Like diverticular disease, it is more common in the elderly. The patient displays signs and symptoms that are characteristic of a left colonic cancer- change in bowel habits (constipation, diarrhea) and bright red blood per rectum. Intestinal obstruction is also common with a left colon cancer, however the patient did not complain of abdominal pain or tenderness which would be expected with obstruction. A right colon carcinoma would present with an iron deficiency anemia due to chronic blood loss, which can be occult and thus unknown to the patient, and a dull vague abdominal pain. The patient did have a chronic dull lower right quadrant abdominal pain. She also had anemia (Hgb 9.8), however this anemia appears to be due to the acute blood loss and not iron deficiency as her Hgb was 12.2 two days prior to admission, and her MCV was normal.

**Ulcerative colitis** should also be considered, although more commonly diagnosed in younger adults, there is also a small peak incidence among the elderly, ages 50-65. Although the patient is beyond this peak, UC must still be considered given that its hallmark is bloody diarrhea. Most patients with UC will also have fever and weight loss, which this patient did not have. **Angiodysplasia/AVM** is also possible as it is most commonly seen in the elderly and presents with painless bright red blood per rectum. **Hemorrhoids** can be a cause of rectal bleeding, however there is usually associated pain and a palpable rectal mass, which this patient did not have. Infectious colitis is less likely in this patient as she has no fever, abdominal pain or leukocytosis, all of which would be expected with an infectious process. The patient also denies any sick contacts.

A brisk **Upper GI bleed** could also be responsible for this patient's rectal bleeding, however with such a large amount of blood loss, one would also expect some hematemesis, which did not occur. The differential would include gastritis, vascular ectasia, peptic ulcer disease and ruptured varices. **Gastritis** is very likely given the patient's chronic use of aspirin. However, she does not have abdominal pain which might be expected if it were severe enough to have caused this patient's bleeding. **Peptic ulcer disease** is less likely as pain is its predominant symptom, and the patient denied any abdominal or chest pain. It is important to rule-out a gastric ulcer in this patient, or to diagnose and treat it, as an untreated ulcer can increase her risk of developing gastric cancer. She is already at risk given her Japanese ethnicity and positive family history of gastric cancer. Ruptured varices is unlikely as the patient has no hematemesis and no history of liver disease which would cause the formation of varices. Her normal coagulation studies make liver disease unlikely. Given the numerous possible diagnoses for this patient's GI bleed, it is imperative to have the patient undergo both upper endoscopy and colonoscopy, especially given her history of both bright red blood per rectum and “black clots”.
Plan: Admit to acute care hospital with careful monitoring of vital signs.
Plans:
Diagnostic:
-Place NG tube to assess for gastric bleeding
-Consult a gastroenterologist for upper endoscopy and colonoscopy
Treatment:
-Type and crossmatch. Transfuse 2 units packed red blood cells to replace blood loss, since she is at risk to continue bleeding
-No food or drink in preparation for endoscopy according to gastroenterologist instructions

-Further treatment dependent on endoscopic findings. Consider initiate gastric acid blocking regimen prophylactically
Patient education:
-Inform patient of the possible diagnoses and the need for careful monitoring and testing
-Inform patient of endoscopic procedures, explain risks and benefits, obtain informed consent
-Inform patient of need for transfusion, explain risks and benefits, obtain informed consent

**Problem #2: Anemia**
Assessment: The patient has developed an acute anemia. Her hemoglobin had dropped 2.4 G/dL (from 12.2 to 9.8), which correlates with a decrease in hematocrit of approximately 7%. Hematocrit generally falls 2-3 points for every 500 mL of blood lost, making the estimated blood loss in this patient 3.5L. The normal MCV also suggests that the anemia is due to an acute blood loss. The normal coagulation studies rule-out a coagulopathy that may complicate the patient's GI bleed, although platelet dysfunction due to the patient's chronic aspirin use may exacerbate the bleed. The patient's orthostatic changes in heart rate and systolic BP is consistent with blood loss of greater than 1 liter resulting in hypovolemia. The patient appears pale with pale mucous membranes and has complaints of weakness and light-headedness, which are all due to her anemia. It is important to transfuse this patient and increase her hemoglobin in order to avoid the complications associated with anemia and hypovolemia, such as high output cardiac failure and organ hypoperfusion, which may be of greater risk in the elderly.
Plans:
Diagnostic:
-Monitor blood count every 4 hrs for continued bleeding and decrease in hemoglobin
Treatment:
- Place adequate intravenous access (2 large bore peripheral catheters)
-Type and crossmatch. Transfuse 1 unit packed red cells now
-Intravenous fluids: normal saline at 100cc/hour
-Transfuse packed red cells to keep hemoglobin > 10 G/dL
Patient education:
-Inform patient of need for transfusion, explain risks and benefits, obtain informed consent -Inform patient of signs and symptoms of worsening anemia that she should be aware of, such as worsening orthostatic hypotension, weakness, faintness, pallor, tachycardia.

**Problem #3: Back pain**
Assessment: The patient has been previously diagnosed with degenerative disc disease and suffers from chronic back pain. She regularly uses a back brace and cane to assist with mobilization. She occasionally has acupuncture treatments to relieve the pain. She had been taking aspirin on a regular basis for pain, and recently changed to Extra-Strength Tylenol which gives only partial relief. Given the possibility of gastritis, it is best for the patient to avoid aspirin and any other NSAID, especially with an active GI bleed. Once the bleeding has resolved, a specific COX-2 inhibitor could be considered, although there is still a risk of GI irritation with COX2 inhibitors, the risk is less than that of nonspecific NSAIDs. Given the patient's allergic reaction to sulfa, celecoxib is contraindicated; however, rofecoxib can be used. In clinical trials with rofecoxib, 3.9% of the patients had a reported sulfa sensitivity, none developed anaphylactic reactions. Another option would be to administer misoprostol along with the NSAID, in order to further protect the gastric mucosa. In order to completely avoid NSAIDs but still provide complete relief, tramadol could be considered. tramadol is a centrally acting analgesic which acts as an opiate agonist, although it is not opioid-derived. Tramadol does not irritate gastric mucosa, thus not causing an increased risk for GI bleed. Side effects reported for tramadol include constipation, dizziness, nausea, dry mouth, sweating and minimal cardiovascular effects including hypotension, tachycardia and syncope. Given the patient's current gastritis, recent GI bleed and sulfa allergy, tramadol might be the best choice for pain relief in this patient should she request more complete relief than she

is currently receiving with Tylenol; while being aware of possible hypotensive effects of this drug.

Plans:
Diagnostic: No further diagnostic studies at this time.
Treatment:
-Continue Tylenol 1 gram every 4-6 hrs as needed for back pain, not to exceed 4g daily
-If better pain control is desired, consider starting tramadol 25 mg daily
Patient education:
-Inform patient of the need to avoid NSAIDs
-Inform patient of the daily maximum dose of Tylenol (4 G per day) and the adverse effects that could occur in the event of toxicity
-Inform patient that a trial of tramadol could be started, with attention to added side effects, if better pain control is needed
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Resources:
AHFS Drug Information, 2002
Ferri. Practical Guide to the Care of the Medical Patient, 5th ed., 2001
Myers. NMS Medicine, 4th ed" 2001

<Signed>
Toby Best, MS 3

## Example of Ambulatory History and Physical

**Ambulatory Medicine Clerkship H&P (Comprehensive-style Ambulatory note for a New Patient Visit please note that more problem-focused notes may be acceptable for different types of patient visits. Please discuss expectations with your preceptor if you are unsure of the length, content, or style expected for notes at your site).**

## Student Note

**Date of Exam:** 6/1/13

**Pt ID:** 57 year old, Chuukese, male

**Source and Reliability:** patient and wife who are unreliable due to language barrier

**CC:** LLE open wound x 3 weeks

**HPI:**
The patient is a 57 year old, Chuukese, gentleman with PMH significant for uncontrolled DM2, HTN, HLD, CAD s/p stent placement, A-Fib, and subclinical hypothyroidism who presents to clinic today for f/u of LLE venous stasis ulcer.

The patient was in his usual state of fair general health until 5 weeks prior to clinic visit when he noted the gradual onset of bilateral LE swelling. Four weeks prior to this clinic visit, the swelling caused the bilateral LE to become very tense and the LLE began weeping clear fluid from the anterior aspect of the lower leg. The weeping progressed to become an open wound with mild serous drainage. Patient sought care at our clinic for this wound 1 week ago. Since this time, the patient feels the wound is getting smaller now. The wound is not painful and is not associated with surrounding erythema, induration, fever, chills, nausea, vomiting, diarrhea, c/p, SOB.

Labs were ordered after last visit including CMP, CBC, TSH, and A1C which were remarkable for BUN at 30 (baseline is 30), normal CBC, normal TSH at 4.17, and elevated A1C at 11.9 (down from 13.3 in January).

**PMH:**
Illnesses:
-DM2: diagnosed in 2002. Poorly controlled. Last A1C 11.9 (5/28/13). Evidence of end organ damage with retinopathy, peripheral neuropathy and multiple toes amputated on R foot for cellulitis secondary to DM. On insulin glargine, aspart, and on metformin. Questionable adherence with medications and multiple clinic no-shows.
-HTN: stage I despite treatment with carvedilol and lisinopril (BP last week 129/91, today 155/85)
-HLD: on atorvastatin
-CAD s/p stent. Has nitroglycerin for angina but says he never has to take it. Takes aspirin and clopidogrel.
-A-Fib. On aspirin and clopidogrel

Meds:
-Furosemide, 20 mg, PO, QAM
-Carvedilol, 12.5 mg, PO, BID
-Insulin glargine, 45 U, BID
-Insulin aspart, 30 U before breakfast, 35 U before lunch and dinner
-Metformin, 1000 mg, BID
-Lisinopril, 5 mg, BID

-Atorvastatin, 80 mg, daily
-Clopidogrel, 75 mg, daily
-ASA, 81 mg, daily
-Nitroglycerin, 0.4 mg, sublingual, 1 dose Q5M x 3 PRN Allergies:
KDA

**FHx, SHx** reviewed and no changes

**ROS:** negative except as stated in HPI

**PE:**
-Vitals: temp 98.3, pulse 102, RR 14, BP 155/85, weight 128.7 kg (was 126.4 kg last week) General appearance: sitting comfortably in no acute distress
-HEENT: MMM
-Neck: no lymphadenopathy
-Resp: CTAB
-CV: irregularly irregular rhythm, normal S1 and S2, no r/m/g
-Abd: obese, nondistended, soft, nontender, normoactive BS
-Ext: bilateral pitting edema to thighs, tense, open wound on anterior aspect of lower left leg measuring 7x3 cm in transverse orientation, wound appears pink with granulation tissue, no surrounding erythema, induration, or associated heat; no popliteal lymphadenopathy; foot exam negative for lesions, monofilament test revealed lack of sensation in toes and plantar feet

**A/P**

#1) Venous stasis ulcer of LLE. Differential diagnosis of lower extremity skin ulceration in this patient with long-standing diabetes and evidence of end organ damage includes venous stasis ulcer, arterial insufficiency ulcer, and diabetic foot ulcer. This lesion is most likely a venous stasis ulcer due to the associated dependent pitting edema, extremely tense nature of the skin encouraging progression to ulceration, and characteristic sequence of onset with edema, then weeping, then ulceration in the area of weeping. Less likely this lesion represents an arterial insufficiency ulcer (it is not located distally at tips of toes), or diabetic foot ulcer (it is not located on feet at pressure points). The pathogenesis of edema related to venous stasis centers on chronic valvular incompetence which disrupts normal outflow of venous blood from dependent areas. Resulting increases in hydrostatic pressure in the capillary beds proximal to obstruction of venous outflow (in dependent areas) cause an abnormal quantity of fluid to transfer from the vascular to the interstitial space. Often, the interstitial volume must expand several liters before the edema becomes clinically apparent. Typically, a weight gain of several kilograms precedes the clear manifestations of edema and certainly precedes the onset of complications related to the edema such as venous stasis ulceration. Importantly, the abnormal transfer of fluid to the interstitium may occur at the expense of circulating blood volume in the remainder of the body which can in turn stimulate the retention of NaCl and water until the plasma volume deficit is corrected. This cycle serves to exacerbate the developing edema. Associated findings in chronic venous insufficiency include erythema, dermatitis, and hyperpigmentation along the distal aspect of the leg.

For this patient, there has been no change since last week in lesion or in associated edema despite assurance he is taking furosemide with good adherence. Cellulitis is often a recurring problem in the setting of venous insufficiency. Patient is applying bactroban and there are no signs of secondary infection, however, still high risk for secondary infection given poorly controlled DM2 and break in skin barrier.

In terms of treatment, effective control and prevention of skin ulceration centers on reduction of edema. There are several lifestyle supportive measures that can be encouraged, as well as the mainstay of diuretics to promote

reduction of total body fluid. Patient education should focus on advising the patient to avoid prolonged standing or sitting with the utilization of frequent leg elevation. Additionally, graded compression stockings can be employed during the day to promote outflow of venous blood from the dependent lower extremity. For ulcer treatment, wet to dry dressings or occlusive hydrocolloid dressing are shown to promote more rapid ulcer resolution. There are also commercially available compressive dressings which contain pastes or zinc oxide, glycerin, calamine, and gelatin which can be applied in one week intervals until healing occurs. As a last resort, surgical valvuloplasty and bypass of venous occlusions can be attempted.

Plan
-Increase furosemide to 40 mg, PO, QAM
-Referral to wound care clinic for more intensive wet to dry dressings or compressive dressing application
-Continue topical bactroban
-F/u with us in 2 weeks

#2) Poorly controlled DM2. A1C from 5/28/13 is 11.9. Patient brought glucometer to appointment today and is checking sugars at least four times per day with good adherence, glucometer reveals sugars in the 300-400s and one reading of 97. Patient believes he misses at least one to two insulin doses per day.
Plan
-Due to questionable adherence, will not make any changes to insulin or metformin today, as patient has an appointment with a diabetes educator next week.
-Patient has scheduled referrals to podiatry and ophthalmology.

#3) HTN. Stage I despite treatment with carvedilol and lisinopril.
Plan
-Increase carvedilol to 25 mg, PO, BID
-Continue lisinopril

#4) HLD: continue atorvastatin

#5) CAD s/p stent: continue clopidogrel and ASA

#6) A-Fib: tachycardic today to 102. On carvedilol for rate control.
Plan
-As above, increase carvedilol to 25 mg, PO, BID
-Continue clopidogrel and ASA

#7) Hx of subclinical hypothyroidism. Previous TSH 5.69 on 1/7/13, most recent TSH 4.17 on 5/28/13. Asymptomatic.
Plan
-Monitor for symptoms at follow up visits

#8) Poor medication adherence
Plan
-Pillbox visit

**Resources:**

Harrison's Principles of Internal Medicine, 18th edition. Chapter 249: Vascular Diseases of the Extremity. Chapter 53: Skin

Manifestations of Internal Disease. Chapter 36: Edema.