

Clinical Skills Bootcamp 2020 [DRAFT]

This Bootcamp is designed to assist students who have taken one or more years off from the medical school curriculum after M2 in refreshing their hands-on and clinical reasoning skills.

This Bootcamp was designed by MD/PhD Students Ashley Kramer and Jenna Carter along with Clinical Skills Faculty Dr. Erin Miller and Dr. Chih Chuang and Sonal Patel. We thank everyone for their contributions and are looking forward to the continued development and improvement of this bootcamp for years to come.

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Learning objectives

- To enhance interviewing skills, physical examination skills, and clinical reasoning
- To facilitate the ability to interact comfortably and effectively with patients and professionals in clinical settings in preparation for clinical clerkships
- Sharpen clinical reasoning skills that include:
 - Interviewing patients for history of present illness
 - Ability to define top differential diagnoses based on clinical presentation
 - Effective note writing, including generating SOAP notes
 - Oral presentation
 - Treatment plan
- Students will review physical diagnosis skills that are deemed important for returning to the clinical setting by performing the 92 maneuver physical exam both in a learning and examination setting.

Segment 1: History

Learning Objective: By the end of day 1 students should be comfortable taking a general history. Students should also be comfortable applying targeted histories to a patient's chief complaint

Part 1: General History Taking Review

- Prior to Day 1, students should review the template HPI form on pg. 6 to refresh your memory on the flow of taking a proper and thorough history.
- Students will be able to use this template on Day 1, but should be able to operate without it by Day 3
- Before jumping into history taking, there will be a 30 minute introductory presentation by an M4 or resident that will provide tips on taking a quality and comprehensive HPI as well as tips on refining a review of systems and case presentations
- Students should pair up with one person taking the role as physician and the other as patient (The "patient" should utilize the script that will be provided)
- Preceptors will be circulating around and listening in to help guide the debriefing sessions.
- After each case, we will come back together as a group to talk through the case and address any questions or concerns you may have as well as point out things that we observed went well or items to improve upon

Part 2: Targeted History Taking Systems-Based Review

- This review will consist of 4 different sessions, focusing on one system at a time (HEENT/Neuro, CV/Resp, ABD, MSK)
- Prior to this session, students should review the "advanced history taking" documents for each system posted on canvas
- Each session will begin with a 15-20 minute powerpoint presentation detailing important history questions to ask when a patient has a system specific chief complaint (i.e. "chest pain")
- After the presentations, we will break off into 3 groups to work through illness scripts regarding the system being discussed. This will be facilitated by a preceptor but students will be responsible for generating the following from a chief complaint:
 - Eliciting a detailed history from the preceptor by asking targeted questions
 - DDX
 - Determining what labs/work-up to perform
 - Interpreting the results of available labs
 - Treatment Plan (developmental level of understanding - not expected to be proficient in this stage)
- This format will be repeated for each system

Day 1: Detailed Itinerary

9:00-9:30 -----Intro History Taking Presentation
9:30-10:00 ----- General History Taking - Case 1:
10:00-10:30 -----General History Taking - Case 2:
10:30-11:30 --- Targeted History Taking - HEENT/Neuro
11:30-12:30 ---- Targeted History Taking - MSK
12:30-1:30 ----- Lunch Break
1:30-2:30 - ----- Targeted History Taking - CV/Respiratory
2:30-3:30 - ----- Targeted History Taking – Abdominal

Segment 2: Hands On!

Learning Objective: *By the end of day 2, students should be comfortable performing all maneuvers of the “92 Maneuver Comprehensive” Physical Exam. This portion of the curriculum will be split over two days, one day for review and one day for examination.*

Part 1: Comprehensive 92 Maneuver Core Physical Exam

- Prior to Day 2, students should review the following materials:
 - [link to 92 maneuver physical exam video]
 - Teaching guide from year 2 PD course for the 92 Maneuver Core Physical Exam
- Students will have the opportunity to ask faculty any questions they may have prior to being assigned a standardized patient (SP)
- Students will work in pairs, both getting the opportunity to run through the entire “92 Maneuver Comprehensive” exam with a teaching assistant SP who will provide feedback on whether students are correctly performing and verbalizing the exam maneuvers.
- The student who is not actively performing the exam will assist their partner in assuring they are using the proper terminology and vocalizing what they are assessing and the results with each maneuver as well as ensuring that they do not miss any maneuvers.

Part 2: Observed 92 Maneuver Core Physical Exam

- For this second hands on portion, students will perform the 92 maneuver physical exam on an SP that is no longer in “teaching mode”. The SPs will no longer be instructing the students so that they can simulate an actual physical exam.
- Students will be observed and evaluated by a preceptor and provided with formative feedback.
 - Note MD/PhD students not on track to return to M3 this year will not require the examination portion of the curriculum.
- Students will also have the opportunity to have a one-on-one debriefing session with their preceptor post exam to discuss their assessment.

Day 2: Detailed Itinerary

Day 1 : (3hrs) 92 Maneuver Physical Exam Practice with TA in Pairs (one reader one examiner, then switch)

Day 2: (70 min) Observed 92 Maneuver Clinical Readiness Assessment

Segment 3: Team-based Clinical Case and Targeted Physical Exam

Learning Objective: *By the end of day 3, students should be comfortable eliciting an HPI, targeted review of systems, targeted physical exam, coming up with a differential diagnosis, orally presenting a case, performing an echocardiogram, a FAST ultrasound exam, and writing a SOAP note*

- This day will begin with a short overview of the components that make up a quality and comprehensive SOAP note
- There will be two full cases that will encompass one cardiovascular and one abdominal case
- Cases will be acted out by peers and/or M4 preceptors
- All students will work as one large group through each case rotating roles (i.e. one student will take the history, another student comes up with an assessment, DDX, Plan, next student performs the physical exam, etc.)
- The most senior graduate students preparing to re-enter M3 this cycle will be expected to do the most significant amount of hands-on participation.
- ALL students should be taking **notes** for **BOTH CASES**
 - Upon completion of day 3, each student will be randomly assigned one of the 2 cases to write a SOAP note and submit to the canvas site.
 - SOAP notes will then be graded by M4 preceptors or Physical Diagnosis course faculty (for students immediately returning to M3) so that students can receive formative feedback and determine clinical readiness.
 - Please refer to pgs. 6-8 for a guide-lines on SOAP note writing
- Each case will include all of the following:
 1. Present the Chief Complaint
 2. Develop HPI with interactive feedback from all students
 3. Determine what physical exam maneuvers are important for diagnosis
 4. Students will perform relevant physical exam on standardized patients
 5. Ultrasound
 - a. Prior to each case, and Ultrasound expert will give a 20-30 overview of the echocardiogram or FAST exam ultrasound scanning protocol
 6. Come up with lab tests to order
 7. Come up with Assessment and Plan
 8. Practice Oral Presentation
 9. Debriefing

Day 3: Detailed Itinerary

9:00-10:30 ----- SOAP Note Writing Presentation

10:30-11:00 ---- Echocardiogram Scanning Protocol Presentation

11:00-12:30 ---- Case 1: Cardiovascular

12:30-1:30 ----- Lunch Break

1:30-2:00 - ----- FAST Exam Scanning Protocol Presentation

2:00-3:30 ----- Case 2: Abdominal

3:30-4:00----- Wrap up and Opportunity for Questions

HPI Review

Chief Complaint: "What brings you in today?"

O - Onset	"When did this start, what were you doing when it started?"
P - Palliative/Provocative	"Does anything make it better or worse?"
Q - Quality	"Can you describe the pain for me?"
R - Radiation	"Does the pain move or radiate anywhere else?"
S - Severity	"On a scale of 1-10, how would you rate the pain?"
T - Temporal	"When are your symptoms the worst, morning, night, after a meal, etc."
A - Associated Symptoms	"Are there any other symptoms associated with this problem you describe?"
A - Attribution	"What do you think my be going on?"
A - Anything Else	"Is there anything else you would like to tell me about today?"

*Remember it is always a good idea to summarize the HPI back for the patient to show them you have listened to them and to ensure you understood everything correctly

Review of Systems (ROS): Ask Pertinent Negatives and Positives for all of the following systems that you think may be relevant to the chief complaint.

Constitutional: fever, chills, sweats, fatigue, wt. Change, appetite change

Eyes: Dry, tearing, discharge, vision change

Mouth/ENT: earaches, hearing loss, rhinorrhea, epistaxis, sinus problems, snoring, sore throat, bleeding gums, tooth pain.

Cardio: chest pain, palpitations, PND, orthopnea, murmur, edema

Respiratory: cough, wheezing, SOB, hemoptysis

GI: Nausea, vomiting, diarrhea, abdominal pain, dysphagia, appetite changes, heartburn, rectal bleeding, melena

Genitourinary: Dysuria, hematuria, flank pain, frequency, vaginal bleeding, vaginal discharge

MSK: Joint pain, joint swelling, muscle pain, deformity

Dermatology: Rashes, lesions, abnormal growths, jaundice, dry skin

Neuro: Headaches, seizures, numbness, dizziness, memory loss

Psych: Mood change, anxiety, suicidal thoughts, major life change or event

Endocrine: sweating, excessive thirst, heat/cold intolerance

Hem/Lymphatic: Easy bruising, easy bleeding, swollen glands

Past Medical History (PMH): "have you ever been diagnosed with major medical conditions, or do you have any chronic medical conditions currently? Have you ever been hospitalized?"

Past Surgical History (PSH):

Medications: Don't forget about OTC pain meds/vitamins/supplements

Allergies:

Immunizations: Ask about flu shot

FH: Ask about family history related to chief complaint. Also ask about the big ones; CVD, HTN, Diabetes, cancer

SH: Living arrangements, do you feel safe, environmental and occupational exposures, occupation, recent life changes or stressors, sexual history, drugs, alcohol, smoking (interest in quitting?), diet, exercise.

SOAP Note Writing Review

The Subjective, Objective, Assessment and Plan (SOAP) note is an acronym representing a widely used method of documentation for healthcare providers. The SOAP note is a way for healthcare workers to document in a structured and organized way.

This widely adopted structural SOAP note was theorized by Larry Weed almost 50 years ago. It reminds clinicians of specific tasks while providing a framework for evaluating information. It also provides a cognitive framework for clinical reasoning. The SOAP note helps guide healthcare workers use their clinical reasoning to assess, diagnose, and treat a patient based on the information provided by them. SOAP notes are an essential piece of information about the health status of the patient as well as a communication document between health professionals. The structure of documentation is a checklist that serves as a cognitive aid and a potential index to retrieve information for learning from the record.

Subjective

This is the first heading of the SOAP note. Documentation under this heading comes from the “subjective” experiences, personal views or feelings of a patient or someone close to them. In the inpatient setting, interim information is included here. This section provides context for the Assessment and Plan. The following information should be included in the “subjective” section of the SOAP note:

Chief Complaint (CC)

The CC or presenting problem is reported by the patient. This can be a symptom, condition, previous diagnosis or another short statement that describes why the patient is presenting today. The CC is similar to the title of a paper, allowing the reader to get a sense of what the rest of the document will entail. (Examples: chest pain, decreased appetite, shortness of breath.)

However, a patient may have multiple CC’s, and their first complaint may not be the most significant one. Thus, physicians should encourage patients to state all of their problems, while paying attention to detail to discover the most compelling problem. Identifying the main problem must occur to perform effective and efficient diagnosis.

History of Present Illness (HPI)

The HPI begins with a simple one line opening statement including the patient's age, sex and reason for the visit. (Example: 47-year old female presenting with abdominal pain.) This is the section where the patient can elaborate on their chief complaint. (OPQRSTAAA, pg. X) It is important for clinicians to focus on the quality and clarity of their patient's notes, rather than include excessive detail. This section should also include relevant information from the rest of the history (Past Medical History, Past Surgical History, Family History, Social History).

Review of Systems (ROS)

This is a system based list of questions that help uncover symptoms not otherwise mentioned by the patient. Pertinent negatives from the ROS should be included in this section. Please refer to pg. X for a ROS guideline.

Current Medications, Allergies

Current medications and allergies may be listed under the Subjective or Objective sections. However, it is important that with any medication documented, to include the medication name, dose, route, and how often.

Objective

This section documents the objective data from the patient encounter. This includes:

- Vital signs
- Physical exam findings
- Laboratory data
- Imaging results
- Other diagnostic data
- Recognition and review of the documentation of other clinicians.

A common mistake is distinguishing between symptoms and signs. Symptoms are the patient's subjective description and should be documented under the subjective heading, while a sign is an objective finding related to the associated symptom reported by the patient. An example of this is a patient stating he has “stomach pain,” which is a symptom, documented under the subjective heading. Versus “abdominal tenderness to palpation,” an objective sign documented under the objective heading.

Assessment

This section documents the synthesis of “subjective” and “objective” evidence to arrive at a diagnosis. This is the assessment of the patient’s status through analysis of the problem, possible interaction of the problems, and changes in the status of the problems. Elements include the following.

Summary Statement

This statement condenses and pulls together the most *relevant* clinical information from both the subjective and objective sections to help present a succinct picture of the patient. This helps your attending understand what you see as the most salient features of the case and helps construct an argument as to why you believe your first diagnosis is correct.

- Ex: “Mrs. Samples is a 34 year old woman with a history of obesity presenting with episodic abdominal pain and nausea provoked by food ingestion, and a positive Murphy’s sign.”

Problem

List the problem list in order of importance. A problem is often known as a diagnosis.

Differential Diagnosis

This is a list of the different possible diagnosis, from most to least likely, and the thought process behind this list. This is where the decision-making process is explained in depth. Included should be the possibility of other diagnoses that may harm the patient, but are less likely.

- Example: Problem 1, Differential Diagnoses, Discussion, Plan for problem 1 (described in the plan below). Repeat for additional problems

Plan

This section details the need for additional testing and consultation with other clinicians to address the patient's illnesses. It also addresses any additional steps being taken to treat the patient. This section helps future physicians understand what needs to be done next. For each problem:

- State which testing is needed and the rationale for choosing each test to resolve diagnostic ambiguities; ideally what the next step would be if positive or negative
- Therapy needed (medications)
- Specialist referral(s) or consults
- Patient education, counseling

A comprehensive SOAP note has to take into account all subjective and objective information, and accurately assess it to create the patient-specific assessment and plan.

References

Adapted from < <https://www.ncbi.nlm.nih.gov/books/NBK482263/> >