



**Course Pack
2012-2013**

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The Longitudinal Program is created for first year medical students to be paired with a physician. The physician mentor is a doctor who works clinically in an outpatient setting. This program will allow students to spend time with a practicing physician and observe the interactions of doctor-patient relationship in continuity, out-patient setting. At the Pritzker School of Medicine, students will learn professional and clinical skills in the traditional classroom setting, and then practice and develop these skills in the real world clinical setting with their mentoring preceptor. The students will also develop a continuity relationship with a clinic, the community and the patients. The program will help to integrate the basic science content of medical school with clinical experience and help the student to develop an understanding of the context of their preclinical medical education.

Goals and objective of the Longitudinal Program are:

1. Develop mentoring relationships between physicians and students
2. Observe and participate in the outpatient care activities of the physician
3. Develop professional character and behavior
4. Appreciate and understand the importance of the doctor patient relationship
5. Integrate the basic science content with clinical experience
6. Understand the U.S. Health Care System
7. Be exposed to the methods of information management
8. Gain knowledge of community resources
9. Learn to adopt the role of a student of clinical medicine
10. Practice interviewing and history taking skills
11. Understanding the patients' perspectives and the impact of illness in their lives
12. Practice physical examination skills
13. Practice clinical diagnostic reasoning skills
14. Practice communicating clinical information orally and written
15. Be exposed to the importance of psychosocial and ethical aspects of patient care

Students achieve these goals and objectives by working with their preceptors in the clinic and by completing the required LP assignments with help from your paired medical student and physician preceptor.

Instructions for Students and Preceptors

The Longitudinal Program is designed to pair a medical student with an outpatient clinical physician preceptor for the first year of medical students. Most students will also be paired with a fellow medical student who will work with each other and go together at the same date and time to their outpatient clinics. The students will observe their preceptor in the clinical setting and apply and practice the clinical skills they are learning in the classroom setting to the outpatient setting. Medical students have available time in the curriculum for visits to their preceptor Monday, Wednesday or Friday afternoons. Students may also visit their preceptors in the evening or on the weekends if their preceptors have this clinic time.

Students will be given an information sheet for their preceptors and contact information on where the clinics are, when the physicians are in the clinics and how to contact their preceptors. It will be the **students' responsibility to contact their preceptors and schedule their required time with them at least 1-2 weeks before their session!**

Students will be required to meet with their preceptors 1-2 times a month for 2-4 hour sessions.

The first part of the session will consist of the students observing their preceptor seeing patients in the outpatient clinics.

The second part of the session will be for the students to complete a required assignment for each visit. The assignment usually will be to practice a clinical skill that was just taught in the clinical skills unit. The preceptor will be given the responsibility of finding a patient that the medical student can work with to complete the assignment. One of the medical students from the two member team will complete the assignment with the first patient while the other medical student will observe the encounter and complete a checklist to evaluate the performance. The preceptor will then find a second patient for the second medical student to work with and this student will complete the assignment and have a checklist completed for their performance. Each student will also be given an attendance sheet that they need their preceptor to sign and that will then need to be handed in. Preceptors will answer any questions the students have and provide formative feedback on their performance.

REQUIREMENTS

Students will need to complete all required assigned sessions with their preceptors. There is one assigned clinical skills activity every student session. Both students and preceptor should review the assignment at the beginning of each clinical session. The students should complete each required skill assignment on each other. The preceptor should then complete an attendance sheet for each student after each visit. The attendance sheets and clinical skills checklists should be turned into the Director of the Longitudinal Program.

The Longitudinal Program integrates clinical skills that are taught in your Clinical Skills unit. You will need to complete all assignments in LP to pass your Clinical Skills unit.

The Longitudinal Program course pack with all assignments completed needs to be handed in to the Family Medicine office M-156 by June 5th, 2013.

For information or questions about the Longitudinal Program contact:

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Clinic Visit 1: Assignment #1

Instructions to the Preceptors:

First hour of the session: Allow the students to shadow you and experience work in the outpatient clinic. Give the students a tour of your office; introduce the student to the staff and their functions in the clinic. Allow the student to observe the preceptor doing at least one patient interview and a physical examination.

Second hour of the session: Assign each student a patient that they complete the assignment with. Please then fill out the attendance sheet below.

Suggested Assignment: Recent Clinical Skills Exercises

- Introduction
- Agenda setting

Attendance and Clinical Skill Log

The attendance & Clinical Skills log lists the various activities that should be completed throughout the year. The student and preceptor should initial the log next to the appropriate topic **after each visit.** Preceptors may also give feedback on this form about the student's performance during a particular session.

<p>Site Visit 1:</p> <p>Student: should observe preceptor and perform a suggested assignment on one patient.</p> <p>Preceptor: give office tour, introduce staff, and allow students to observe clinical care. Find a patient for each student so that they can practice</p>	<p>Date _____</p> <p>Completed _____</p> <p>Preceptor Signature _____</p> <p>Student Signature _____</p> <p>Student Evaluator Signature _____</p>
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Clinic Visit 2: Assignment 2

Instructions to the Preceptors:

First hour of the session: Allow the students to shadow you and experience work in the outpatient clinic. Allow the student to observe the preceptor doing at least one patient interview and a physical examination.

Second hour of the session: Assign each student a patient that they complete the assignment with. Please then fill out the attendance sheet below.

Suggested Assignment: Recent Clinical Skills Exercises

- Introduction
- Agenda setting
- History of Presenting Illness

Attendance and Clinical Skill Log

The attendance & Clinical Skills log lists the various activities that should be completed throughout the year. The student and preceptor should initial the log next to the appropriate topic **after each visit.** Preceptors may also give feedback on this form about the student's performance during a particular session.

<p>Site Visit 2:</p> <p>Student: should observe preceptor and perform a suggested assignment on one patient.</p> <p>Preceptor: Preceptor: Allow students to observe clinical care. Find a patient for each student so that they can practice</p>	<p>Date _____</p> <p>Completed _____</p> <p>Preceptor Signature _____</p> <p>Student Signature _____</p> <p>Student Evaluator Signature _____</p>
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Clinic Visit 3: Assignment 3

Instructions to the Preceptors:

First hour of the session: Allow the students to shadow you and experience work in the outpatient clinic. Allow the student to observe the preceptor doing at least one patient interview and a physical examination.

Second hour of the session: Assign each student a patient that they complete the assignment with. Please then fill out the attendance sheet below.

Suggested Assignment: Recent Clinical Skills Exercises

- Introduction
- Agenda setting
- History of Presenting Illness
- History: (i.e. HPI, Past Medical, Family, Social, Review of Systems, Sexual)
- Physical Exam

Attendance and Clinical Skill Log

The attendance & Clinical Skills log lists the various activities that should be completed throughout the year. The student and preceptor should initial the log next to the appropriate topic **after each visit.** Preceptors may also give feedback on this form about the student's performance during a particular session.

<p>Site Visit 3:</p> <p>Student: should observe preceptor and perform a Suggested assignment on one patient.</p> <p>Preceptor: Allow students to observe clinical care. Find a patient for each student so that they can practice</p>	<p>Date Completed _____</p> <p>Preceptor Signature _____</p> <p>Student Signature _____</p> <p>Student Evaluator Signature _____</p>
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Clinic Visit 4: Assignment #4

Instructions to the Preceptors:

First hour of the session: Allow the students to shadow you and experience work in the outpatient clinic.

Second hour of the session: Assign each student a patient that they complete the assignment with.

Suggested Assignment: Recent Clinical Skills Exercises

- Introduction
- Agenda setting
- History of Presenting Illness
- History: (i.e. HPI, Past Medical, Family, Social, Review of Systems, Sexual)
- Physical Exam: (i.e. pulses, abdomen, ENT)

Attendance and Clinical Skill Log

The attendance & Clinical Skills log lists the various activities that should be completed throughout the year. The student and preceptor should initial the log next to the appropriate topic **after each visit.** Preceptors may also give feedback on this form about the student's performance during a particular session.

Site Visit 4: Student: should observe preceptor and perform a Suggested assignment on one patient. Preceptor: Allow students to observe clinical care. Find a patient for each student so that they can practice	Date
	Completed _____
	Preceptor Signature _____
	Student Signature _____
	Student Evaluator Signature _____

Clinic Visit 5: Assignment #5

Instructions to the Preceptors:

First hour of the session: Allow the students to shadow you and experience work in the outpatient clinic.

Second hour of the session: Assign each student a patient that they complete the assignment with.

Suggested Assignment: Recent Clinical Skills Exercises

- Introduction
- Agenda setting
- History of Presenting Illness
- History: (i.e. HPI, Past Medical, Family, Social, Review of Systems, Sexual)
- Physical Exam: (i.e. heart, lung, musculoskeletal)

Attendance and Clinical Skill Log

The attendance & Clinical Skills log lists the various activities that should be completed throughout the year. The student and preceptor should initial the log next to the appropriate topic **after each visit.** Preceptors may also give feedback on this form about the student's performance during a particular session.

Site Visit 5:	
Student: should observe preceptor and perform a suggested assignment on one patient.	Date Completed _____
Preceptor: Allow students to observe clinical care. Find a patient for each student so that they can practice.	Preceptor Signature _____
	Student Signature _____
	Student Evaluator Signature _____

Geriatric Home Visit: Assignment #6

Instructions to the Student:

- One student per pair should reply to the e-mail sent by Aliza Baron, abaron@medicine.bsd.uchicago.edu, to schedule a visit at an independent senior's apartment in Hyde Park.
- Dress professionally and arrive on time to the trained patient home visit.
- Work in pairs to complete the Assignment at the trained patient's home.
- Complete the post-visit questionnaire (provided by trained patient).
- Sign the attendance log.
- At home, complete a 250 word reflection of your experience (see CHALK website for full details)

Instructions to the Trained Patient:

- Allow students to perform complete history and certain parts of the physical exam outlined in the worksheet.
- Have students complete the post-course questionnaire.
- Provide feedback to the students utilizing the structured checklist.
- Sign attendance log.
- Keep the post-course questionnaire and Assignment with you.

The attendance & Clinical Skills log lists the various activities that should be completed throughout the year. The student and preceptor should initial the log next to the appropriate topic after each visit. Preceptors may also give feedback on this form about the student's performance during a particular session.

Attendance and Clinical Skill Log

Site Visit 6: Student: should observe preceptor and perform a suggested assignment on one patient.	Date Completed _____ Student Signature _____ Student Evaluator Signature _____
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Clinic Visit 7: Assignment #7

Instructions to the Preceptors:

First hour of the session: Allow the students to shadow you and experience work in the outpatient clinic.

Second hour of the session: Assign each student a patient that they complete the assignment with.

Suggested Assignments:

- **History: (i.e. HPI, Past Medical, Family, Social, Review of Systems, Sexual)**
- **Physical: (i.e. vitals, EENT, Lung, Cardiac, Abdomen, Musculoskeletal)**
- **Written History**
- **Oral Presentation**
- **Counseling for Change**

Attendance and Clinical Skill Log

The attendance & Clinical Skills log lists the various activities that should be completed throughout the year. The student and preceptor should initial the log next to the appropriate topic **after each visit.** Preceptors may also give feedback on this form about the student's performance during a particular session.

<p>Site Visit 7:</p> <p>Student: should observe preceptor and perform a suggested assignment on one patient.</p> <p>Preceptor: Allow students to observe clinical care. Find a patient for each student so that they can practice.</p>	<p>Date _____</p> <p>Completed _____</p> <p>Preceptor Signature _____</p> <p>Student Signature _____</p> <p>Student Evaluator Signature _____</p>
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Written Essay: Assignment # 8

Attendance and Clinical Skill Log

The attendance & Clinical Skills log lists the various activities that should be completed throughout the year. The student and preceptor should initial the log next to the appropriate topic **after each visit.** Preceptors may also give feedback on this form about the student's performance during a particular session.

<p>Assignment 8:</p> <p>Written Essay of Outpatient Clinic Experience</p> <p>Student: Identify and put to paper a key experience you have had while working with your preceptor in the outpatient clinic. Share the experience with your preceptor and outpatient student partner.</p>	<p>Email Dr Mari Egan your written essay at megan@bsd.uchicago.edu</p> <p>Also take a picture of yourself and preceptor and either hand in or email Dr Mari Egan</p>
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Optional History and Physical Exam Checklist

Introduction/Agenda Setting Checklist

Remember: This is a guideline for your use. Not every question and/or item is appropriate for every patient.

- Welcome the Patient

- Appropriate Form of Address-ascertain the patient name and how they would like to be addressed, maintain a respectful tone

- Introduce self-using both first and last name

- Introduce role-Inform patient you are a medical student and what your role was in the interaction

- Introduce Flow of Visit

- Assess and Address Barriers-adapt to patient's level of understanding (e.g., avoid/explain jargon), acknowledge waiting time, check for understanding, encourage questions
- Assess and Address Comfort/Greeted Patient in a way that made them feel comfortable, establish and maintains a personal connection

- Assess and Address Privacy-reassure patient that anything discussed is confidential, maintain privacy (e.g., close door)

- Put Patient at Ease-verbal and non-verbal skills put patient at ease and pay attention to them (e.g., express caring, concern and empathy, avoid directive/leading questions, listen, face patient, eye contact, verbal acknowledgment, encourage patient to ask questions, non verbal feedback)
- Establish Agenda-establish reason for the visit, outline patient's full agenda for the visit (e.g., "anything else?", issues, sequence)
- Finalize Agenda-end encounter smoothly and professionally (e.g., ask if there is anything else patient would like to discuss, review next steps with patient)

History of Presenting Illness Checklist

Remember: This is a guideline for your use. Not every question and/or item is appropriate for every patient.

A. Chief Complaint _____

B. History of Present Illness

- 1. Characteristics of Symptoms
 - a. Location
 - b. Radiation
 - c. Quality
 - d. Quantity
 - e. Chronology/Timing (onset, duration)
 - f. Severity
 - i. Sudden, gradual
 - ii. Acute, chronic
 - g. Setting
 - h. Frequency/Pattern (intermittent, continuous, progressive)
 - i. Aggravating/Exacerbating
 - j. Alleviating factors
 - k. Associated manifestations
- 2. Associated **active medical, surgical or psychiatric problems** which may impact the Chief Complaint
- 3. **Past experience** with symptom(s), if chronic, why now?
 - a. Prior Treatment? Response? Data from past charts?
 - b. What has patient done about the symptom(s)
- 4. Significant positives and negatives
- 5. What was the psychosocial **context** of the onset of the symptoms
- 6. Patient's Perspectives of the Illness
 - a. Patient's **understanding** of the disease? Especially causes/implications/fears
 - b. **Impact** of the disease and/or its treatment on the patient's life, work, relationships
 - c. Patient's **expectations**
 - d. Patient's **reason** for visit

Past Medical History

- Significant Childhood medical history – developmental disorders and genetic conditions , seizures, heart disease, sequelae of prematurity and low birth weight, group B strep, leukemia or other childhood cancers, whooping cough, chicken pox, rheumatic fever, scarlet fever, immune disorders..
- Immunizations - , Haemophilus influenzae type b, tetanus, pertussis, diphtheria, polio, measles, rubella, mumps, varicella, flu vaccine, Hepatitis B, Pneumococcal vaccine, meningococcal vaccine.
- Adult Illnesses:
 1. This should be a chronological listing of past medical illnesses. For each, note the date, place and name of physician, any important details regarding the outcome or subsequent complications. If the patient names a specific disease or uses medical terminology (e.g., myocardial infarction), attempt to have the patient identify the data utilized to make the specific diagnosis. This inquiry should be open-ended. Questions such as the following are helpful:
 - a. Are you now seeing a doctor for any reason?
 - b. Have you ever been hospitalized? If so, when and where? What was the reason? What was the outcome?
 - c. Have you in the past ever consulted or been treated by a physician for any problem?
- Psychiatric Illnesses or Hospitalizations
- Operations: Give details as to reason for surgery, type of surgery, place, date, and any complications.
- Injuries and Accidents: Give details as to place, date, treatment and sequelae.
- Obstetric History: Number of pregnancies, number of live births (vaginal or Caesarean), number of abortions (spontaneous or induced), any complications during pregnancy.
- Transfusions: Include date, reasons for, and reactions.

Current Health Status

- Medications: Give names and doses, reasons for starting, dates, compliance, side effects. Be certain to ask for frequently overlooked medications, including analgesics, antihistamines, antacids, sedatives, laxatives, vitamins, oral contraceptives, etc.
- Allergies and Drug Reactions: Inquire about any allergies and about allergies or reactions to any medication - be sure to include name, date, and nature of reaction.
- Health Screening (e.g., Pap test, cholesterol, rectal/prostate exam, tuberculin tests, mammograms, stools for occult blood or colonoscopy, breast self-examination or testicular self-exam): Include results and dates last performed.
- Diet, Sleep, Exercise - attempt to estimate total calorie intake by inquiring about intake for each meal and any snacks. Dietary restrictions or supplements? Document sleep pattern including normal time patient goes to sleep and awakens. Naps during the day? Problems with sleep? Document amount of exercise.
- Habits:
 1. Tobacco - type, how much, how long – quit date
 2. Alcohol - type, how much, how long – quit date
 3. Drugs - especially illegal - type, how much, how long, how often – quit date
- Complementary and Alternative Medicines/Therapies
“A lot of people are using complementary or alternative approaches such as herbs, vitamin supplements, acupuncture and massage therapy. Are you currently using any of these?”

Psychosocial History

- Marital Status
- Living Conditions including who lives at home
- Employment: (including employment of spouse and past employment, if applicable) especially as concerns occupational exposure, job satisfaction.
- Sexual History: history of sexually transmitted diseases, frequency of intercourse, number of partners, sexual difficulties, sexual habits, use of contraception.
- Significant Life Events: deaths, divorce, unemployment, financial hardships, alcoholism, relocation, physical or sexual abuse
- Mental Status: mood changes, anxiety/stress, memory/cognitive changes, depression

Family History

<u>Age</u>	<u>Cause of Death/Age at Death</u>	<u>Illness During Life</u>
Mother		
Father		
Each sibling		
Each child		

A. Ask for specific named disease(s): cancer, tuberculosis, heart disease, hypertension, stroke, kidney disease, diabetes mellitus, anemia, seizures, or symptoms like those of the patient.

Review of Systems

General:	General state of health (i.e., Do you consider yourself healthy or would you say that you have a lot of illness?) Usual weight, appetite, recent weight change, weakness, fatigue, fever, chills, sweats.
Skin:	Rashes: lumps, itching, dryness, color change, changes in hair or nails.
Head:	Headaches.
Eyes:	Vision, contact lenses or glasses, last eye examination, pain, redness, excessive tearing, double vision, transient loss or impairment of vision.
Ears:	Hearing changes, sensation of spinning, earaches, infection, discharge, ringing.
Nose and Sinuses:	Frequent colds, nasal stuffiness, Hay fever, nose bleeds.
Mouth and Throat:	Condition of teeth and gums, bleeding gums, last dental examination, sore tongue, frequent sore throats, hoarseness, bad breath, change in voice, loss of or peculiar taste.
Neck:	Lumps in neck, "swollen glands, pain or stiffness in neck.
Breasts:	Lumps, pain, nipple discharge, rash.
Respiratory:	Cough, sputum (color, quantity), coughing blood, wheezing, asthma, bronchitis, emphysema, pneumonia, pleurisy.
Cardiac:	Shortness of breath: at rest, with exertion, or with lying down, or that awakens one after a period of sleep. Chest pain, rapid or skipped heartbeats, swelling, syncope.
Gastrointestinal:	Trouble swallowing, heartburn, nausea, vomiting, vomiting of blood, indigestion, changes in bowel habits, rectal bleeding or black tarry stools, constipation, diarrhea, abdominal pain, food intolerance, excessive belching, or passing of gas, hemorrhoids, liver or gall bladder trouble, hepatitis, jaundice.
Urinary:	Increased frequency of urination, increased volume of urine, urination during usual sleeping hours, immediate need to urinate, problem in initiating urination, involuntary loss of urine, blood in urine, history of urinary stones.
GENITOREPRODUCTIVE Male: Female Menstruation:	Discharge from or sores on penis, testicular pain. Age at onset of menses, regularity, frequency, duration of periods, bleeding between periods or after intercourse, last menstrual period, excessive pain during menstrual flow, age at cessation of menstrual period, menopausal symptoms, post-menopausal bleeding, vaginal discharge or itching, birth control methods.
Musculoskeletal:	Joint pains or stiffness, arthritis, gout, backache; muscle pains or cramps.

Peripheral Vascular:	Leg cramps with walking, varicose veins, thrombophlebitis.
Neurological:	Fainting (syncope), seizures, paralysis, local weakness, numbness, tingling, tremors, memory.
Psychiatric:	Nervousness, tension, mood, depression.
Endocrine:	Thyroid trouble, heat or cold intolerance, excessive sweating, diabetes, excessive thirst, eating or urination.
Hematologic:	Anemia, easy bruising or bleeding.

VITAL SIGNS

Vital Signs

- Temperature, pulse, respiratory rate, blood pressure, pain, and oxygen saturation.

Temperature

- Tools: thermometer (mercury (try to avoid given the risk of mercury toxicity and disposal if breaks), digital (now more ubiquitous)), ear infrared thermometer (more common now too.)
- Measurement: in practice we use thermometers to measure the temperature as close to the core as possible (Under the tongue, rectally, arm pit (infants), ear)

Pulse

- Tools: your hands.
- Measurement: you can feel the pulse on many areas of the body (arteries in the neck, arm, thigh, feet). The typical area that we use to measure the pulse is the radial artery in the wrist.
 - (i) Supinate the forearm (turn arm so palm side is up.)
 - (ii) Extend the wrist slightly (tilt wrist back.)
 - (iii) Identify the styloid process, the bony prominence in the wrist at the end of the radial bone (the bone of the forearm on the thumb side.)
 - (iv) Place your finger pads on the wrist in the soft area just medial (toward the middle) to the styloid process. The radial artery should be felt there.
 - (v) Assess whether the pulse is 'regular' in its rhythmicity or 'irregular.'
 - (vi) If it is regular, count the number of beats in 30 seconds and multiply by 2, the number in 20 seconds and multiply by 3, or the number in 15 seconds and multiply by 4.
 - (vii) If it is irregular, count the number of beats in a full minute.Normal resting pulse (60-100)

Respiratory Rate

- Tools: eyes/hands.
- Measurement: After checking the pulse, keep your hand on the radial pulse, but cast your gaze to the chest wall and observe for 30 seconds the number of breaths the patient takes. Multiply by 2 for the number of breaths per minute.
- Normal number of breaths per minute (12-16).

Pain

- Pain has become the fifth vital sign. The government has mandated its measurement, as many patients have unmet pain relief needs.
- Tools: voice
- Measurement: Ask the patient if he/she has pain.
- Note the location of the pain and the severity of the pain.
 - ◆ The traditional scale for measuring pain quantitates the pain on a scale of 1 to 10. Say to the patient, “On a scale of 1 to 10 with 1 being just a prick and 10 being the worst pain you could imagine, how would you rate the pain that you have?” This scale may be difficult for some patients, particularly those with low literacy.
 - ◆ An alternate scale is a visual scale, with pictures of different cartoon faces with different expressions – one extreme being a smiling face, and the other being a crying face. The patient is to circle his/her level.

Oxygen Saturation

- The oxygen saturation has become a common vital sign done in the hospital setting. It gives a measurement of how well oxygenated a patient’s blood is. It is particularly helpful for patients with pneumonia, heart failure, emphysema, asthma and others.
- Tools: Pulse oximeter: a machine that measures oxygen saturation.
- Measurement: We will not measure this today.
 - i) The machine has a clamp that goes over the end of the finger.
 - ii) The light on the end of the finger measures the change in the wavelength of light after it goes through the nail and bounces off of the blood.
 - iii) The change in wavelength is related to the level of oxygenation.

Blood Pressure

- When we measure blood pressure, we get two numbers, the systolic and diastolic blood pressure (systolic/diastolic). The systolic blood pressure is the force on the walls of the arteries that is created by the heart when it is contracting, propelling blood into the arteries. The diastolic blood pressure is the force that remains on the walls of the arteries when the heart is at rest.
- Tools: Hands, sphygmomanometer, stethoscope.

Measurement:

- Measure the blood pressure. Start by supporting the arm at patient’s heart level.
 - (i) Stand in front of the patient slightly to the side.
 - (ii) Hold the patients examined elbow in the palm of your same elbow. (if examining patient’s right elbow, it should be in your right hand, the left elbow in your left hand.)
 - (iii) Rest patient’s forearm on your forearm and tell patient to relax.
 - (iv) Lift the patient’s arm, so it is level with his/her heart.

- Place the stethoscope
 - (i) Properly put the stethoscope in your ears.
 - (ii) Place the diaphragm of the stethoscope in the antecubital fossa on the crease over where the brachial artery will go through. Tuck under the blood pressure cuff if necessary.
 - (iii) Hold the stethoscope in place with the thumb of the hand holding the arm.
 - (iv) ***You should hear no sounds at this point.***

- Measure the blood pressure
 - (i) Make sure the bladder is sealed closed. (If you try and pump up the bladder of the blood pressure cuff and the air just escapes, turn the valve closed the opposite way.)
 - (ii) Pump up the bladder using the bulb 20 mm Hg above the blood pressure you determined by palpation. If you have not done this, pump it up to around 160 mm Hg (if you still hear sounds at 160, pump it to 20mm Hg after the sounds disappear.)
 - (iii) Gently release the valve so the bladder starts to release air and the pressure begins to come down. Release the pressure approximately 2-3mm Hg per second.
 - (iv) Listen closely. There should be silence.
 - (v) Listen for the systolic blood pressure. This is the first sound that you hear. It will sound like a rhythmic pulsing or tapping sound. It may not be constant; it may come and go. Note the pressure on the sphygmomanometer when you hear **two consecutive beats**. This is the systolic pressure.
 - (vi) Continue to slowly release the bladder. As you do, the sounds will become louder, more consistent, and more harsh.
 - (vii) Note the pressure the sounds muffle then completely go away. This is the diastolic pressure.

- So the systolic pressure is the emergence of sound out of silence, and the diastolic pressure is the emergence of silence out of sound.

Checklist for Abdominal Exam

□ **General Principles:**

- Wash hands
- Talk before touch
- Appropriate draping
- Proper positioning

□ **Inspection:**

General Inspection for contour, markings, venous markings and changes with respiration

□ **Auscultation:**

- Bowel sounds in each of the 4 quadrants
- Bruits (renal and aortic)

□ **Palpation:**

- Superficial, Deep, Superficial in all 4 quadrants
- Spleen
- Liver

□ **Percussion:**

- Liver span

Head, Ears, Nose, Throat and Neck Exam

Head:

Inspection of:

- Hair-color, texture, distribution
- Skull-size, shape, asymmetry, deformities
- Scalp-lesions, scaliness, lumps
- Face-facial expressions, contours, asymmetry, masses, skin changes

Ears:

Inspection and palpation of:

Pinna (or auricle)

- Note the position, size and shape of the pinna. Observe for deformities, nodules, inflammation, discharge, or lesions.
- Palpate for tenderness, swelling, and nodules. Pull upward and down on the pinna and/or press in on the tragus to assess for an external ear infection.

Posterior auricular area (mastoid)

- Inspect for scars and swelling.
- Palpate for tenderness or deformity.

Ear canal and Tympanic membrane-(Need an otoscope to perform exam)

- Using an otoscope, inspect the external canal. The external canal starts at the external meatus and ends at the tympanic membrane. Inspect for discharge, foreign bodies, erythema and erythema.
- Inspect the tympanic membrane (eardrum). The tympanic membrane is an intact, ovoid, semitransparent pearly gray membrane at the end of the ear canal. Describe the color, integrity, transparency and landmarks of the tympanic membrane. Identify the pars tensa, pars flaccida, handle of the malleus, short process of the malleus, umbo, incus and manubrium. The light reflex (cone of light) is a bright triangular cone of light reflected from the pars tensa that starts from the umbo.

Inspect Auditory Acuity

- To test hearing, test one ear at a time. Occlude one ear by pressing down and inward on the tragus and speak softly into the other ear. Repeat the exam with the other ear.

Nose:

Inspection and palpation of:

External examination of Nose

- Inspect the nose for any swelling, deformity or asymmetry. Inspect the external nares for symmetry and lesions. Palpate for deviations and tenderness.

Internal examination-(Using the otoscope)

- Tilt the patient's head backwards. Insert the otoscope into the nostril and inspect the septum and nasal mucosa. Inspect the vestibule, anterior and posterior septum, and inferior and middle turbinates. Note any edema, erythema, bleeding, discharge, perforations, polyps and masses. Repeat on the other side.

Mouth:

Inspection and palpation of:

Lips

- Observe the color, moisture, and evidence of ulcers, lesions and cracking. Inspect for localized and generalized swelling and assess their ability to open their mouth.

Oral mucosa

- Using a tongue blade and a good light source, inspect the buccal mucosa and gingivae. Observe for any color changes, bleeding, infections, hypertrophy, lesions or ulcerations. Observe for white patches (leukoplakia).
- Identify opening of Stensen's duct (drains the parotid gland) near upper second molar and Wharton's duct (drains the submandibular gland) at base of understructure of tongue.

Teeth (Ask for dentures to be removed)

- There are 32 teeth in the full adult dentition. Observe the number and condition of the teeth.

Tongue:

Inspection and palpation of:

- Observe the color and texture of the tongue. Inspect the sides and undersurface of the tongue. Ask the patient to lift tongue to the roof and the mouth and inspect the undersurface of the tongue and the floor of the mouth. Palpate the floor of the mouth. Not any discoloration, nodules or ulceration.
- Look for indurated ulcers or masses in the middle lateral aspect of the tongue, the most common site for intraoral squamous cancer.
- Palpate the lateral margins of the tongue. All white areas should be palpated for induration.

Pharynx

- To visualize the pharynx, the examiner should use a tongue blade to depress the tongue and a good light source. Examine the soft palate, anterior and posterior pillars, uvula, tonsils and pharynx. Observe for erythema, discharge, mass, ulceration or infection. Evaluate tonsillar size.

Neck:

Inspection of:

- Inspect the neck for asymmetry, scars, or masses. Examine the neck for any enlargement of the parotid or submandibular glands, enlarged lymph nodes or abnormal thyroid gland.

Palpation of Lymph Notes:

- Palpate with the pads of your fingertips for various lymph node groups
- Occipital-at the base of the skull.
- Postauricular-behind the ear.
- Posterior cervical chain-along the anterior end of the trapezius.
- Superficial (Anterior) cervical-over and in front of the sternocleidomastoid muscle.
- Deep cervical chain-deep to the sternocleidomastoid muscle. The examiner hooks thumb and fingers around either side of the muscle and palpates the nodes underneath.
- Tonsillar-at the angle of the mandible.
- Submaxillary (Submandibular)-along the jaw line.
- Submental-the tip of the mandible.
- Preauricular-in front of the ear
- Supraclavicular-deep in the angle formed by the clavicle and sternocleidomastoid muscle.

Trachea

- Inspect the trachea for any deviation from its usual midline position.
- Palpate for any deviation. Place your finger along one side of the trachea and measure the space between it and the sternocleidomastoid muscle. Compare it to the other side. It should be symmetrical.

Thyroid Gland

- Anterior approach-The examiner's left hand displaces the larynx to the left. During swallowing, the left thyroid lobe is palpated. The right lobe of the thyroid is then evaluated by reversing hand position and displacing the larynx to the right.
- Posterior approach-The examiner stands behind the patient. Place the fingers of both hands on the patient's neck so that your index fingers are just below the cricoid. Ask the patient to sip and swallow water and move downward while palpating for the lobes of the thyroid. Note the size, symmetry and position of the lobes, as well as the presence of any nodules.

Special tests:

Rinne and Weber test: additional tests for auditory acuity testing (Tuning fork needed).

- **Rinne**-compares air conduction with bone conduction. Each ear is tested separately. The examiner strikes a tuning fork (512 Hz) and places the handle on the mastoid tip. The patient is asked whether he or she hears the sound and to tell the examiner when they can no longer hear the sound. The fork is then placed in front of the external auditory meatus and the patient is asked whether he or she can still hear the sound. Normally air conduction (AC) is better than bone conduction (BC) and the patient is able to hear the tuning fork at the external auditory meatus after they can no longer hear it on the mastoid tip.
- **Weber**-compares bone conduction in both ears. Stand in front of the patient and place a tuning fork (512 Hz) firmly against the center of the patient's forehead. Ask the patient whether he or she hears or feels the sound in the right ear, the left ear or in the middle of the forehead. Hearing the sound, or feeling the vibration, in the middle is the normal response.

Cardiovascular System

□ **General Principles:**

Wash hands
Talk before touch

□ **Vital Signs:**

Pulse
Blood pressure

□ **Jugular veins**

□ **Examination of the precordium:**

Inspection for an observable apical impulse (PMI)
Identify the aortic, pulmonic, tricuspid and mitral areas.

□ **Palpation:**

PMI-detect location and strength
Thrills/Pulsations/Heaves at the pulmonic, tricuspid, and aortic areas.

□ **Auscultation:**

-With diaphragm of stethoscope, auscultate the aortic, pulmonic, tricuspid and mitral areas.
-With bell of stethoscope, auscultate the aortic, pulmonic, tricuspid and mitral areas.
-Determine S1; S2 (time with carotid pulse)
-Auscultate for S3; S4; systolic and diastolic murmurs.

□ **Arterial Pulses:**

Carotid	Femoral
Brachial	Popliteal
Radial	Dorsalis pedis
Ulnar	Posterior tibial

Lung Exam

- **General Principles:**
 - Wash hands
 - Talk before touch

- **Vital Signs Review:**
 - Respirations

- **Neck:**
 - Tracheal position

- **Examination of the thorax:**
 - Inspection (anterior and posterior)

- **Palpation:**
 - Excursion
 - Tactile fremitus (anterior and posterior)

- **Percussion:**
 - Anterior and posterior
 - Diaphragmatic excursion

- **Auscultation:**
 - Breath through an open mouth
 - Anterior, posterior and lateral positions

Musculoskeletal Exam

General Considerations: This part of the examination should include:

- **Inspection**-look for any asymmetry (left to right, proximal vs. distal). Look for atrophy, signs of inflammation, joint deformities and involuntary movements.
- **Palpation**-examine each major joint and muscle group in turn. Identify areas of deformity and tenderness. Always compare side to side.
- **Passive and Active range of motion**-each joint has a characteristic range of motion that can be measured passively and actively. Start by asking the patient to move through the active range of motion (joints moved by the patient), then proceed to passive range of motion (joints moved by the examiner). Joint motion is measured in degrees of a circle, with the joint at the center.
- **Muscle tone**-is assessed when performing passive range of motion. Tone is defined as the residual tension in a voluntarily relaxed muscle. There is normally a small continuous resistance to passive motion. Observe for increased (upper motor neuron lesions) or decreased (lower motor neuron lesion) tone.
- **Muscle strength**-is tested by having the patient move actively against your resistance. Always compare one side with the other. Grade strength on a scale of 0 to 5.
 - 0: Absent No muscle movement
 - 1: Trace visible muscle movement but no movement at the joint
 - 2: Weak Movement of the body part with gravity eliminated
 - 3: Fair Movement against gravity
 - 4 Good Movement against gravity with some resistance
 - 5 Normal Movement against gravity with full resistance

Neck-

- **Inspection**- observe for symmetry, swelling, redness or deformities. Inspect from the front, back and sides,
- **Palpation**- palpate for cervical bony tenderness. Palpate for paravertebral muscles for tenderness and spasm.
- **Range of motion**-evaluate neck **flexion** (put chin on chest (45°) and **extension** (place your hand behind the occiput, instruct the patient to trap your hand by extending the neck (55°)). Evaluate neck **rotation** (ask the patient to rotate the neck and touch chin to each shoulder (70°) and **lateral flexion** (place each ear to shoulder (40°)).

Shoulders-

- Inspection - inspect for any deformity, swelling, atrophy or asymmetry. Inspect the bony landmarks of the shoulder.
- Palpation-for any local areas of tenderness, crepitus.
- Range of motion (active)- joint movements are **abduction** (movement away from the midline (180°) and **adduction** (movement toward the midline (50°)). Evaluate **flexion** (motion away from the zero point (180°) and **extension** (return motion to the zero point (50°), and **internal rotation** (turning of the anterior surface of the limb inward (90°) and **external rotation** (turning of the anterior surface of the limb outward (90°)).

Elbows:

- Inspection-as above
- Palpation-palpate for any swelling, masses, tenderness or nodules.
- Range of motion (passive and active)-test for **flexion** (160°) and **extension** (0°). Test for **pronation** (elbow should be flexed at 90 degrees, ask the patient to rotate the forearm and wrist down with the palm down (90°) and **supination** (ask them to rotate the forearm and the wrist up with the palm up (90°)).

Hands:

- Inspection: of wrists, MCP, PIP and DIP joints. Inspect the hands in motion to see if the motion are smooth and natural.
- Palpation: of wrists, MCP, PIP and DIP joints. Note any tenderness, swelling, nodules or redness. Is there any radial or ulnar deviation of the wrist? Palpate with thumb and index finger, the medial and lateral aspects of the fingers and the joints.
- Range of motion: test for range of motion at the wrists. The movements are **extension** (dorsiflexion-movement in the direction of the dorsal surface (70°) and **palmar flexion** (movement in the direction of the palmar surface (90°)). Assess radial (20°) and ulnar (55°) deviation at the wrist. Additional movements are **supination** (palmar surface upward) and **pronation** (palmar surface downward).
MCP, PIP and DIP joints (passive and active)-Test **flexion** and **extension** of the fingers (ask the patient to make a fist with the thumb across the knuckles and then extend and spread the fingers).
Also test **abduction** and **adduction**, by asking the patient to spread the fingers apart and back together.
The thumb should also be tested for **opposition**, by asking the patient to touch the thumb to each of the other fingertips.

Spine:

- Inspection (posterior and lateral)-observe the patient's posture. Assess for normal and abnormal curvatures of the spine. Assess for symmetry, muscle mass and bony abnormalities.
- Palpation-the spinous process of each vertebra for bony tenderness. Palpate the paravertebral muscles for tenderness and spasm.
- Percussion-with the ulnar surface of your fist on the spinous process to assess for tenderness.
- Range of motion (active)-examine the spine for **flexion** by asking the patient to bend over and touch their toes. The lumbar concavity should flatten out in normal flexion motion. Then **extension** (30°) should be assessed by placing your hands on the posterior superior iliac spine and asking the patient to bend backwards as far as possible. Spine **rotation** (30°) should be examined by stabilizing the patient's pelvis by placing a hand on each of the patient's hips. Ask the patient to rotate the shoulders one way and then reverse. Finally, test for **lateral flexion** (35°) by asking the patient to lean to both sides as far as possible.

Hips:

- Inspection-carefully observe patient's gait. Observe limb length measurements (distance between the anterosuperior iliac spine and the tip of the medial malleolus) and symmetry of iliac crests. Observe for any muscle bruising, swelling or atrophy.
- Palpation-the bony landmarks of the hip. Palpate for tenderness.
- Range of motion (passive and active)-Examine for **flexion** (130°) of the hip by asking the patient to bend each knee and bringing it up to the chest and against the abdomen. Observe for flexion of the opposite thigh that suggests a flexion deformity of the hip (Thomas test). Then test for **extension** (15°) by asking the patient to lie on their stomach and extending the thigh upward. The hip is then tested for **abduction** (45°) by stabilizing the pelvis, grasping the ankle and moving the thigh away from the body. Then test for **adduction** (30°) by stabilizing the pelvis, hold one ankle and move the thigh medially across the body and over the opposite extremity. Finally test for **internal** (40°) and **external** (45°) **rotation** by flexing the patient's leg, grasping the ankle and turning the lower leg laterally and then medially.

Knees:

- Inspection- for muscle mass, swelling, effusion, bony abnormalities and landmarks, and whether there are varus or valgus deformities.
- Palpation-review bony landmarks, palpate the tendons, ligaments, joint line and bursae of the knee for tenderness and swelling. Check for fluid motion of the knee and for crepitus.
- Range of motion (passive and active)- test for **flexion** of the knee (135°) and **extension**.

Ankles and feet:

- **Inspection**-observe for deformities, swelling, nodules, calluses or corns. Observe the number and position of toes. Observe any abnormalities of the longitudinal arch of the foot.
- **Palpation**- should include the medial and lateral malleolus and observe for tenderness, swelling and warmth. Palpate the Achilles tendon and assess for nodules and tenderness. Compress the forefoot between the thumb and fingers and evaluate for pain. Palpate the calcaneus and toes.
- **Range of motion (passive and active)**-at the ankle include **dorsiflexion** (toes up- 20°) and **plantar flexion** (toes down- 45°). In addition, test for **inversion** (plantar surface of the foot inward- 30°) and **eversion** (turning of the plantar surface of the foot outward- 20°) at the subtalar and transverse tarsal joint. Finally, **flex** and **extend** the toes in relation to the feet.

Oral Presentation Guidelines

Overview

- Purpose of the case presentation: to *concisely summarize* 4 parts of your patient's presentation: (1) history, (2) physical examination, (3) laboratory results, and (4) your understanding of these findings (i.e., clinical reasoning)
- Make your presentation be a convincing case for the important problems and the differential diagnosis you have developed.
- Make it structured, organized and targeted/No more than 3-6 minutes in Length

Opening Statement

Begin with a single-sentence that summarizes:

- Important demographics (i.e. age, sex, etc.)
- Concise, **relevant** past medical history
- Brief statement of chief complaint/chief concern
- Begin with a one sentence description of the patient and the reason prompting their evaluation (i.e. the Chief Complaint).

“Mr. __ is a __yr old man with a past medical history significant for __ who is here today for a chief concern of __of __days duration.”

A. "Mrs. White is a 59 year old woman with prior diagnosis of breast cancer, rheumatoid arthritis, and hypertension who presents with 2 months of bilateral leg weakness"

History of Presenting Illness (HPI)

- Consider starting with “He/She was in usual state of health until ...”
- Be chronologically organized and clear.
- Should include through description of complaint. Remember “OLD CARTS”
- **O**nset, **L**ocation, **D**uration, **C**haracteristics, **A**ggravating/Alleviating, **R**adiation, **T**reatment, **S**ignificance

Remember: The differential diagnosis you are considering should guide what information you include.

Pertinent Positives and Negatives: Pertinent=relevant to the differential diagnosis (DDx) and management considered. "Pertinent negatives" are meant to exclude, on the basis of history, other possible diagnoses that are known to have a similar negative statements – include 3 categories of findings that, although *absent*, are important to mention: Constitutional complaints (fevers, sweats, weight change).

Symptoms relevant to organ symptom (if the patient has chest pain, report here which chest symptoms were absent, i.e., cough, dyspnea, sputum, hemoptysis, dysphagia)

Important risk factors (ask yourself the question "what could my patient have been exposed to cause this problem?")

Past Medical History (PMH)

- Include important relevant PMH-each problem pertinent to the HPI should be mentioned
- Descriptions of these problems should be included (etiology/complications)
- Exclude minor diagnosis without impact on current care.
- Important medications with doses-each one should be explained by the PMH
- Allergies

Focused Family History (FH)/Social History (SH)/Review of Systems (ROS)

This information should only be included in the oral presentation if it is relevant to the chief complaint or PMH

- FH-should include family history relevant to chief complaint and DDx
- SH-should always include tobacco, alcohol and drug history

Physical Examination

- Always include general appearance and specific vitals
- Should include positive abnormal and pertinent normal findings to chief complaint and DDx.

Labs/Radiology/Procedures/Consults

- Include lab/studies relevant to chief complaint/DDx and PMH

Assessment and Plan

!!Remember Assess and Synthesize. DON'T summarize and regurgitate. Demonstrate your thinking about the patient's specific differential diagnosis!!

- Begin with a positive statement of the patient's most important problem, which is either a (1) symptom, (2) sign, (3) abnormal laboratory test, or (4) diagnosis
- Your assessment focuses on differential diagnosis: (i) list the 3-5 most likely diagnoses, (ii) state which diagnosis is most likely and why, and (iii) state why other diagnostic possibilities are less likely (draw your evidence from the H and P you just presented)
- Each active problem should be discussed
- Include your understanding of the cause of the problem and presumed diagnosis
- Include a specific plan for addressing it.

History Taking In the Home (Geriatric Visit)

The following is an outline of the questions you will ask during the geriatric in-home history-taking and functional assessment interview. At the interview, you will receive a form from the “trained patient” with these same questions and check boxes, note-taking spaces, and the clock draw form.

I. GENERAL HEALTH

- a. How would you describe your health?

II. GERIATRIC REVIEW OF SYSTEMS

- a. Vision: Do you have difficulty driving, watching TV, reading or walking because of poor eye sight?
- b. Hearing: Can the patient hear normal conversation?
- c. Depression: Do you often feel sad or depressed?
- d. Nutrition:
 - i. Have you unintentionally lost weight in the last 6 months?
 - ii. How many meals do you eat daily?
- e. Incontinence:
 - i. Do you have trouble with control of your bladder?
 - ii. Do you have trouble with control of your bowel?
- f. Falls:
 - i. Have you had any falls in the past year?
 - ii. Any fear of falling?
- g. Alcohol: Do you drink alcohol?
- h. Social supports:
 - i. Do you live with anyone?
 - ii. Who would help you in an emergency?
- i. Elder Abuse: Has anyone intentionally tried to harm you?

III. ACTIVITIES OF DAILY LIVING

- a. Are you independent, requiring assistance, or dependent with each of the following tasks?
 - i. Ambulating
 - ii. Dressing
 - iii. Bathing
 - iv. Eating
 - v. Hygiene
 - vi. Toileting
 - vii. Using telephone
 - viii. Transferring
 - ix. Driving/taking transportation
 - x. Shopping
 - xi. Preparing meals
 - xii. Housework
 - xiii. Managing finances

xiv. Taking medications

1. How many medicines do you take including prescribed, over-the-counter and vitamins?
2. What is your system for taking your medicines
 - a. Pill box/family or caregiver help/list or chart/none/other

IV. OBSERVATIONS OF FUNCTIONAL ASSESSMENT and ASSESSING SAFETY IN THE HOME

- a. Ask patient to give you a tour of home. While touring home, observe and describe the following:
 - i. patient's gait
 - ii. Going from sitting in a chair to standing up
 - iii. Walking to the bathroom (consider use of assistive device with walking)
 - iv. Turning on/off stove
 - v. Cleanliness/ Clutter/ Pets
 - vi. Throw rugs in the house
 - vii. Lighting
 - viii. Evidence of emergency contact information available (or emergency contact visible)

V. OBSERVATIONS OF COGNITION

- a. 3 word recall
- b. Clock draw