

PROCEDURE SKILLS ROTATION

Participants: Internal Medicine interns

Duration: 2 weeks

Location: UWMC and HMC

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ROTATION HISTORY

Welcome!

The Procedure Skills Rotation was conceived in response to feedback from outgoing residents who felt that they would have benefited from increased exposure to common internal medicine procedures. Several factors have altered the resident procedure training experience, including work hour restrictions and departmental financial pressures (i.e. some procedures that were traditionally within the domain of medicine residents are now being performed by Radiology). Additionally, there is a movement within medicine and within our institution to expand procedural training in a simulator-based environment.

With these issues in mind, the Medicine Residency Program developed this rotation to try to increase intern exposure to both actual and simulated patient procedure experiences. This rotation continues to be a work in progress. We welcome your feedback.

ROTATION DESCRIPTION

This two-week rotation will allow the intern the unique opportunity to focus on acquiring procedural skills in the absence of primary patient care or call responsibilities. Procedure education will be both didactic and hands-on. The intern will have access to training models to increase familiarity with the supplies, sterile technique, and manual skills required for successful central venous catheter placement, lumbar puncture, thoracentesis and paracentesis. He or she will also gain hands-on experience performing procedures on the medical ward and in ambulatory clinics.

Of note, this rotation is paired with an R1 “Risk” obligation and as a result, procedure interns may be called upon to cover for colleagues on-call or ED rotations in the event of illness or unexpected absence. Rotating interns will be relieved of procedure obligations on the day following a Risk pull. Please contact the Residency Program office with questions regarding the Risk pull policy.

ROTATION GOALS

1. Improve resident exposure to and comfort with procedures early in residency training.
2. Allow residents the opportunity to meet residency program procedure requirements.
3. Improve the quality of resident-to-resident education regarding procedures.
4. Improve patient safety and outcomes.

LEARNING OBJECTIVES

Procedure interns will learn:

Central Venous Catheter Placement

1. To understand the indications for central venous catheter placement.
2. To understand the contraindications to central venous catheter placement.
3. To understand to alternatives to central venous catheter placement.
4. To become familiar with the supplies and setup required for successful central venous catheter placement.
5. To become familiar in the basics of bedside ultrasound as an aid to central venous catheter placement.
6. To become adept at identifying anatomic landmarks for the three common insertion sites- internal jugular, subclavian and femoral veins.
7. To become familiar with the complications of central venous catheter placement and implement safe practices to minimize their occurrence.
8. To recognize appropriate and inappropriate CVC placement and procedural complications radiographically.

Lumbar Puncture

1. To recognize clinical situations in which lumbar puncture is indicated.
2. To understand the contraindications to lumbar puncture.
3. To understand when a CT of the head is necessary prior to lumbar puncture.
4. To skillfully explain the lumbar procedure to patients and obtain informed consent.
5. To become adept at the skills involved in performing lumbar puncture.
6. To become proficient in interpretation of laboratory results from cerebrospinal fluid (CSF).
7. To become familiar with the potential complications of lumbar puncture and the management of these complications.

Thoracentesis

1. To recognize clinical situations in which thoracentesis is indicated.
2. To understand the contraindications to thoracentesis.
3. To identify pleural effusions on AP, PA, lateral, and decubitus chest radiographs.
4. To skillfully explain thoracentesis to patients and obtain informed consent.
5. To become adept at the skills involved in performing thoracentesis.
6. To become proficient in interpretation of laboratory results from pleural fluid.
7. To become familiar with the potential complications of thoracentesis and the management of these complications.

Paracentesis:

1. To recognize clinical situations in which paracentesis is indicated.
2. To understand the contraindications to paracentesis.
3. To skillfully explain paracentesis to patients and obtain informed consent.
4. To become adept at the skills involved in performing paracentesis.
5. To become proficient in interpretation of laboratory results from ascitic fluid.
6. To become familiar with the potential complications of paracentesis and the management of these complications.

GENERAL SCHEDULE

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM	X	X	ORIENTATION - UW	UW Conferences	Procedure Coverage
PM			Procedure Coverage	Procedure Coverage	Procedure Coverage
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM	Roosevelt Outpt Procedure Clinic/ ED Conferences	CVC and LP SimLab	Thora/Paracentesis SimLab	Conferences at UW	Procedure Coverage
PM	ED Conferences/ Procedure Coverage	HMC LP Clinic (1)	Procedure Coverage	Procedure Coverage	Procedure Coverage
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM	Roosevelt Outpt Procedure Clinic/ ED Conferences	ECG review/ Procedure Coverage	X	X	X
PM	ED Conferences/ Procedure Coverage	HMC LP Clinic (2)			

RESIDENT RESPONSIBILITIES

Roosevelt Outpatient Procedure Clinic: Each Procedure Intern will spend Monday mornings performing outpatient procedures, such as skin biopsy, at UW Roosevelt Internal Medicine Clinic.

When: Monday mornings, 8:00AM-12:00PM

Where: UW Roosevelt General Internal Med. Clinic, 3rd floor, 598-8750

Contact: Kim O'Connor, MD (koconnor@u.washington.edu, 598-6190)

Lumbar Puncture Clinic: Each Procedure Intern will spend one afternoon performing lumbar punctures on ambulatory Neurology patients in the HMC LP Clinic.

When: Tuesday afternoons, 1:00 PM-4:00 PM

Where: HMC 4W Clinic – Neurology, 744-3992

Contact: Joe Zunt, MD (jzunt@u.washington.edu, 744-3000)

Simulation Lab Training: During the duration of the rotation, the intern will have the opportunity to work through learning modules created for central venous catheter placement, lumbar puncture, thoracentesis and paracentesis. This training will be individualized, hands-on, and employ the use of training models. The intern will be asked to view the procedure videos on the New England Journal of Medicine web site <http://content.nejm.org/> prior to the corresponding simulation lab.

When: Please see your individual schedule for times

Where: Please see your individual schedule for locations.

Contact: Please see your individual schedule for instructors. Contact Moe Hagman, MD (mhagman@u.washington.edu, 540-9725) if questions.

Procedure Coverage: Each intern on the Procedure rotation (listed with paging as the “Medicine Procedure Intern on-call”) will be expected to provide procedure coverage for the medical services at his or her respective hospital on an as-needed basis Monday-Friday 8am to 4pm. Most often, these will be procedures for the post-call Medicine team or procedures performed with a senior Medicine resident whose intern is unavailable on a particular day. These procedures will be staffed by a Medicine attending or a Medicine resident who is qualified to supervise a particular procedure (i.e. is “signed off”). Please be sure to follow-up on the results of x-rays or fluid analysis from the procedures you perform and provide that information to the appropriate physician caring for the patient at that time (i.e. cross-cover). Each resident will be asked to record the number and type of procedures performed during the two-week block. Also, please separately record those procedures that you were called to perform but were unable to complete secondary to scheduling or other logistical issues.

When: 8:00 AM – 4:00 PM on Monday through Friday. (SimLabs, LP clinic, outpatient procedure clinic and Risk obligations are mandatory and take precedence over procedures during those times).

Contact: An attending staff schedule will be provided to you on the first day of your rotation.

ECG Module: Each intern will receive ECG educational materials and a packet of ECGs at the beginning of the rotation. Each intern will be asked to read all of the ECGs during the rotation and return a list of their interpretations of the ECGs for feedback.

When: 2nd Tuesday of the rotation, 8:00PM-9:30AM

Where: BB527

Contact: Moe Hagman, MD (mhagman@u.washington.edu, 540-9725)

Educational Conferences: The resident is encouraged to attend as many educational conferences as possible during this rotation (Residents’ Report, Chief of Medicine rounds, etc). Nonetheless, recognizing that the purpose of this rotation is to gain experience with procedural skills, the resident is encouraged to actively seek out opportunities to perform procedures. It should also be noted that Sim Labs and clinics are mandatory.

When: Please see your schedule for the conferences available at your institution.

R1 Risk: Procedure Interns must have their pagers on and remain within pager range at all times in the event they must be contacted regarding a Risk pull.

Hints: Where to “Find” Additional Procedure Opportunities:

Check in (or round when possible) with post-call teams.

UW: Ask charge RN on 6NE if you can assist RNs with any peripheral IV, NG tube, or Foley placements. Go to the outpatient procedure floor, 4S, especially in the mornings, and ask the charge RN if there are any peripheral IVs that need to be placed. Text page interns on Heme-Onc and Cardiology to let them know that you are available to help. Contact senior residents on consult services such as Pulmonary, Rheumatology, Renal, GI, and Hepatology to offer your services.

HMC: Spend time in the HMC ED observing and performing procedures as available. Introduce yourself to the Medic One and Trauma Docs, as well as the ED attending. Ask ED charge RN if you can assist RNs with any peripheral IV, NG tube, or Foley placements. Text page intern colleagues on the wards and contact senior residents on consult rotations to let them know how to contact you.

Of note at HMC, the procedure intern should not perform procedures for MICU service patients, as the Pulmonary/Critical Care attendings have requested that these procedures be performed by other MICU team members.

EVALUATION

The majority of feedback will be provided in real time in a mini-CEX format. Each resident will be asked to complete an online evaluation at the rotation’s end; feedback for improvement is very welcome.