PGY-3 Adult Rotator Orientation

Welcome to your Pediatric Neurology Rotation! We hope that you have an educational and enjoyable time with us. Here is a guide to help you out while you are at St. Louis Children’s Hospital.

A few days prior to the start of your rotation, please email Bobby Rudock at rjrudock@wustl.edu to set up a time to meet to go over the specifics of the rotation.

Setting up:
A guide to logins and software unique to SLCH

**In the week prior to starting the rotation, call the numbers listed below to get your logins set up.

1. Dictations: St. Louis Children’s Hospital ESA (which is separate from Barnes ESA)
   You can dictate new consults or type them into Kiddos (see below)
   Call 314-454-2639 to get your 5-digit SLCH dictation number
   To dictate call 314-454-4397

   Use work type 35 (Stat Other) and state the cosigning attending followed by the requesting attending

To edit transcription:
- Open ClinDesk1
- On the Virtual Remote (left bottom corner): CLICK the red round SLCH button, CLICK on the green rectangular ESA button
- You will see: “Connective to Remote Host”, “Citrix MetaFrame” verifying credentials and, “Starting ESAPROD” screens. **Note:** If you do not see these notices, click on the green rectangle ESA button again – it may take up to 4 times to get this to launch the first time.
- You will see the Softmed log-in Screen: Type in your unique User ID# and type in the word: today (as a default password). You will be asked to type a new password twice;

If you would like to schedule an ESA training time, please contact Cathy Baughman, Manager, at 314-454-2171.
2. **Electronic Medical Record: Kiddos** (which looks similar to Compass)
You can type new consult H&Ps and daily progress notes.
Call 314-362-4700 to set up your login.

To create a new consult H&P:
- Open Kiddos
- Click on the “Enter Document” icon on the top of the page (white paper with pen in the corner)
- Type in Consult Note, or choose from the list below (2nd option)
- Double click “Consult Note” or click “Open”
- Attestation group at the end of note is _always_ “Neurology (non9/12)” – even if the patient is on the 9th floor

To create a daily progress note:
- Same as above, but type/choose Progress Consulting, instead.

3. **Allscripts/Touchworks:** Outpatient electronic medical record (same as Barnes)
You will use this during your call nights to document your discussions with parents, ER and outside hospitals about our patients.
Typically, we use a non-structured call note and free-text the information into the note. Please include the date and time of the call and remember to task the note to the primary neurologist as an FYI.
**Note:** If the patient DOES NOT have an Allscripts/Touchworks chart, you can email the call note with the patient’s name and DOB to Laura Graves at gravesl@neuro.wustl.edu, so that a chart can be made.

4. **Follow-Me Desktop**
You should be able to use the same badge that you use at Barnes. If you have trouble, call 314-362-4700 to set up your login.

5. **Pediatric Neurology Office – 1260 North West Tower (NWT), 12th floor**
This is where we will have journal club, M&M conferences, resident report, and didactic sessions (with free lunch on Thursdays!)
If you do not have badge access, contact Lori Nichols before your rotation at nicholsl@neuro.wustl.edu

Other numbers to know:
Neuro office 314-454-6120, press 7 to get someone to pick up quickly
Schedulers: Jo 314-128-3274 Rachel 314-454-5440 (Allscripts team: PDNL schedulers)
EEG attending (EMU, LTM’s) usually sits at 314-454-3796
Daily routine EEG reads come from 314-454-4129
EEG lab (techs) 314-454-6237
12th floor resident workroom 314-454-3793 or 314-454-3791
SLCH operator 314-454-6000

Your daily sign-out will have other important numbers across the top.
General Overview

Please email the PGY-4 consult resident prior to the start of your rotation about where to meet the first day. You will receive an email every evening with an updated consult list and time/location to meet the next morning from the PGY-4 consult resident.

Please make sure you are able to forward the pagers (Consults, NICU, floor) prior to your first night on-call.

Page Forwarding for Child Neurology (iPhones)

Page Forwarding (adding “Coverage Exception”):
1. Dial 314-454-7777 from a landline telephone.
2. Press * when the prompt plays, “Please dial the ID number.”
3. Enter 10-digit service pager messaging ID (see below) and press #.
5. The prompt announces if you currently have a coverage exception.
7. Enter your personal 10-digit messaging ID and press #.
8. The prompt confirms the messaging ID you entered.
9. Hang up.

Note: A message stating: “ID 214-xxx-xxxx [Doe, Jane] will be covering for ID 314-xxx-xxxx [Doe, John]. Please do not reply to this message,” should appear on both devices.

Role Phone Messaging ID #’s
- Consult Pager: 314-407-6848
- NICU Pager: 314-490-0085
- Floor Pager: 106111

The majority of your time will be seeing PICU, CICU, ER and floor consults. You may also have the opportunity to see NICU consults. You will take 1 weeknight call per week on Wednesdays and will work Saturday morning (sometimes stay until early afternoon).

You will be assigned one journal club presentation while on the rotation. Journal club is every Tuesday at 7:30am in the Pediatric Neurology Office – 1260 NWT. Sometimes instead of Journal Club, there is a Townhall Meeting (for pediatric neurology residents only) which you can skip. The journal club schedule is attached to the end of the packet.
Consult Service:
Responsible for all the consults in the PICU, Heart Center (CICU) if older than 6 months, non-neurology floors and ER. You can also round with the NICU team to familiarize yourself with the NICU patients and newborn examination.

Typical Schedule
0700: Receive email sign-out from on-call resident (if you are the on-call resident, please send update emails through the evening to notify the floor and consult residents of any new patients admitted overnight and any major updates)
0745 (0715 on Tuesdays and Fridays): Meet in PICU (7th floor) for Huddle to discuss active PICU patients with ICU team
0800-0900: Pre-round on new/old consult patients
0900: Round with attending
1700: Sign-out to night call resident

Call Responsibilities
1. If called in to see a patient for a new consult overnight, please dictate OR write a new consult note in Kiddos and state that you discussed the plan with the attending on-call documenting the name of attending and time of discussion. **please call to discuss the plan with the on-call attending**
   a. If the patient is in the ER and being admitted to the 12th floor neurology service, you can assign the note to the on-call floor attending
   b. If the patient is in the NICU or CICU (and less than 6 months), you can assign the note to the NICU attending
   c. If the patient is remaining on the Consult service, you can assign the note to the Consult attending
   d. If the patient is seen in the ER and is DISCHARGED to home, you may assign the note to the person who you discussed the case with over the phone.
2. If called to discuss a patient, but you do not have to physically come in to see the child, please document a note in Allscripts/Touchworks. You may ALWAYS call the on-call attending to discuss the patient.

On-Call:
Monday – PGY4 Fellow
Tuesday – PGY4 Fellow
Wednesday – Adult Rotator
Thursday – PGY4 Fellow
Friday – PGY4 Fellow
Saturday – PGY4 Fellow
Sunday – PGY5 Fellow

Call starts at 1700 and goes to 0700 the next morning.

Adult rotators will take overnight call once each week, typically Wednesday. If you would like to switch with one of the PGY4 fellows, this needs to be discussed not only with the fellows but also with
the attendings taking call that week (most important for the EEG attending since adult rotator does not have home EEG access).

On-Call Attending

ALL OF THE ATTENDINGS ANTICIPATE HEARING FROM YOU WHEN YOU ARE ON CALL. If you are unsure about a decision, they would much rather help you sort it out now than potentially sort out an error in the morning.

Who to call: When the fellow sign out to you at 1700, they should tell you who is on for each service.

1) Floor attending: Covers 12th floor non-EMU patients. This is your go-to person for any question regarding outside hospital calls/transfer, parent calls, non-EMU and non-NICU patients.

2) EEG attending: Covers EMU and ketogenic diet initiation patients on 12th floor, and any long-term monitoring EEG (LTM’s) in the PICU or NICU. Always clarify the plan on these patients, because while the EEG attending will have a lot of contact with you on LTM’s, they are NOT responsible for management decisions (if consult patient, ask Floor attending; if NICU patient, ask NICU attending).

3) NICU attending: Covers NICU patients between Monday-Thursday. Over the weekend, these patients are covered by the Floor attending. All NICU cooling patients and emergency overnight consults need to be staffed over the phone with the attending.

Responsibilities

- Take calls from patient families for all physicians in the department
- Take calls from SLCH ER and other services.
- Manage all emergent consults.
- Take calls from outside ERs and hospitals.
- Accept transfers from outside facilities.
- Arrange direct admissions for patients when indicated.
- Arrange referrals to urgent clinic consult appointments.

On Call Protocols

**All calls should be documented in a ‘call note’ in Allscripts. You must document the name and date of birth of the patient. Verify the correct spelling. The name that comes across your pager is often spelled incorrectly. You must document the date and time of the call. Document the story and your plan. This is a legal document and part of the patient’s permanent medical record. It is also the primary means of communication with the patient’s neurologist and our nursing staff. These are important notes! Please send a ‘Go To Note’ task to the primary neurologist so that they are aware of the encounter.

Remember you are NOT there to make long term decisions/plans, but to deal with immediate situations. Families should be instructed to call the next day (or Monday) to discuss medication adjustments and long term plans with their physician. For med refills, typically refill one week’s worth and have them call the office in the morning for a regular month prescription refill.

NEVER tell families that someone will call them (unless you plan to call them yourself). Tell them to call the office in the morning.
All patients with any neurological issues that are going to the 12th floor should be admitted to the neurology service. **Neurology does not admit patients on floors other than 12.** If you accept a patient to the Neurology service, but there is no bed available on 12, then they need to be admitted to general pediatrics service (equivalent to Medicine admission) on a different floor with Neurology consult.

When you accept any patient for admission, call the accepting pediatric resident on the floor directly to advise them of your plan for overnight. Be very explicit: the residents are thorough and helpful but they are not neurologists. (For the same reason, you can’t assume the ER can pass on your message perfectly.)

You may receive calls from outside hospitals requesting transfer, but in some cases it is more appropriate to arrange outpatient follow-up. If the physician you are speaking to is uncomfortable with that plan, you should accept the transfer (you’re not seeing what they’re seeing).

**How to Transfer a Patient from an Outside Hospital:**

When accepting a patient for transfer, this will often be through Children’s Direct (equivalent of Doctor’s Access). Remember to obtain the patient’s name, date of birth, referring physician’s name, transferring hospital and call-back number. You will have to discuss the patient with the on-call hospitalist (or PICU attending if transferring to the ICU) as they will be ‘Medical Control’. They will help to arrange appropriate transport (one-way ambulance or transport team – ground, air etc) and will work on securing a bed for the patient.

Sometimes you will receive a call from the hospitalist after they have accepted a patient for the Neurology service without talking to you first. In these cases, we are encouraged by the Neurology faculty to ask to speak with the outside hospital physician directly to have the opportunity to hear the story firsthand and ask your own questions. If you feel comfortable with what you hear from the hospitalist, it is okay to go off of their information.

If you receive a call from a parent at home and decide to admit the patient, you have the option to admit directly to the floor or send them to SLCH ER (if you want them evaluated by a physician first, or if there are diagnostic studies you want obtained). If you send them to the ER, call 454-6121 to give report and ask for a callback after the patient is evaluated. If you are admitting the patient on the same day of the phone call, contact Children’s Direct 747-7001. Ask Children’s Direct to call the parent with information once the bed is assigned. If you are admitting the patient on a subsequent day, call Admitting by reaching the SLCH operator 454-6000.

**STAT EEGs:**

All STAT EEGs require prior EMU attending approval.

The EMU attending will be the person to give approval and will be reading the stat EEG.

**After giving approval, the attending should notify the techs**

If you are called about a patient who sees Neurology in another practice, i.e. Cardinal Glennon, a private neurologist in St. Louis, a neurologist in a different city or state, the person calling you should first attempt to speak with whoever is on call for the patient’s primary neurologist. If the patient is planning to transfer care to us but has not yet, the previous neurologist should still be making
management decisions. We, typically, do not do urgent second opinions (but might in extenuating circumstances). Please note that Dr. James Rohrbaugh, Dr. David Callahan, and Dr. Sheel Pathak do not practice at SLCH but are clinical associates of our practice. We are not supposed to cover calls for them, but if they would like a patient of theirs admitted to us, they have the privilege to do this and make requests for how they are managed.

**How to handle new-onset seizures:**
1) Any patient who is not yet back to baseline after an appropriate amount of time being monitored should be admitted to Neurology for observation.
2) Our standard workup from the ER if going home is CBC, CMP, Mg, Phos, UDS, +/- EKG.
3) You can refer a patient to the New-Onset Seizure Clinic if the patient is:
   - older than 6 months
   - developmentally normal (other than ADHD or mild speech delay)
   - has never been evaluated by a neurologist (including yourself)
   - back to baseline
To do this, give the parent the number 314-454-4355 to set up an appointment. Appointment will be in the next 2 weeks. Ask the physician to get the name and phone number of the parent, and then send a task to Rachel Hillen in Touchworks/Allscripts to set up NOSC appointment.
-- Any patient who is 6 months or younger with new-onset seizure should be admitted.
-- Regardless of age, if seizures are new and pretty frequent (multiple per day) should probably admit for expedited evaluation.
-- Always remember to review seizure precautions and first aid with anyone being discharged from the emergency department.

**How to handle Urgent Consults:**
If you take a call about a patient who does not warrant admission but should be seen within the next 2 weeks, and the patient is not a candidate for NOSC, you can refer them for an urgent outpatient consult appointment. To make the referral, get the name and phone number for the parent and send an email to the PGY4 class. The PGY4 clinic fellow will then assign the patient to either urgent consult clinic (Monday afternoons), or to an attending clinic (Dr. Mar has slots Mon PM and Wed AM or Dr. Ryther has slots Wed AM. The parent should be given the office number 314-454-6120.

Final note on EEG’s: If you admit a patient overnight who will need an EEG the following day, call the EEG lab at 314-454-6237 and leave a message with the patient’s name, location, and relative priority level for the EEG.

**Common Issues or Questions:**

**Febrile Seizures**
- Simple febrile seizures – less than 15 minutes, no focal features, one seizure in 24-hour period.
  - If back to baseline and identified source of fever, patient does not need admission or Neurology follow-up (but should follow-up with PMD in 1-2 days).
- Complex febrile seizures – greater than 15 minutes, focal onset, or greater than one in 24-hour period.
  - Typically does not need HCT/MRI or LP if completely back to normal and are older than 18 months.
  - If there is any question or doubt, then get these studies and/or discuss with attending.
If presenting with febrile status epilepticus, strongly consider LP to r/o bacterial meningitis or HSV encephalitis
- May have fever before, during, or after seizure.
- Patient must be GREATER THAN 6 MONTHS, and typically not older than 5 years.
  - If patient less than 3 months, any seizure should be treated as a rule-out sepsis (blood, urine, CSF culture with empiric antibiotics and acyclovir). Patient should be admitted.
  - If patient 3-6 months, AAN practice parameter says to do LP, but if child looks great and there is an identified source for fever, can defer LP and watch closely. Patient should be admitted.

Increased Seizure Frequency (probably most common call)
- Ask about missed doses
  - Consider checking drug levels if history of, or concern for noncompliance
- Ask about infectious symptoms
- If patient is back to baseline and parent is comfortable with watching at home-going home from ER, consider prescribing clonazepam (or ask if they have it) and can administer to “quiet things down” until they can call the office in the morning to discuss with their primary neurologist.
  - Clonazepam forms including: 0.5mg/0.25mg tablets (can be halved/quartered and crushed); 0.5mg/0.25mg/0.125mg wafers or oral-dissolving tablets (go with ODT over wafers because insurance doesn’t like to approve wafers).
    - 0.125mg BID x 3 days = patients <20kg
    - 0.25mg BID x 3 days = patients 20-50kg
    - 0.5mg BID x 3 days = patients >50kg
  - If patient on clobazam (Onfi), can consider giving one-time extra dose rather than clonazepam.
    - Since it is a controlled substance, you will have to call it in to the pharmacy if ER does not provide a prescription.
- If you are asked about increasing the home dose of AED, check notes in Touchworks/Allscripts to see if the primary neurologist had a pre-determined plan. If not, it is best to defer to having the parent call in the AM. The exception to this is if the patient is taking levetiracetam, you can increase the dose by roughly 20% or 10 mg/kg/day, whichever seems like a more appropriate jump, as long as the primary neurologist was not planning to wean off of it, and they have not already maxed out the dose (max 80-100 mg/kg/day).

Baclofen pumps: When a baclofen pump malfunctions, withdrawal can be life-threatening. Remember the mnemonic “itchy, twitchy, bitchy.” Patients in withdrawal can show autonomic dysregulation (fever, tachycardic, tachypneic, hypertensive, flushing), increased muscle tone, seizures, agitation, complain of intense pruritus, and have facial or total body jerks. GIVE ENTERAL BACLOFEN UNTIL THE PUMP IS FIXED! NG/GT/PO, whatever. Call neurosurgery and your attending.

VP shunts: If you hear about a patient with epilepsy along with CP/MR/global developmental delay, who is having increased seizure frequency, ask if they have a shunt, since parents/physicians often neglect to mention it, and shunt malfunction can be a cause of increased seizure frequency. Shunt malfunction usually presents with somnolence, headache, vomiting, increased seizure frequency, and
Cushing’s triad if allowed to progress, but vital signs are often unremarkable or hard to interpret if the child is irritable.

**Migraine management:** In ER, start with NS bolus, Toradol 1 mg/kg (max 30 mg), and Compazine 0.1 mg/kg (max 10 mg) IV. Unlike Barnes, SLCH ER will usually give only 1 dose before they are ready to admit for further management but you can try a dose of SQ triptan in the ER.
- ER is typically not fond of giving VPA, Magnesium Sulfate or Droperidol/Haloperidol.
- If you think you need these agents, it is best to admit the patient.

**Therapeutic hypothermia in the NICU:** Please see the guidelines on the Pediatric Neurology section of neuro.wustl.edu as well as the PEDS pages in the redbook.

**Long-Term Monitoring EEGs (LMTs):** Most of the time, with a patient on long-term EEG monitoring in the PICU, CICU, or NICU, the attending managing daytime decisions is not the attending covering the patient at night. It is imperative to discuss a contingency plan with the daytime attending (ideally in conjunction with the EEG attending) before the end of the day to avoid confusion overnight.

**The extra vital sign:** For a child less than 3 years old, the OFC is the “extra vital sign” to a pediatric neurologist. Please always know the OFC and percentile in relation to the other growth parameter percentiles when presenting to the attending. Also, remember to obtain the developmental history. (Grab a Denver II)

**High-dose steroids:** In kids we use 30 mg/kg/day divided in q6h doses (max 1 gm per day).

**When to come in from home:**
Come back to the hospital whenever your exam is essential to the urgent management of the patient.

Examples (these are only examples, always refer to the above general principle):
- You or the examiner is uncertain if the patient has stopped seizing.
- You are confused by the reported exam and need a better exam to make management decisions.
- You are uncertain if the patient is seizing at all (especially ICU).
- NICU baby initiating cooling
- You or the requesting team thinks a patient may need VEEG or a STAT EEG.
- Refractory status epilepticus.
- Possible strokes.
- Any neuromuscle patient (especially MG) with respiratory complaints or GBS
- Any spinal cord complaints.

**Weekends:**
Saturday: The weekend fellow will round on the 12th floor with the floor attending while the adult rotator covers the consult/NICU service (old and new patients) and rounds with the Weekend Helper attending. You will need to forward the pages (Consult and NICU) to yourself at 0700 on Saturday morning.
Once floor rounds are complete, you will sign out the consult/NICU service and any patients awaiting disposition from OSH/ER to the weekend fellow. Expect to be available until at least 2:30 pm for new consults.

**Conferences**

1) Adult rotators on the service during July should attend the daily noon core curriculum.

2) Journal Club: Tuesday mornings from 0730 to 0830 in the 12NWT.
   - Adult rotators will present once during their time on pediatrics. Attendance to other journal clubs during your time on pediatrics is expected.
   - See schedule for dates when each individual will present.
   - **Please email your article in pdf form to Lori Nichols** ([nicholsl@neuro.wustl.edu](mailto:nicholsl@neuro.wustl.edu)) **no later than the Thursday before you present.**

3) Neuroradiology Conference: Thursday mornings from 0700-0800 on the 3rd floor of SLCH in the auditorium. It is highly recommended you go as it is frequently interesting and helpful for care of inpatient consults.

4) Peds Neuro Noon Lectures: You are welcome to attend on Mondays, Thursdays and Fridays with case discussions, teaching sessions and career development sessions with the faculty at noon in the NWT conference room. Ask your fellow or chief resident for the schedule of noon conferences while you are on service.