Objectives

- To provide guidelines for common problems encountered while on call and present management and coping strategies
- To provide the pediatric intern/resident general principles for safe patient care

First Night on Call...

A typical call night entails...

- Continuing care of patients already admitted
- Admitting new patients and initiating appropriate care
- Following up on labs, X-rays or other pending studies for established and new patients
- Communicating with your team (interns/residents/attendings), nurses, pharmacists and other ancillary staff to provide the best care for the patient

Top Ten List

- 10 helpful hints that will hopefully help you not only survive but flourish both on call and in general through residency

# 10 Learn Resources Available

- “Read the directions and directly you will be directed in the right direction.”
  ~ Doorknob
Resources

- Cincinnati Guidelines
- From otitis media to community acquired pneumonia
- UTHSCSA Blackboard
  - https://ecourses.uthscsa.edu/webct/logonDisplay.dowellct
  - Log In is the same as your email

Live Resources

- Senior Residents
  - Should always discuss your management plan and review orders
  - Should always examine patient and discuss pertinent findings
  - Should always review labs/images
  - Should always be available for questions

- The PICU
  - At SR, a 2nd or 3rd year resident, a fellow or PA/NP and an attending always on call.
  - At UH, a fellow or NP/PA on call.
  - Available for any questions, reviewing studies, change of level of care, transport issues…

- Your Attending
  - Don’t hesitate to call with questions.
  - Must call if emergent surgical consult needed.
  - If you are uncomfortable with a patient or if the attending needs to know something about the patient prior to walking in the patient room in the morning, call your attending.
  - Issues with consultants, nursing or families that you need help with, call your attending.

- Pharmacy
  - Always a pharmacist in house, can help with dosing, which brand of med available, TPN
  - Be sure to write mg/kg with all med orders
    - Ex. Acetaminophen 150mg po q4h prn fever (15mg/kg/dose)
  - Nurses
    - Another set of eyes
Additionl Resources

- Harriet Lane
- Radiologist
- Primary Physician
- House Supervisor
- Social Worker
- Rapid Response Team
- Code Button

Organization

- Use whatever system works for you, but you must have a system.
- “To do” lists, checkboxes, lists, checkout sheets
- Multi-color pens, Highlighters
- PDA, iPhone, Blackberry
- Brief cross-cover notes for important overnight events!
- Write legibly!
- Be on time!

# 9 Get Organized

- “No wonder you’re late. Why, this watch is exactly 2 days slow.” ~ The Mad Hatter

# 8 Don’t Lie

- “Off with her head.” ~ The Red Queen

# 7 Communication is Key

- Never, ever lie or make up an answer to a question about a patient.
- If you forgot to ask something, or forgot to do something that was asked of you simply say, I don’t know or I forgot.
- Respect and trust are hard qualities to regain so make an effort to not lose them in the first place.

- “Speak English. I don’t know the meaning of half those long words and I don’t believe you do either.” ~ Eaglet
Communication
- Be Polite. Always say please and thank you.
- Listen to the patients/parents.
- Listen to the nurses.
- Listen to the pharmacists.
- Listen to your fellow interns/residents.

Communicating with Families
- Introduce yourself.
- Don’t use medical jargon. Use clear language.
- Listen to their concerns and try to address these as best as possible.
- Summarize what information the parents have given you, to be sure you’re on the same page.
- Review the plan at the end.
- Language Barrier – translators and phone available

Communicating with the Team
- For the attending/senior resident – state your expectations early in the rotation
- For the intern – try to follow these
- Try to keep every member of the team in the loop as far as new developments, new plans, new results

Communicating with Nurses, Pharmacists, etc.
- Promptly respond to all pages
- Listen to concerns expressed by ancillary staff
- Answer questions in a polite manner
- When a nurse calls about a patient, it is always a good idea to ask if they would like you to come look at the patient. If in doubt, go look at the patient.

# 6 There’s no I in TEAM
- “We’re all mad here. I’m mad. You’re mad.” ~ Cheshire Cat

Teamwork
- Support your fellow interns/residents
- Help out with post-call work
- Volunteer to take a different day off or help cover a call, if a resident is sick or has an emergency
- Don’t take advantage of your co-workers by repeatedly calling in sick for minor things.
- Residency is already a high stress situation, don’t add to it by creating poor relationships with co-workers.
# 5 Details and Following Up

- “Begin at the beginning and go on til you come to the end: then stop.”
  ~ King of Hearts

Follow Up

- Taking care of established patients overnight is an important part of call.
  - Be sure to watch for pending labs, X-rays, studies
  - At checkout, be sure to ask what the team expects you to do with the pending test
  - Do you need to change a med, start/stop IVF’s, let someone else know about it, call consult?
  - Serial exams, I/O’s, following up consultant’s recommendations, additional questions
  - Don’t leave daily work to the on-call team.

# 4 Prevent Patient Decompensation

- “Curiouser and curiouser.” ~ Alice

Complicated Patients

- Can be difficult to admit overnight
  - Home health orders, numerous medications
  - Commonly have previous admissions so can look at old discharge summaries or med lists
  - Contacting those specialists who regularly care for the patient can save time (can be done in the morning if not an urgent matter)
  - Have extra supplies at bedside (ie. appropriate sized tracheostomy tube)

- Hopefully by good communication and frequent follow up, you’ll be able to prevent patient decompensation.
- However, can be the nature of some illnesses (ie. bronchiolitis)
- Stay calm, start with the ABC’s and call your senior resident immediately (or have nurse, secretary call them if you can’t leave the patient room)

- Start using resources - nurses, house supervisor, RT’s
- Start thinking if transport to a higher level of care is needed vs. intensifying therapies at current level of care
- May be helpful to get nurses opinion, if a nurse isn’t comfortable taking care of a patient any longer then that probably means they need a higher level of care
Learn to Recognize Sick vs. Not Sick

“Don’t just do something, stand there!
~ White Rabbit

Sick Vs. Not Sick

- Stop for a second and think. Focus on the patient, stay calm and start with the ABC’s.
- Is the patient stable?
- Are they getting worse?
- Do I need to intensify/change my treatment?
- Do I need labs/studies?
- Do I need help?

Sick vs. Not Sick

- ABC’s
- Airway and Breathing likely to be the source of decompensation in pediatrics
- Signs of Respiratory Distress:
  - Retractions
  - Head bobbing
  - Grunting
  - Nasal Flaring
  - Apnea

Case 1

- Intern: you are sent to the 9th floor to admit a patient with an acute asthma exacerbation
- 12yo Hispanic male with known asthma recently exposed to smoke at grandmother’s house
- VS T 98 HR 115 RR 22 OxSat 95% RA
- Last treatment was Albuterol 5mg neb 3hrs ago in the ED
- Phys Exam – alert, no retractions, good air exchange, diffuse exp wheezes

What to do? Sick, not sick?

- Not too sick.
- Asthma protocol orders, likely ok on Albuterol 5mg q3h plus home meds, oral steroids

Case 2

- Intern: you are sent to the IMC to admit a patient with an acute asthma exacerbation
- 12yo AA female with known asthma and frequent hospitalizations
- VS T 99 HR 140 RR 44 OxSat 90%
- Currently receiving Albuterol 5mg neb
- Phys Exam – tired, sitting up, leaning forward, retractions (IC, SC, suprasternal), unable to speak more than one word at a time
Case 2

- What to do? Sick, not sick?
  - SICK!!!
  - Get help quickly, nurses, RT, senior resident, Rapid response team.
  - Don’t leave the patient.
  - In the meantime, escalate care..
    - Increase Albuterol (start cont. nebs), add Atrovent
    - NPO, IV steroids
    - IV Magnesium
    - Start the process to transfer to PICU

Case 2 Cont

- CBG: 7.3/52/48/21/-1
- CXR: flattened diaphragms, hyperinflated 11 ribs, no infiltrates
- Phys exam: minimal air movement appreciated, no wheezing
- What to do? Sick, not sick?

Case 2 Cont

- Get HELP!!
- Call the rapid response team, fellow/attending
  - Nurse and RT from the PICU, can help with IV’s, treatments, facilitate rapid movement to the ICU
- Needs increased treatments, possibly systemic therapy terbutaline
- Assistance with WOB, BiPap; sedation, ketamine?; Intubation??

Case 3

- Intern: you are called by an 8th floor nurse regarding a Heme-Onc patient
- 6 yo with ALL admitted earlier that day with fever and neutropenia, current BP is 69/48

Case 3

- Tell the nurse that you are on your way to see the patient and get there quickly.
- If you are in the same room as your upper level resident, quickly brief them on the issue as you will likely need their help soon.
- Upon arrival to the floor, the nurses say that they woke the patient up and took the BP again (in both extremities) and it was the same 68/45
- VS T 102.2 HR 130 RR 24 Ox Sat 95% RA
### Case 3
- Phys Exam: sleepy, mottled with cool extremities, delayed cap refill
- Per nurses he received his 1st dose of Cefepime approx. 45min ago, they are worried that he needs to go to the PICU
- What to do? Sick, not sick?

### Case 3
- Again, get help. Have a nurse or secretary call your senior resident.
- ABC’s
  - Place on Oxygen
  - Give a 20ml/kg NS bolus and push it.
  - Repeat BP’s every few minutes
  - If BP not improving, give a 2nd bolus. Probably a good idea to discuss with PICU at this point.

### Case 3 Cont
- For the upper level resident in the PICU: you are called by the floor intern concerning a Heme/Onc patient with hypotension not responding to fluid resuscitation that is being transferred to the ICU

### Case 3 Cont
- The intern has already called the transport team and they are at bedside when you arrive.
- After 40ml/kg of NS boluses, VS are improved.
  - HR 115, BP 85/59, RR 18
  - Everyone accompanies the patient to the ICU and the intern finishes giving you report on the way.

### Case 3 Cont
- Upon arrival to PICU, VS T 101.6  HR 130 RR 24 BP 70/49 Ox Sat 94% 2L NC
- Phys Exam: tired, mottled with cool extremities, intermittent grunting
- What to do? Sick, not sick?

### Case 3 Cont
- Sick! Get help, fellow/attending.
- Start with ABC’s
  - Respiratory distress likely 2/2 fever, hypotension rather than a primary respiratory source
  - Increase Oxygen therapy, cont to monitor sats and level of distress closely
  - Circulation compromised, cont fluid resuscitation, likely needs vasopressors
Case 4

- Intern: you are called by a 3rd floor nurse about a 4yo female currently having a seizure.
- She has a known history of epilepsy but infrequent seizures since starting Keppra.
- Admitted currently with acute gastroenteritis and dehydration.
- You give the nurse a verbal order for a 0.1mg/kg dose of Ativan and tell her you are coming to see the patient.

Case 4

- Upon arrival to the floor, the nurse says she gave the Ativan just before you arrived. 2 min have passed and the patient is still seizing. You order a 2nd dose of Ativan.
- As a bright intern, you have already had another nurse page your senior resident.

Case 4

- About 2 min later, the upper level resident arrives and the patient is still seizing.
  - VS T99 HR 120 Ox Sat 74% RA
- You activate the rapid response team and start with the ABC's
  - You place the patient on 15L non-rebreather and sats improve to 89%, with PPV sats to mid 90's
  - Suctioning of oral secretions
- You call pharmacy to order stat doses of fosphenytoin and phenobarbital

Case 4

- The PICU fellow arrives and asks for the patient's lab values. You report that the am chemistry was normal
- She asks for current electrolytes and an accucheck immediately.

Case 4

- The nurse reports that the accucheck is 23.
  - You give a 2ml/kg bolus of D10 and the seizure stops in 2 minutes
  - Glucose 10 min later is 58 so you repeat the D10 bolus
  - The nurse then informs you that the patient had no IVF's ordered and had been refusing to drink since admission earlier that morning
Case 4
- IVF’s are initiated and the patient appears HDS with normal vital signs.
- Accuchecks over the next 2 hours are normal and the patient is able to remain on the 3rd floor.

Lessons for the Intern
- Recognize sick from not sick
- Know when to get help
- Try to manage patient to the best of your ability in the meantime
- Do not leave a sick patient

Lessons for the Senior Resident
- Recognize sick from not sick
- Know when to get help and what kind of help you need
  - PICU, Pharmacy, RT, Nurse
- Escalate care and manage the patient in the meantime always starting with ABC’s

# 2 Ask for Help
- “It would be nice if something made sense for a change.” ~ Alice

Asking for Help
- Don’t be afraid to ask for help
- Asking for help is not failure
- Do what is best for the patient
- Use your resources available
- Remember you are never alone

Who do I ask for help?
- Senior Resident
- Attending
- PICU (resident, fellow, attending)
When do I ask for help?

- Decompensating Patient
  - Start with the ABC's
  - Call your upper level
  - Rapid Response Team
  - PICU resident/fellow attending

- Complicated Patient
  - Often with multiple meds, diagnoses,
  - May need help sorting out what is going on
  - Review previous admissions
  - Discuss with specialists, PCP

When do I ask for help?

- Difficult Parent
  - Start with your supervising resident
  - Nurses, House Supervisor
  - Security
  - Reassure parent that you want what is best for the child just like they do to reduce confrontation
  - Speak calmly, don’t yell
  - Keep yourself safe

- "I don’t know what to do"
  - Doubting the diagnosis
  - Question regarding appropriate management
  - Something just doesn’t seem right
  - Strange labs/studies
  - Problems with nursing, pharmacy, or other hospital staff
  - Problems with policies/protocols

Asking for Help

- Your attendings would like to know about a concerning patient or if you have questions earlier as opposed to walking into a bad situation in the morning.
- You need to call your attending if you are unsure or concerned about a patient. Trust your instincts.
- You will not be in trouble or looked down upon for calling your attending.
  - Make sure another team member hasn’t already called with the same question.

# 1 Learn from Mistakes

- “I give myself very good advice but I very seldom follow it.” ~ Alice
Learn

- Always review your work for positive/negative feedback
- Ask senior residents, attendings for feedback
- Look for ways to improve
- Hindsight is 20/20, don’t beat yourself up
- Accept feedback graciously, it is not a personal attack
- Don’t become defensive if a senior resident or attending disagrees with your diagnosis or management

Learn

- Review literature, talk about it
- Share what you’ve learned
- Listen to what others have learned and use it

Questions?

Comments?