INTERN SURVIVAL GUIDE
2021-2022
EDITION

Disclaimer

This guide was written by previous Emergency Medicine residents to help B-UMC interns navigate their first year of residency. The guide includes: contact information, tips for success in the ED and on off-service rotations, and what we have found to be the most helpful advice and resources. Please make note of any errors or changes in new policies, off-service curriculum, contacts, phone numbers, etc. so that it

can be revised for incoming classes. Also, it is your responsibility to double-check the provided information, especially when concerning off-service rotations.

NOTE: It is in no way a complete description of all policies and guidelines and is not meant to replace the existing RRC-approved residency curriculum.

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Chapter 1

General Information

Residency Leadership

Position	Name	Phone Number
EM Program Director	Al Fiorello	(520) 626-5034 office (520) 909-4753 cell
EM Associate Program Director/ Curriculum and Conference	Nicholas Hurst	(520) 626-5514 (520) 591-4813
EM Associate Program Director, Medical Simulation Fellowship	Vivienne Ng	(520) 626-7397 (510) 384-0455
EM Associate Program Director	Garrett Pacheco	(520) 626-7830 (520) 310-1527
EM&Peds Program Director	Aaron Leetch	(520) 245-8870
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Emergency Dept. Medical Director	Melissa Zukowski	520-203-1180
Airway Man	John Sakles	(520) 626-6312
South Campus Program Director	Lisa Stoneking	(520) 626-5510
South Campus Associate Program Director, Associate Director, Sports Medicine Fellowship	Anna Waterbrook	(520) 874-9000
South Campus ED Medical Director	Matt Berkman	(520) 626-5510

Important buildings and where to find us.

ED Call room: Banner UMC-Tucson Tower 4, Room 5606,
code is 9-0-9-8. The actual ED call room is the last room on the left, same code.

Department of Emergency Medicine Administrative Offices:
Arizona Health Sciences Library (AHSL) in the College of Medicine PDs, APDs, Program Manager, and Admin Assistant offices are located on the 4th floor of the medical library. You can only access this area by entering in through the medical library.

Our mailing address:
1501 N. Campbell Ave., PO Box 245057
Tucson, AZ 85724-5057
Phone: (520) 626-7233
Fax: (520) 626-2480

Residents' e-library: AHSL, cubicle #4172H

Resident Mailboxes: ED Charting room #1101 (by back elevators).
Code: 6323 (MEBE)
DO NOT SHARE THE CODE WITH OFF-SERVICE RESIDENTS.
THIS ROOM IS FOR EM RESIDENTS AND ATTENDINGS ONLY!

Security: 2nd floor/ Banner UMC-Tucson, Tower 4
Phone: (520) 694-6533

Questions about benefits:
Brigitte North-Aponte, SR HR Consultant
(602) 398-8089
Brigitte.North-Aponte@bannerhealth.com

GME Office: College of Medicine, Room 2233, (520) 626-7878

GME Mental Health Services

Free and confidential mental health services are offered for residents.

The Mental Health Services team includes:
Dr. Mark Gilbert, 520-626-7200
Dr. Julie Demetree, juliedemetree@gmail.com
Dr. Demetree offers tele psychiatry.

The Mental Health Services website has information on services and resources. Residents can request an appointment directly from this site via a HIPPA compliant and confidential form.

https://mentalhealthservices.medicine.arizona.edu

GME Senior Learning Specialist

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Resident Email Addresses

To access: mail.medadmin.arizona.edu (Login is NetID)
Format: username @aemrc.arizona.edu

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Chapter 2

Education

Education A.

Websites :

1. Commonly Used Sites (e.g. Bookmark these!):
   a. http://emergencymed.arizona.edu/education/residency-prog rams/umc (Our EM residency home page)
   b. https://med.d2l.arizona.edu/index.asp (D2L website - where ultrasound curriculum can be found)
   c. https://mail.medadmin.arizona.edu/owa/ (Webmail – also linked from current EM residents page)
   d. https://www.new-innov.com/Login/Login.aspx (New Innovations – where you log procedures/see conference schedule/attendance, etc) Institution=UA
   e. https://www.shiftadmin.com/login.php (Work schedule - sync your schedule w ith your phone's calendar)
   f. https://citrix.uahealth.com/vpn/index.html (Banner Citrix)

2. Educational Resources:
   a. https://www.roshreview.com/ (Great Q-bank, you will receive access info)
   b. https://www.emcoach.org/
   c. https://www.aliemu.com/air/
   d. www.ahsl.arizona.edu (Health Sciences Library)
   e. http://www.ahsl.arizona.edu.ezproxy2.library.arizona.edu/e_bmsearch/EmergencyMedicine/index.cfm (EM EBM search)
   f. http://www.peds.arizona.edu/residency/emermed.asp (Peds info for U of A EM)
   g. www.emedicine.com
   h. www.uptodate.com
   i. www.emrap.us (Audio files)
   j. https://www.ebmedicine.net/topics.php (EBM Topics)

k. http://accessemergencymedicine.mhmedical.com/book.asp x?bookID=683 (EM procedures)
l. http://library.med.utah.edu/kw/ecg/index.html (ECG tutorials)
m. http://ecg.bidmc.harvard.edu/maven/mavenmain.asp (ECG - Harvard)
n. http://www.sonoguide.com/introduction.html (Ultrasound teaching)
o. Apps, apps, apps – there are tons of good apps out there – epocrates, medscape, medcalc, 10 second EM, Stroke Track, pedistat, MDcalc, EMRA antibiotics
p. Some residents have access to HippoEM videos that are stored in the UABox. Please contact Michael Russo if you want these videos.

3. EM Organizations:
   a. www.emra.org
   b. www.acep.org

B. Suggested Textbooks :
1. EM: Tintinalli, Rosen's, Harwood-Nuss (located in ED library and charting room), River's Written Board Prep (education house), Current Emergency Dx and Tx-Lange Publishing (ED library), Atlas of EM by Knoop (charting room), 5 Minute Clinical Consult (palm or book-located in ED library/charting room), Peer VIII Q&As,
2. Pediatric EM: Tintinalli (ED charting), Textbook of Ped EM by Fleisher (ED library), The Harriet Lane Handbook (charting room)
3. Radiology: Radiology of EM by Harris & Harris (ED library)
4. Orthopedics: Handbook of Fractures, Manual of Orthopedics, The Hand

5. Toxicology: Goldfranks (ED library), Emergency Tox by Peter Viccellio
6. Ophthalmology: Will's Eye Manual
7. Procedures: EM procedures by Reichman & Simon; Roberts and Hedges procedure book (both located in charting room)
8. Ultrasound: Emergency Ultrasound by Ma and Mateer (charting room and Al Fiorello has a copy); Ultrasonography in Trauma:
   The FAST Exam by Jehle and Heller (charting room).

C. Conferences :

1. Tuesday mornings 7-12a, Room 5403 at B-UMC-T
2. Attendance 70% required; 80% total/100% core content if on study plan. You can view your attendance on the New Innovations website. Please remember to swipe in and out of conference in order to get credit!!!
3. Presenting
   1) EM Interns: Case presentation - schedule will be sent a few months in advance with topic
   2) EM Juniors: Peds or Critical Care, CPI, journal club
   3) EM Seniors: Grand Rounds, CPI, oral board cases x2, journal club

   b. Lisa Chan and Kevin Reilly have a great CD of pics-so use it for presentations.

D. Library :

1. Website at www.ahsl.arizona.edu You can connect online at home with your UANet ID and password.
2. Check out the link to EBM – we have our own EM search set up
   by the librarians.
3. Joan Schlimgen is an excellent librarian for journal conference assistance- web posting of articles.

4. Carol Howe and Ahlam Saleh are College of Medicine liaison Librarians .

E. Prehospital :

1. Requirements for UMC Residents:
   a. EMS Days build into ED schedule:
      1) 0900-1100: Attend EMS lecture
      2) 1100-1700: Go to assigned fire station and ride on ambulance or fire engine.
      3) Location for both EMS lecture and fire station assignments send by email from Graciela 2-3 days before "EMS Day"
      4) Problems call or email Josh Gaither (cell: 520-247-0553)
   b. On-line Medical Direction:
      1) Senior residents can respond to requests for medical direction from the radio room.
      2) Training at start of senior year.
      3) Problems discuss with ED attending or call Josh Gaither (cell: 520-247-0553)
2. Contacts: please email one of the faculty member below
   a. Melody Glenn = EMS days.
   b. Josh Gaither = Flight Information
   c. Terry Valenzuela = Tucson Fire Department Information
   d. Josh Gaither = BUMC-TC EMS issue
   e. Dan Beskind = BUMC- SC issue

F. Journal Club: Journal Club serves as a forum for discussion of Emergency Medicine literature and for reinforcing skills learned in both the Scholar Quest and EBM tracks. We do this as part of

conference on Tuesdays. There is a separate intern journal club. There are also separate journal clubs hosted throughout the year at various residents/attending's homes through UA EM and PEDS EM.

G. Procedures and Ultrasound :

1. Log your procedure via New Innovations. You should develop a system that will help you keep track of your procedures. Al's recommendation is to make a habit of logging procedures and duty hours immediately after each shift. Or you can write them down in a log book and transfer them to new innovation in batches. YOU WILL FORGET IF YOU DON'T LOG OR WRITE THEM DOWN! Procedure logging is a residency requirement and used as part of your "resume" after residency. The more you have, the more competent you look.
2. You are required to complete a certain number of procedures by RCC rules. Here is an outline of how many total are required for each procedure. When you perform them, create a separate .procedure note to document the procedure.

Procedure Name	Independent Target
Cardiac pacing	6
Cardioversion	10
Central venous access	20
Chest tube	10
Crico-surg	3
Dislocation reduction	10
ED Bedside ultrasound	150
Intubation	35
Lumbar puncture	15
Medical resuscitation, adult	45
Medical resuscitation, pediatric	15
Pericardiocentesis	3
Procedural sedation	15
Trauma resuscitation, adult	35
Trauma resuscitation, pediatric	10

Note: **For procedural sedation, you should keep logging them past 15 as some hospitals require up to 50 for credentials after residency.**

4. Ultrasound logging: These are all logged onto a program called QPath - link is on the top toolbar of Cerner. Someone will show you how to use this. After each scan you should complete a worksheet. This can be done directly on most machines or on the computers on QPath.

Chapter 3:

Obstetrics Rotation

BUMC-T

Obstetrics Rotation

A. General Information:
   1. Talk to the EM intern coming off service to show you the how-to of the rotation and where everything is. There are templates for all types of notes/charting and general work-up protocols and order sets for common OB complaints. Ask the EM intern coming off service to share these Cerner note templates with you ahead of time.
   2. Rotation typically consists of both day and night shifts. You generally get one week of days and one week of nights. Specific hours and OB schedule will be forwarded to you several weeks prior to the start of your rotation, or you can ask Veronica for the link to the OB Qgenda schedule in advance. Make sure you have two 24-hour periods off during the 2-week block. If not, notify the chiefs. Depending on the time of year and who else is on the rotation (i.e. Family Medicine Residents) they may be flexible with the schedule. You can try to coordinate your schedule with the OB Chief in advance if needed.
   3. Definitions:
      a. MOP Room (Triage): Maternal Out Patient Room= Pregnant women's ER located on the 5th floor of the new tower.
      b. The Deck: Labor & Delivery located on 5NS.
      c. The Floor: Post-partum/Post-op obstetrical floor – 5EW.
   4. Your Goals for this Rotation:
      a. RRC min requirement is 10 vaginal deliveries.
      b. Master the cervical exam. (You must always have either an L&D nurse or OB resident perform the exams before or after you.)
      c. Familiarize yourself with common OB emergencies.

B. Your Typical Day:

1. Rounds :

a. Go to the OB resident team room, about halfway down the hall of L&D, in the center of the hall. Your badge should get you in. There is an intern phone and an off service intern phone. If no OB intern is present carry their phone, if there is an OB intern on shift then carry the off service phone. The OB 2nd year overnight resident will send a text out in the middle of the night telling you how many patients you will be seeing for rounds that morning. I recommend setting an alarm early, checking your phone and then sleeping in more if you don't have that many patients to see. Typically, one of the OB residents will give you a list in the morning, but if they don't have one available, you can access their list on their OB gmail account. You'll have to ask them for access though. Start pre-rounding at 5:00-5:30 am on 5EW. Depending on the census and staffing for the day, you could end up rounding on quite a few people (my record was 9). In general, interns round on all the post-op and post-partum patients. The OB intern typically covers most of the post-op, and we cover most of the post partum vaginal delivery patients. Antepartums and L&D will be covered by the overnight team.

b. Be sure to make your own presentation notes for sign-out/attending rounds. Know vitals on your patients, especially those with hypertension or concern for infection. Also know if they are up-to-date on their vaccinations (Tdap, MMR, Influenza) and the type of birth control post-partum. You will need to review their prenatal history, but this should also be stated in the sign-out sheet.

c. Prepare all discharges after your progress notes are done. D/C is usually PPD 1-2 for vaginal deliveries and post op day 3-4 for C-sections. Insurance will grant all vaginal deliveries are up to 48 hours in the hospital and all c-sections get up to 4 days in the hospital. If the mother is GBS positive they will likely stay for at least 36 hours, but most likely 48 hours for baby to be monitored by peds.
d. All C-sections will likely have a mepilex dressing in place. Do not take it off. It will stay on for one week.
e. Most patients are discharged with contraception, so always have this conversation prior to d/c, ideally have this conversation when the patient is admitted to the hospital for delivery. Common contraceptives:
    --Depo-Provera 150mg IM x 1, repeat in 3 months
    --OCP: if breastfeeding, Norethindrone (Micronor) 0.35 mg one PO q day #28, 11 refills. *start 2 wks after delivery. (Progestin only, no 7 day break)
    --There are handouts available for patients if they are discharged and are not sure what contraceptive use they want for the future.
    --IUD: Post placental mirena placement. Some will opt for paragard which has to be placed at their 6 week follow up.
f. Be done pre-rounding by 7 AM (6:15 AM on Wednesdays because of their conference). If you have time, get the discharge summary and scripts done prior to rounds. Ask the intern coming off service or a junior for the discharge summary template.
g. Rounds are in one of two locations:
    -Team Work room in the L&D hall on the weekends
    -Teaching room by the call rooms on weekdays.
h. After rounds, ask the OB chief or 2nd year OB resident what your responsibilities are. The EM intern usually is

either in seeing triage patients in the MOP or attending deliveries on the Deck. Ask the OB intern/OB resident where you can be most helpful.

-The Deck: Go introduce yourself to each patient in labor following rounds that are not Genesis patients (outside partnership). Meet the nurses that are taking care of patients who will deliver that day and ask to be included in the cervical checks. The more present you are during the patient's care throughout the day, the more likely you'll get the delivery. Be sure to put your name and AzCOM number on the board up front at the nurses station and give it to the unit clerk to start the day so they can call you for deliveries and cervical checks.

-MOP room (Triage): Chief complaints range from UTI to cold to SROM to labor to "trauma". You must always staff off each MOP pt with the 2nd year OB resident. The R2 or the MOP nurses will also help with all cervical checks. When you are on-call they will help you tremendously by doing most of the SROM checks, and just call you to d/c the patient (make friends with the nurses!). Nurses will also help you read the FHTs/tocometer monitor (late decels are bad, page the 2nd year OB). Although you are capable, don't order anything prior to "staffing" the patient with the 2nd year or the Chief until you feel comfortable with their style. If you're not sure about something, run it by the OB resident before placing the order. Most attendings will see the triage patients before dispo. Most triage patients can be staffed with the attending in house however a few, including Dr. Moreno, want to hear about all their patients. Ask the OB resident. As for notes, Triage notes are a

Procedure Note for the note type. If the patient gets admitted from triage, then change your note to H&P and put in admission orders. Have a resident show you how to admit and discharge patients from Triage on your first day. Similar to the deck, you will not see Genesis patients.

k. There are PM Sign-out rounds at 5pm, except on Wednesday when it is at 7pm with the change of day to night shift in the Team Work Room.

C. Notes / Documentation: Please ask either an EM junior or intern coming off the OB service for all the note templates, but the following information is expected in your notes. Use the UC OB 8OP context.

1. Daily Progress Notes:
   a. HPI: PPD#/POD#, eating, walking, urinating, pain control, lochia, breastfeeding or bottle, contraceptive plan, general neonate status (doing well, nursery, NICU); if post-op add flatus/stoo.
   b. ROS: same as above +/- SOB, ab pain, vision change, fever, chills, headache, voiding issues
   c. PE: vitals, note if foley in/out and UOP if voiding issues, ABD: soft, non-tender, uterus (fundus firm below or above umbilicus – FBU); MSK: calf pain/swelling; LUNG: CTAB; CV: RRR, GU: examine any 3 rd-4 th degree vaginal lacs and for post-op add SKIN: incision C/D/I (clean/dry/intact), staples vs sutures.
   d. Labs: H/H pre & post if drawn (not routine for PP pts); Rh+- and if rhogam received/Rubella immune/nonimmune and if MMR is ordered/ GBS +/- and if pre-treated with ampicillin (in that specific order). Add any labs unique to that patient.
   e. A/P: _ age, G_P_, PPD#/POD# s/p NSVD (normal spontaneous vaginal delivery) vs. FAVD (forceps assisted

vaginal delivery) vs. VAVD (vacuum assisted vaginal delivery) vs. 1LTCS (primary low transverse c-section) vs. RCS (repeat c-section), doing well w/o complaints, no significant interval events

2. Mag Check Notes:
    a. Mag checks need to be done every four hours (give or take an hour depending on how busy things are). They will be initiated for patient with pre-eclampsia or pre-term labor. Doing these notes can be really helpful to the intern or 2nd year. It's best to discuss with the other off service residents. History should include symptoms of magnesium toxicity such as weakness, SOB, or chest pain.
    b. Physical exam: should include reflexes, and lung exam. Reflex hammer can make this process easier!
    c. UOP: whatever is recorded over the last few hours
    d. Labs: Recent labs
    e. A/P: No signs of magnesium toxicity, (these will continue until 24 hours after delivery for patient with pre-eclampsia)
3. Delivery Note:

    Delivery notes should be put in as a .deliveryrecord note type. To find this note type go to documentation, add new, change note type filter to All and find the type. .deliveryrecord.

    a. You will also need to drop a "dot phrase", which you can obtain from all of the second years or OB residents. This should have the attending, and residents names, along with information for each of the stages of the delivery.
    b. Stage 1: age, sex, G?P?, admitted for ____, labor augmented by ____, Membranes ruptured by (AROM vs SROM), Fluids noted to be _____, Labor anesthesia (none vs epidural), GBS status ____, Antibiotics (indicated or not indicated), progressed to 10 cm.

c. Stage 2: Delivered by (SVD, low forceps vaginal delivery, c-section, …. Etc), infant weight ____, Apgars at 1' & 5' (These are often placed late, and you might need to refresh the apply delivery note section after nurses put it in), indication for instrumentations (reason vs no indication)
d. Stage 3: Placenta and Cord. Mechanism (Manuel, spontaneous), Description (complete, 2 cord, 3 cord, fragmented), Pitocin and fundal massage ____, EBL, Episiotomy or incision: (locations), length ____, Repaired with: ____, specimens
e. Complications:
f. Condition: stable/unstable

4. Discharges :
   a. Ask an OB resident to show you how to prepare discharges on your first day. Discharge meds are usually Tylenol, Ibuprofen, Colace for vaginal deliveries and Oxycodone, tylenol, colace, ibuprofen for C-sections. Sign scripts, finalize backsheet, complete and sign DC summary, and write DC order in Cerner and contraception orders if needed (Depo).
   b. Vaccines: Tdap, MMR or Influenza (depending on the season) vaccines. Place the order in Cerner so the patient can receive them before discharge.
   c. Contraception plan- Micronor (norethindrone which is a progesterone only pill and is safe for breastfeeding), Depoprovera, BTL (bilateral tubal ligation), IUD or nexplanon.
   d. Standard post-partum/post-op care.
   e. Follow-up 6 weeks for vaginal deliveries; 2 weeks for surgical deliveries.
5. L&D Note :

a. The OB residents/attendings have done away with the q2h or q4h labor check notes. Check with the residents when you are on service regarding the latest status on this topic. There is also a template on Cerner for these "significant event" notes. However, you still need to see the patient and perform the cervical checks; they may not need notes in Cerner.
b. S: one quick line of subjective
c. O: Toco (contractions) Q_ min; FHT (fetal heart tones) range; reactive/accels; any decals; SVE (sterile vaginal exam, e.g. cervical check) _/_/_ (dilation cm, effacement %, station -5 to +5), maternal vitals
d. A/P: expectant management, anticipate NSVD, start Pit, Mag, Ampicillin (GBS neg/unknown), Gent/Clinda (chorio) etc

6. H&P
   a. Each person that gets admitted needs an admission note. These usually have more information than the Triage note, and if you believe they will be admitted, you should probably start an H&P note.
   b. In the subjective, you should also state whom the patient receives prenatal care with. It should also have OB complications.
   c. Physical Exam should have the usual… pelvic exam, FHT, tocometry, NST etc, which is the same as the MOP note.
   d. Labs should have the prenatal labs placed as they will want to know
      1 hour GTT
      3 hour GTT
      Blood type:
      Antibody screen
      Urine Cx
      HBSAg

Rubella status
GBS
GC/CT
HIV
RPR

e. The assessment & plan is usually straightforward. G?P? who presents with ___ complicated by ___?
Admit to L&D
CBC
Pitocin PRN
Epidural PRN
Anticipate: NSVD, VBAC, VAVD etc.

D. Words of Wisdom:

1. Deliveries: You may not be told this on your first day, but remember to protect yourself during a delivery. It is messy and you'll feel rushed, but remember to wear protective eye gear and shoe covers. OB residents do not do this, but do not ever feel awkward protecting yourself. Residents have gotten amniotic fluid and blood splashed into their eyes. You can get a pair of plastic glasses from the cart in the room.

COVID 19 update: For deliveries (and when seeing all triage patients) you must wear your N95. Make sure you have your N95 prior to starting the rotation until restrictions from the pandemic pass.

a. After your delivery make sure you write the delivery note using the .deliveryrecord note type, otherwise the mothers status in cerner will remain as being pregnant.
b. The key to success in this rotation and all off-service rotations is to be a team player. If you work hard, get along with the other residents and nurses, and get your work done promptly, they will be more willing to help you get your deliveries.

2. Resources
    a. Just like the IM red handbook, there is an OB/GYN little red handbook by Scrub Hill Press. No one buys this.
    b. To expand your knowledge, there are many books. Re-reading what you used in med school is perfect. Even reading the First-Aid OB/GYN section is fine.
    c. Use MD Calc for you pregnancy dates calculator
    d. http://www.flame.rocks is created by an OBGYN with fast bullets
3. The culture here is hierarchical - talk to your second year when you have questions and tell them about patients you are evaluating in triage early. They run a tight ship and want to know exactly what is going on. Even if you know the work-up discuss the case and plan with them. We have a lot more autonomy in the ED than their residents do.
4. Work hard and you will get through it. Unlike other rotations (e.g. Trauma), OB residents work two weeks on our service. They work hard on our service so we should work hard on their service. Make friends with them and it makes consulting them much easier. The nursing staff will help you a lot so be nice to them! Be a team player! If you are, the OB/GYN residents will be more willing to help you get more deliveries.
5. Getting the required number of deliveries is hit-or-miss. Sometimes it is very busy and you may be on with one other resident. Sometimes there just aren't that many pregnant women giving birth while you're there. If you don't get your 10 deliveries, you can sim some of them.
6. Schedule – always confirm with the OB resident as to when you need to show up, especially on nights. They won't tell you if sign out is later than normal.
7. Call rooms – There are call rooms on the same floor as L&D and postpartum. Ask the OB resident which one you can use. On nights if there are no patients in triage and no patients in

active labor you can sleep in the call room and the nurses should call you if there is a new triage patient.

8. Useful order sets: OB Assess in Triage (for triage), OB Labor/Postpartum (for admissions), OB Induction (for cyotec/pitocin orders), OB Antepartum (for non-labor admissions)

Chapter 4:

Trauma Rotation

BUMC-T

General information:

1. **Call rooms:** There are new call rooms on the 8th floor near the elevators, no code required. They are often claimed, but easy to get work done outside of the 8th floor team room.

2. **The team: chief, junior, and 2-3 interns**. There are also PA/NPs that contribute substantially to the floor work during weekdays, primarily with Team A. Work with your co-intern to split carrying the pager as it goes off constantly. Taking turns scribing and performing the primary/secondary surveys worked well for me. There may be times that you are the only one in the bay for a trauma yellow - you can call a PA to assist you if you are new to the rotation.

3. **Schedule:** Veronica will email the schedule as soon as she receives it, usually within the week before the rotation starts.

a Typically, there are 3 teams, A/B/C. A & B alternate day call, C takes night call. You will likely not be on Team C. On call days you respond to all traumas (yellow, red). The following post-call day is essentially a "clean up" day; try to discharge as many patients as you can, manage the ones you cannot. Discharge is the name of the game to prevent lists from getting ridiculous, but do not discharge them unsafely, this is a major problem with their service, otherwise they will bounce back and linger in the ED for days.

b **Days are** typically **5a-6p**. You will go to the trauma bay to get morning sign-out from the night team at 5a, then evening sign-out will happen at 6p again in the trauma bay. Surgery sign out is fast, usually you sign out to the night intern (who will then cover teams A & B throughout the night), but sometimes it's a group sign-out. If a trauma comes in at 6:30a you should respond and the night team will take over once the initial assessment is complete.

c Occasionally, you will work a **night** shift. Usually it's **6p-6/7a** after team sign-out (detailed below), but you may be required to round the next day with the team.

d In the morning, you first sign-out intern to intern, usually in the trauma bay. Though variable, Team A generally runs differently than Team B - Team A gets numbers and does not pre-round on their patients, but instead rounds together once everyone has numbers. Team B typically pre-rounds on their patients - the chief usually divides the list and then you meet to run the list before "Team Sign Out." The team sign out is all the teams getting together and discussing the cases and traumas and consults that came in over the past 24hrs. Location changes day to day so ask your chief, it was typically on the 5th floor in the old hospital in a conference room.

4. **Pagers:** You will often share the duty of carrying your team's pager (or the night float pager at night covering all teams) with your other intern, fielding the incoming calls from nursing regarding your admitted patients. Don't be afraid to ask your junior or chief for help if you have questions on floor patients.

5. **iPhones:** there is also an iPhone for team members. Often one intern carries the iPhone, the other carries the pager. There is a list of contacts for all surgery teams and attendings, etc. iPhones are kept on a charger bay in the trauma bay.

6. You should be running some traumas and doing some procedures. You are not there solely to write notes and do busy work for the trauma team (though this will be a large part of your job). If you are, please reach out to our chiefs or PDs to get you more involved. The best way to get procedures is to be prepared - read up on chest tubes and know the process, likewise, read up on the primary and secondary survey and

observe the junior so that you rock it when the time comes. If they trust you, they will let you do more!

Schedule:
Days: 5a-6p, Nights: 6p-6/7a, 1 day off/week (push back if they try to give you Tuesday off), also, do not go in before conference on Tuesdays, this is protected time!
First Day: Prior to the first day, try contact the intern coming off service a few days before to discuss expectations and get some tips. Ask the outgoing ED intern for the templates for H&Ps, Progress notes, C-collar clearance, and any procedure templates they may have.

Rounding:

1. First, you will pre-round alone. Interns/PA/NPs are responsible for seeing and writing notes on all of the floor patients (you'll divide the patients up in the morning). The junior and senior will see and write notes on ICU patients and may see some floor patients if the list is long (which it usually is).

2. You will prepare the "list" in the morning with lab values/acute overnight events. If you work with the other intern, this shouldn't take long. Click on the tab for your Trauma team list and then Print on the top right side of the Cerner window.
3. Every attending rounds at a different time of the day, so check with your team when rounds will be.

On call days:

1. **TRAUMA PAGES:** Trauma intern responds to all traumas via the intern pager or the iPhone.
2. **ROLES:** EM resident in the ED runs airway (not the EM intern on trauma). The trauma senior/junior/PA/NP runs the trauma, and the rest of

the team interns/med students/PA/NPs do everything else. Don't be afraid to ask to run a trauma.

i The intern is often the note writer.

ii Write the orders or make sure someone did. Make a favorites folder with trauma orders CBC/CMP/Mg/Phos, PT/INR, UDS, EtOH level, bHCG, CXR, PXR, pan scan CT orders, Tdap, POC Ultrasound, etc.

3. Trauma has protocols for everything – rib score, BIG criteria, these will be helpful to know for dispo purposes.
4. If the patient arrives with films from outside hospital, someone should give disc to CT tech in the ER to get them uploaded in the PACS.
5. Med students are a big help when you are on call and can help you chase down labs, charts, etc. They should also be helping to scribe during the resuscitation and evaluation, to help you write the H&P later. Don't abuse them either, make sure to teach them and let them do some procedures (lacerations).
6. Add each patient onto your list in Cerner so that everyone stays organized. The A, B, & C team lists can be added through **Powerchart**.
7. **SURGERY CONSULTS:** General surgery consultations are supposed to be the junior resident's responsibility. Don't let them bully you into doing their surgery consults.
8. **ADMITS:** admitting orders are placed in Cerner. There is a trauma admission order set. **Do not admit patients unless it is cleared with your senior or attending.**

i Trauma pain med preferences for admitted patients are Tylenol 650mg x2 PO q6hrs PRN, Robaxin 750-1000mg po QID, lidocaine patch daily (for rib fractures), oxycodone 5mg po q4hr PRN.

Words of wisdom:

1. Answering floor pages: You will have to answer pages for all the patients on your team, so do your best to know the patients. Make friends with the nurses and if they want you to see a patient bedside, GO.

2. Transferring patients from the ICU: Make sure the CCM resident has written a transfer summary - this makes the discharge summary you will have to do in the future a bit easier and make sure it is cleared with the junior/senior.

3. There is no requirement for OR time and you do not have to go into the OR if you don't want to; however if you're interested, talk with your chief.

4. This rotation is not as bad as it once was. The new trauma attendings are great and love to teach, but do not expect teaching, and are a big part of the changing culture of this service. Make sure to keep under your duty hours (they're very careful about this). Work hard, keep your head down, and it can be a helpful rotation to get chest tubes, lac repairs, etc.

Template: C-Collar Clearance

_ was evaluated at bedside by me for removal of the cervical collar. I personally reviewed the CT C-spine; there were no fractures or subluxations. Radiology had reviewed the film as well and documented that the cervical spine was negative for acute traumatic injury.

Repeat Neuro Exam:

Sensory exam: Fully intact bilaterally upper and lower extremities

Neuro Motor Exam:

Elbow: _/5 bilaterally

Wrist: _/5 bilaterally

Grip: _/5 bilaterally

Hip: _/5 bilaterally

Knee: _/5 bilaterally

Foot and Ankle: __/5 bilaterally

The cervical collar was removed while keeping the head in a neutral position. There was no tenderness to palpation in the posterior midline. Full cervical range of motion exercises were performed, followed by axial loading. The patient denied pain with examination, and the cervical collar was discarded.

Chapter 5

Anesthesia/Selective Rotation

BUMC-T

Anesthesia Rotation

A. **Duration:** 2 weeks

B. General Information:

1. Great opportunity to do both direct and video laryngoscopy. (Direct is HARD!)
2. The CRNA's are your friend. Follow them to get tubes. Try to follow an attending through several rooms if you can.
3. This is a great rotation to have a life outside residency, so enjoy and take advantage of the extra time. Or take Step 3.
4. You also will be required to perform 25 ultrasound scans this month. Your best bet in completing this without frustration is by coordinating your scanning with the intern on the US rotation. This is extremely helpful if you haven't done US yet. If you have, then you know what to do.

C. Your Typical Day:

1. OR cases start at 7am because that is when the anesthesia residents finish their daily morning teaching session. Show up at 7 am to look at the list of cases for the day. The MIC will also let you know which cases will likely involve intubations. **NOTE: On Wednesdays, OR cases start at 9 am (Anesthesia Conference Day).**

2. Go to the pre-op area, check out the whiteboard and scroll through the list of cases on the computer on OR Manager and find high yield cases. This is best accomplished by meeting all of the CRNAs and following them around. Later in the year (winter/spring) the residents are more likely to let you intubate. Generally if a resident is on the case, you won't be able to intubate. In addition, if it's a difficult intubation, you may not be allowed to intubate.

3. Locate the patient's chart in the pre-op area and try to familiarize yourself with the procedure, indication, and comorbidities. This will improve your chances of the attending/resident giving you the intubation. (To be honest, I never did this. But it sounds like great advice!)
4. Find the anesthesia residents assigned to that OR case and ask if you can participate. If they say yes, make sure you meet the patient, evaluate their airway, and listen to their lungs.
5. Most interns leave around 7:30/8am or shortly after 1-2 tube(s), but there are always opportunities for procedures/airways in afternoon cases, it just depends on your motivation and if you have connected with an enthusiastic anesthesia attending/resident. You can decide when you are done for the day. Usually this is when there doesn't seem to be any more cases where you will get to intubate (normally early to mid-afternoon.)
6. Your afternoons will likely be dedicated to ultrasound if you are done with anesthesia for the day. Take advantage of this and get a handful of scans done each day. They rack up quickly. Make sure to scan patients that have a confirmatory study (ultrasound, CT, MRI). It's a good idea to find out who the other intern on ultrasound rotation is and coordinate with them - generally makes the scanning shifts more fun.

D. **Notes / Documentation:** Log your intubations in New Innovations.

E. As for attendings, the majority are great. You'll learn different techniques with each attending. Introduce yourself with he/she walks in the room. Most of them are very patient teachers. Intubating is less time-pressured in the OR. There were times when I would miss the intubation, we would re-oxygenate the patient, then I tried again.

F. Pediatric cases can be tough to get in, but remain proactive and talk to the anesthesia residents to get in..

G. Get experience with direct laryngoscopy. Then ask the attending to use different techniques: light wand, Glidescope, bougie, etc. If you are on anesthesia when other interns and/or med students are also rotating, then your intubations may be limited.
H. Spend a day or two going thru the difficult airway cart in the Trauma Bay (there is also a good CD-ROM on difficult airway in ED library or ask Dr. Sakles). Also check out the airway black bag (ask the intern before you where it is).
I. **If you can, plan to take Step 3 towards the end of this block. It's a great time to get it out of the way.**

This is a great month to plan trips, etc. because of the flexibility of the schedule, but keep these plans to yourself. ;)

Intern Selectives

NOTE: Selectives were canceled during COVID and we were on-call for the ED. Hopefully selectives will be available again during your year!

1) **Ophthalmology:**
The ophthalmology selective is very relaxed and full of quick tips and tricks about slit lamps, tonopens, and gnarly eye pathology. You typically round with the ophtho resident on admitted UMC patients in the morning and see any interesting consults throughout the day. They cover UMC, SC, and VA Monday-Friday (days). You will be invited to join them but they will often send you home after rounds. They will round with their attending later in the day. You will receive the resident's email and/or cell phone number from Veronica or the preceding resident to contact directly and schedule times for morning rounds. This is a great two-week period to study for boards or relax with a long weekend trip.

2) **Radiology:**
The radiology selective, continuing the trend from above and below, is also a relaxed rotation with a lot of self-directed learning. You have the opportunity to rotate through various reading rooms at your leisure: Chest, MSK, Body (CT and MRI), Neuro, (Head/Brain/Spine), and US. **Chest, MSK, and Body are likely the most high yield for ED.** Learn how to interpret the forever-ambiguous CXR to differentiate subtle atelectasis, pneumonia, effusion so you, in fact, "better exclude clinically." A day on Neuro learning how to comfortably say "no intracranial abnormalities" is probably beneficial. We get great US exposure and training, so spending time in the US reading room wasn't very valuable. The durations of your days is up to you. You can choose to stay in one room all day, half a day, or for a few hours. Or you can choose to hop between reading rooms. The choice is yours! You typically walk in, introduce yourself to a resident who doesn't know you and didn't know you were coming, go through their reads with them and ask questions/pick their brain. Ask them questions regarding indications for imaging, how we can help them help us, basic approach to image interpretations, etc. Then hang around until they "round" with their attending, where the good learning and questions come in. Typically you stay as long as you want, there really is no expectation of you.

3) **Fast Track:**
This rotation is at South Campus. It is a rotation where you focus on low-acuity, non-critical patients. It is a great opportunity to focus on your skills with efficiency, concise charting, volume, and disposition. The ability to disposition and usually discharge quickly is a critical skill during residency but also for the rest of your career. It comprises four 10 hour shifts/week, but you are often sent home early. Shifts are 9 hours and they usually prefer that you start your shift in the afternoon and work till closing since this is the busiest time. There is a low-grade procedural component with an emphasis

of removing things from ears/noses/eyes and lots of laceration repairs. You see a wide range of chief complaints but will become more facile in navigating basic procedures like the aforementioned laceration, slit lamp, and simple splinting which will help you with your flow in the ED. You're a med student again for a brief period! Also, you will look like an all-star seeing twice as many patients as the family med resident. You work with Dr. Wright, who is family medicine trained, but worked in urgent care setting for a long time. He is great and really cares about teaching you.

4) **ENT:**
Disclaimer: This is a relatively new rotation for EM residents and you can basically tailor it to what you think you would benefit from (OR cases, clinic, going to consults). You basically shadow; sometimes let you play with their toys. There's no specific role we play in patient care, but they try to accommodate us.

General ENT Information:

- The main goal of this rotation is to look at 1 million ear, noses and throats if you are in clinic and learn about pertinent EM related things. The residents and attending are all super nice and welcoming and point out pearls here and there.
- Email the coordinator early for the schedule/contact info; contact the senior for the resident/attending schedule.
- They may insist you go to "interesting cases" to see the scope of what they do but you can respectfully decline and go see what you think you would benefit from, you can also bounce around from OR's if one case gets monotonous…and go do something personally beneficial
- Neck dissections are long, but provide a good anatomy lesson
- You can ask anesthesia if they will let you intubate

- You may carry the floor pager and write a few notes, but overall there is little busy work and they do some crazy surgeries! Work on your suturing, they will often let you close and help with flaps, which are pretty cool.

Your Typical Day: Decide whether you want to go to OR or clinic (you may get to choose, but it depends on their schedule - just let the senior know). Mon-Fri, you may work weekends depending on the resident on.

OR Day

1. Meet in the work-room between 5-5:30 depending on the size of the list. You may pre-round or round as a team depending. Rounds start at 6:15, ask the senior where rounds will be.
2. Breakfast burrito at 7:00 so they can run the list, you get to think about whether you want bacon or sausage the following day
3. Break up and go to OR cases
4. Shadow/scrub in to case, if you're in the OR and they have a consult you can go see the consult and shadow some more
5. Leave when your feet hurt/no more interesting cases for you to see, you can stay as long as the residents do, but there are days that they are operating until late into the night

Clinic Day

1. Clinic is 8:20-5:00, sometimes you end at 3pm
2. Just shadow all day and see interesting pathology. (Note this can get monotonous but is good for differentiating subtleties).

Chapter 6:

Orthopedic Rotation

BUMC-T

Orthopaedic Rotation

A. General Information:
   a. Before you start
      i. Contact Barbara Solares 626-9245 or bsolares@ortho.arizona.edu about 1 week before you start to get your call schedule and to access "The List" (see below)
      ii. Contact the Intern coming off rotation to get the contact information for your team. They can give you important updates and templates for notes.
      iii. Try to message the Ortho Intern on the team a few days before you start to get yourself situated and to go over expectations.
      iv. Get surgical scrubs. You can find these in any OR locker room. Some attendings will want you to present consults directly to them in the OR during cases. Due to Banner policy, you can only enter the OR with Banner site scrubs, so getting them a day beforehand can save you some trouble. The whole team appreciates you changing into surgical scrubs before the day starts as you can quickly go in/out of the OR.
      v. Get your affairs in order. This is a long rotation and it can feel endless, so try to take care of the important things in your life before it starts.
B. The Schedule
      i. You can expect to work six days a week with your day off being Mon or Wed if you are rotating without another EM intern, and with a sports medicine clinic day on Thursday.
      ii. Even on clinic days, you are expected to show up to round in the morning. On Tuesdays, you will round with your team in the morning, then you will be excused for conference. Make sure to just leave.
      iii. The Ortho residents may try to insist you finish notes before conference but remember: Conference is protected. Make sure

to notify your chief or Veronica if you're getting hassled too much

iv. Always remember to hand your pager to the other resident when you leave for conference.

v. Intern schedule is often as follows (VERY subject to change)

2 ED interns and 1 Ortho intern							
	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
ED1	5a-6p	5a-6p	5a-6p	5 till clinic over	5a-6p	6 to ~4	Off
ED2	9a-9p	Conf. - 8p	9a-9p	Clinic	10a-10p	Off	6a-6p
Ortho	5a-6p	5a-6p	5a-6p	5a-6p	off	4p (overnight)	8am

1 ED intern and 1 Ortho intern							
	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
ED	Off	5a-6p	5a-6p	5 till clinic over	5a-6p	5a to ~4	5a-6p
Ortho	5a-6p	5a-6p	5a-6p	5a-6p	off	4p (overnight)	8am

b. Resources for your rotation

i. During your rotation, you will be expected to see general Ortho and hand consults while on service. You MAY be expected to see spine consults if Ortho is on call for spine with Dr Ganapathy.

ii. Textbooks (many are located in ED charting room or Ortho work room)

1. Handbook of Fractures (Egol et al)
2. Manual of Orthopedics (Lippincott)
3. The Hand by Raymond Hart et al

4. Emergency Orthopedics (Scott Sherman)

iii. Online Resources
   1. wheelessonline.com.
   2. Orthobullets.com is frequently used by the ortho residents.
   3. Radiopedia.com can be helpful for reading plain films before a read
   4. https://www.aliem.com/splinter-series-splint-principles-101/ . The ALIEM splint series is a great resource to help with splinting (Which you'll do a lot of and need to get quick at)

iv. The EMRA Ortho guide is an amazing. It shows good splints and differentials and treatments for common and uncommon fractures as well as handy dispositions. It's often provided by Veronica when you first start

C. The Rotation

a. The List:

i. The list is accessed through Microsoft teams on Google Chrome. Make sure to reach out early to the coordinator to get permissions. The list is a *big deal* to the ortho team. With their many consults, it's the only way their small team keeps track of things, from new consults to discharges to upcoming OR cases. Throughout the day, continuously update the list as appropriate. And make sure you get a thorough explanation of how it works!

b. Your Typical Day:

1. Weekdays: arrive by 4:45-5am on D2N in a room behind the nurses' station. On weekdays, you will chart check/get numbers on the patients assigned to you, you will then round as a resident team around 5:30, so get there at whatever time will allow you to finish chart checking. Door code is 1230 (subject to change).

2. Weekends: You will chart check and then need to round on your own patients prior to rounding with the residents/attending around 6:15-6:30.
3. The night float resident will likely print you a list assigning you 5-8 pts, but if you get there first, just open the most current list.
3. Quickly make skeleton notes using information from the list and the case management/PT/OT notes. You don't need to see your patients before you round with the team (except weekends)
4. Morning rounds with the resident team usually begin at 5:30-6. (weekdays). Give a quick one liner, antibiotics, Labs (really, they only care about H&H and glucose, however if there are any other abnormal labs, I would mention them), PT/OT recs, disposition.
5. Following verbal desk rounds with your chief, you will then quickly do bedside rounds with the senior ortho. residents. You will probably do NOTHING during this. However, be aware of what they find on your patients, as you will have to document findings in your notes.
6. Following resident rounds, tableside rounding is done with the attending. The night resident will present all evening cases. You will probably not be asked anything. However, be aware that Dr. Lowe enjoys getting ED residents involved, and he might ask you a dispo or treatment question if he's on.
7. You will then be responsible for all notes on your assigned patients (but help out your co resident if you finish early!)
   Use the following format (a template may be available):
   CC: 1 liner about the injury and patient status
   Abx: get off the list but double check against chart meds
   VTE: get off the list but double check against chart meds
   Vitals: usually filled in
   Wound vac or drains: look under flowsheets, then intake/output records on the left

Labs: will be filled in
Exam:
UE: WWP, 2+ radial pulses, SILT M/U/R nerves, OK sign, humbs up, cross fingers, spread fingers
LE: WWP, 2+ DP/PT pulses, SILT dp/sp/s/s/t nerves, +DF/PF, +EHL/FHL, Extensor (particularly knee)
Dressing: C/D/I and Location
Splint: C/D/I and Location
A/P:
VTE: what they're on and until when, look at the chart
Abx: are they on any or not, look at the chart, day # of #
Pain control: look at the chart
PT/OT recommendation: look under documents - all
Case manager recommendation: look under documents - all
Anticipated D/C: ask the residents (vitals, labs, PT recs, Case management notes).

6. Make sure you run the list again with the junior and chief so when they disappear into the OR, you will know what to do. Try to start a group text with all the day's residents; communicate often with pertinent updates and anything that would delay surgery for patients going to the OR that day.
7. Anyone you discharge (are primary service) write the D/C summary. Continue to check with CM for updates on patient requiring placement or DME.
8. For the rest of the day, you will respond to consults from the pager (see below on presenting). On Wednesday Mornings and weekends you are often by yourself. Sometimes this is stressful. Other times you can kick back. Your main job will be to see the Consults in the ED (insist that plain films and appropriate labs/diagnostics are done before you see them) then staff this with your senior.
    a. If Dr Lowe is on, he will want it directly staffed

b. If Dr Boulton is on, she will want it staffed outside of the OR unless it's an emergency
c. All other ortho attendings are usually ok if you staff and update things via text to your senior. ALWAYS confirm with your attending and senior
d. Hand consults will be done via phone and text unless they are in house. Dr Margolis and Dr Turker want us to talk to them directly via text. The other hand surgeons (Especially De Silva and Becker) want an ortho resident to do all communication (which can be very annoying if you're solo)

9. Do not completely remove a pt from the list upon d/c. There is a section on another tab the list that is for recently d/c'd pts. Cut/paste your dc'd pts to this section so if they are a bounce back or call in with questions you can easily find what they had done.
   a. D/C summaries:
      Date of admission
      Date of discharge:
      Principal Diagnoses:
      Final Diagnoses:
      Procedure performed:
      Brief HPI: look at the H&P note. Just need a couple lines. Then say, "for full details please refer to the H&P note."
      Hospital course: The patient was taken to the OR on <date> where a <procedure> was performed. The patient tolerated the procedure well without immediate complications. The patient was then transferred to the floor for nursing care, PT/OT. By the day of discharge the patient was <passing flatus, having BM, urinating without difficulty, ambulatory, etc> and it was therefore determined the patient was safe for discharge.

PE at the time of discharge: keep it brief
Discharge medications: list the med, dose, and number dispensed +/- how many refills
Weight bearing status: usually from the list or PT/OT note Diet:
Follow up:

14. Answer pages, do consults. You can feel free to go into the OR to find them and present consults. **ALWAYS enter and exit through the sterile core. If you don't, you will have a bad day.** You can call the OR front desk to ask what room they are in, usually they're in OR 14; can check Cerner mPage button at top, select periop, surgery 02 -> submit to see the surgery trackboard. 4-6120.
    a. Usually, you will be completing the consult notes. Ask the ortho or previous ED resident for the templates.
15. Sign out is at 6pm. You will likely get a page from the night float person returning, or just text the junior to see where you will sign out, typically it is on D2N where you meet in the mornings (not the conference room)

Thursdays: You go to sports medicine with Anna Waterbrook at South Campus. You are expected to pre-round at UMC with the ortho team, then drive to South for clinic. You usually get to leave around 5pm. Address**:** 300 S Bentley Ave, Tucson, AZ 85714 – DON'T go back after clinic.

C. Notes / Documentation: (see the sample note above)
    1. Exam:
        a. Inspect for swelling, discoloration, deformity
        b. Assess active and passive range of motion (ROM) of joints proximal and distal to injury
        c. Palpate
        d. Assess neurovascular status: assess peripheral nerve fxn for an extremity injury, i.e. ulnar, radial, median for UE

injury. Remember to assess vascular status for fx-disloc of ankle, disloc of knee, displaced supracondylar fx. Typical exam abbreviations:

Upper Extremity UE: SILT r/m/u, FPL/EPL/IO intact, 2+radial/ulnar bilateral

Lower Extremity LE: SILT dp/sp/s/s/t, 2+DP/PT bilaterally, EHL/FHL intact, DF/PT intact EHL/FHL/DF/PF intact, L4-S1 SILT (sensation intact to light touch), 2=DP/PT pulses, etc. etc.

2. Radiographic evaluation:
   a. Imaging should include joint above and below the injury
   b. Comparison films may be needed, i.e. kids
   c. Learning to read musculoskeletal films is an important part of the ortho rotation, so read all the consult films and discuss w/ ortho resident. This can be hard to do because they are so busy.
   d. Description: open vs. closed; location: proximal, middle, distal, intraarticular orientation of fx line: comminuted, oblique, transverse, spiral, segmental, torus, greenstick displacement and separation: distance (mm) or % shortening: distance of mm or cm angulation: direction and amount; apex pointed dorsally (when describing midshaft fx of long bone), or terminal fragment angulated (when fx near end of bone) rotational deformity: distal fx fragment twisted on its own axis relative to proximal fragment.

      Fx combined with dislocation/subluxation: i.e. ankle malleoli
   e. Salter-Harris fractures

      Fx through epiphyseal plate

      Fx of metaphysis w/ extension through epiphysis

      Fx of epiphysis extending into epiphyseal plate (intra-articular)

Fx through metaphysis, epiphysis and epiphyseal plate (intra-articular) i.e., i, ii, and iii.
Crush fx, compression injury of growth plate

3. Discharges:
   a. See sample note earlier.
   b. They have a PA for the service, Myles, whose number is on their patient list who you can call if you are having trouble discharging patients. He doesn't ever really do much else
   c. Discharge meds: Attendings have specific regiments for outpt pain control (especially Dr Lowe). Make sure to follow it.
4. Discharges- make sure to put appropriate wound vac/PT/OT/DME recs in! All patients requiring placement need a documented CXR and a recorded bowel movement

D. Words of Wisdom:
1. Of course, you will be responding to inpatient floor nurses about pts on your list, usually from D2N. If you have questions, just ask your junior. Some pts are taken care of by other ortho residents such as the "hand ortho" resident. As the ortho trauma intern, you are called for everything as a default, so learn who you can appropriately deflect questions to. Make sure to check on the list if you are the primary service, if another team is primary (medicine or Trauma) turf the call. ICU patients are taken care of by CCM.
2. LOG YOUR HOURS!
3. When presenting consults go into the OR (put on lead if they are using fluoro) and bring up the films on PACS. And then wait until they notice you. :,(
4. Reducing fractures: if you get a consult with a fracture you know you are going to get to reduce- get everything set up if

you can. Drag the mini C-arm into the room and boot it up. Click on “admin” at the opening page, then “perform”, the password is “g”. Grab a bucket and lots of waffle padding, ace wraps, and plaster. Whether you’ll get an opportunity to attempt reduction really depends on your team. But the more ready and capable you seem, the more likely they’ll give you a shot.

5. There is an on-going friendly war between trauma and ortho about who is going to admit patients. Trauma will often try to sign off patients that they feel are “isolated ortho problems.” It is not your job to accept them. If a trauma senior calls asking you to take patients on your service tell them to talk to your senior. They will try to be sneaky. Remember, however, that you will be on trauma service one day and if a patient would do well on the ortho service, try to help facilitate the admission so the patient gets admitted quickly and not stuck in the ED for hours while the two services battle over who will admit (it also helps clear the ED faster).
6. Do not admit patients without clearing it with the junior/senior/attending! No matter how necessary you think it is.
7. Pain control- these patients have just had big surgeries. Some are chronic narc users for various reasons as well. Our ED pharmacists (49815) were very helpful, as was Myles on what to do when Percocet just doesn’t cut it. But make sure to dose often and appropriately, especially before attempting reductions!
8. Case Management and the social workers are your friends. They are the key to getting pts into rehab or SNFs, and if you get people out ASAP, your team will think you are a rock star. Run your list with them frequently. Always know what a pt’s dispo status is and what Case Management is working on. Be

proactive in getting things coordinated well before the day of anticipated d/c.

9. This may not be a procedure heavy rotation (Comment on your post rotation evals!). Use it as an experience to learn what is and is not an appropriate consult to Ortho. And get good at splinting!
10. Rx- Rx like lovenox for people who will be NWB, wheelchairs, front-wheel walkers, bedside commodes all need to be tubed to station 19 (case mgmt) for clearance. As soon as you know someone is going to need one of these things (check the PT recs in the computer) tube an Rx to get the ball rolling. Rx like lovenox require pre-authorization to go home on, so if you know a patient is going out with this, talk to case management early. This strangely doesn't apply if they're going to IPR (in-patient rehab) or SNF (skilled nursing facility).
11. Hand surgeons prefer that the Ortho residents staff patients with them. Still go see the consult, but let your ortho intern/junior/senior know about it and they will likely contact them. Here are there numbers, just in case the residents say it is ok to directly contact them.

    DeSilva: 520-301-4261
    Margolis: 520-300-0717
    Turker: 520-404-6850
    Becker: 520-203-4431
12. Remember to breathe. This rotation can be rough. Check on your friends who are on it when you finish. Reach out to friends when you're on it. Just try your best to have fun. You got this!

Chapter 7

VA ICU Rotation

VA ICU Rotation

OORAM: In order to intubate at the VA you have to complete an in-person airway training course. They are very strict about not letting you intubate unless you have this done. Email Jodi at minimum a month before your rotation to see when the courses are available.**These classes are hard to get and fill up early. It's a good idea to take the class as soon as you can to avoid having the class full the month prior to your rotation. If you complete it before starting the rotation, you are more likely to get some tubes!**

A. General Information:

Your schedule will be determined by you and the other residents on the rotation together. The attendings have no interest in your schedule, so you can decide amongst yourselves; one intern must stay until 630-7pm on any given day. You get one day off a week. You also get the conference morning off, and if the patient load isn't too bad, they will sometimes give you the rest of the conference day off as well.

Work Hours: With the 16 hour rules, you will not take overnight call. The way it works is that 1 intern from the team will be "long call" and stay from 0700 until 1900. The other intern will be on "short call" and will come in for rounds, and will leave after notes and team work is done. If it is busy both interns will often stay. If you happen to be on with a 2nd ED intern, then some one will be "mid call" and will stay until 1600-1700. Typically, short call takes the first admission, mid call the second, and long call the third (and so on and so forth) to prevent people from staying past 1900. The Medicine night-float team covers your patients from 1900 until 0700.

1. Team: 3-4 housestaff (1-2 IM Interns and 1-2 ED Interns) + a 2nd yr IM resident. Team is overseen by a Pulmonology/Critical Care Fellow and a Pulmonology Attending. If have any questions, ask the 2 nd yr IM resident and/or a Pulm Fellow (in house 8a-5p), after that call the fellow on call at home and he/she will provide advice or come in as needed. After 7 pm, a Medicine Hospitalist oversees the night float resident (they will not be in the ICU and also oversee the on-call Medicine Team, page them if needed)
2. VA Computer Access: All notes are written electronically in the VA. This can take a lot of your time and CPRS is not user friendly, but you will get the hang of it. One week before you begin, contact Internal Medicine residency secretary (Jodi Peters). She can be reached at 520-792-1450, ext 4517, Jodi.Peters@va.gov (4 th floor Medicine Education office) to set up your ID badge/computer/CPRS access/shared CCM folder access. You MUST complete mandatory VA online training at most 1 year PRIOR to your start date, otherwise they won't grant you permission to access the system. One of your teammates can give you a brief training session on using the VA computer system. It's a very old, laborious system, so be patient.
    a. Patient List: The team sign-out list is maintained on the VA server (reached from the desktop of any VA computer) in the Medicine Residents folder and CCM subfolder. It's on the S: drive when you go to My Computer. (Jodi Peters can grant you access). Make sure to update this list with major changes, new admissions, and at the end of every day before leaving so that any resident on the team can manage issues for any patient in the unit. The "on-call" intern or 2nd year IM resident will sign-out the list to the night float team at 1900 in medicine lounge on the 3 rd floor.

3. Conference: EM Interns MUST attend the Emergency Medicine Conference while on the ICU service. For non-post-call days**, remind your team the day before so they don't assign you patients that morning.** Then go to the ICU after teaching day is over to help with the team's work for the rest of the day (often they won't even ask you to come in, so text first!).
4. Work Hours: The VA ICU rotation will be a non call rotation; the interns will be seeing patients during the day and admitting new patients, but will sign out to the night float team for coverage and admissions during the night. They will be working at most 6 days/week and will get at least a day off. Let the Medicine VA Chief Resident know if you are having any problems with hours (and Veronica of course, too). When there are sick patients and central lines and intubations happening, it can be worth staying a little later to help out and get some extra procedures.

B. Your Typical Day:
1. Day 1: Show up to the ICU on the second floor at 0700. You will see anywhere from 1 to 2 patients on your first day.
2. Rounds: Typically start around 9am. You should ask the attending the day before what time they expect to round the next day. In general, it takes ~30 minutes to see an ICU patient for the first time and collect necessary data for rounds.
    a. Generally follow the format for a daily note. Always comment on ABG, vent settings, I/O's, imaging, and consultant recs. Have on hand the lab results for the past few days for anything that is out of the normal range so you can discuss the trends if the attending asks.
        -Dr. Habib – Keep things brief, always mention the ABG and CXR, but otherwise keep physical exam and labs to pertinent positives and negatives only. He loves I&Os and wants to know the insensible losses

(the correct answer is approximately 600cc daily). He will interrupt you regularly to discuss assessment/plan during your presentation. Try not to repeat yourself too much and when you get to the real A/P, go by problem list and just list the plans. He loves asking about A/a gradients and the causes of increased BUN:Cr ratios

-Dr. “Swathi” P- Loves cardiac ultrasound on rounds. Pretty nice. Dry sense of humor.

-Dr. Thakker. Rounds long, but they’re table rounds with a lot of teaching in between. Super approachable, knows you’re an intern and is great at slowing down to make sure processes are understood.

-Dr. Abassi - very nice, very into teaching, and very deeply cares about his patients.

-Dr. Muna - also very nice and approachable

3. Problems and resources:

a. Medications – The ICU has in house pharmacists during the day (who are super awesome). Use them, and learn from them, they will make your life much easier. Many Medications are ordered through a note, which will take you to an order set.

Insulin Critical Illness Infusion
Insulin Diabetic Ketoacidosis
Insulin Transition Continuous infusion to SC
Insulin Subcutaneous Order Set
Ischemic Stroke
Med Albumin
Med Anticoagulation Protocol Inpt
Med Sedation/Analgesia
Sepsis Protocol Orders Note
Ventilator Management Orders
Ventilator Withdrawal at End of life

b. Airway/Vents – If a patient isn't saturating well or has other ABG problems, get respiratory therapy (RT) to help you with suctioning, nebs, non-invasive ventilator support (BiPAP), setting up for intubation and changes in vent settings (If you make any tweaks to vent settings make sure you really know what you are doing, and that you put in an order with the new settings). RT knows a lot and can help with most airway issues. Call the Pulm fellow if you have questions RT's can't help you solve.

c. The ICU has a glidescope available for intubations, you MUST be OORAM CERTIFIED to intubate in the VA (with an OORAM certified attending supervising)- ask Jodi Peters.

    -Anesthesia is in-house during the day and can help with difficult airways. There is always an ED attending in-house (however, some are not actually EM trained) who may be willing to come up to help.

d. Daytime Help – First call the Pulm Fellow then your attending. The attendings are really nice, so if you are not feeling comfortable with one of your patient's and the Pulm Fellow is not available, feel free to go directly to them.

e. Evening Help – For non-emergency help you can call the on-call Pulm Fellow to discuss a patient (they will come in if you need them) or call the Medicine Hospitalist (in house). During a code, the Medicine on-call team and Hospitalist will automatically be called, however, for pre-code emergencies, have a nurse page them. The Medicine team's senior can also be called for when you need minor assistance. The ED attending can also be called for help in emergencies.

f. Other – If you are ever not sure who to ask, check with the nursing staff and they will point you in the right

direction. Most of the ICU nurses are fabulous – be nice to them and they will have your back.

4. ED Admissions: The ED attending or resident pages the ICU pager for admissions. Usually the medicine resident carries the on-call pager, and they are expected to return the page within 5 minutes and see the new patient in the ED within 30 minutes. Most of the time the whole team will go down to evaluate the patient if it is not busy. Write an admission H&P and enter admission orders (write as delayed transfer orders if the patient is still in the ED) for all new admits. Don't forget to put the patient on the list when you admit them.
    a. After evaluating the patient, if you do not feel they need ICU admission, discuss the patient with the ED physician and the appropriate service (Medicine, Surgery, etc). If there is disagreement, err on the side of caution and admit to the ICU. You can also always check with your fellow for questions about admitting a patient.
5. Medicine/Off Service Emergency Transfers – You will be paged for floor or SDU patients who are not doing well and need emergency transfer to the ICU. For these patients, follow the same basic procedure as with ED admits – see the patient, write transfer orders, and write a transfer note that should consist of an abbreviated H&P and a summary of the patient's hospital course to the point of transfer. Put the patient on the list.
6. Non-Medical Non-Emergent Transfers – Must be evaluated by the CCM fellow prior to acceptance.
7. Outside Transfers – Must be approved by the CCM attending. Attendings will inform you of the expected transfer prior to arrival. If you have not been notified by the fellow or attending, page them to advise of the situation. If you are contacted directly by an outside facility, notify the AOD/SCO, who will forward the call to the CCM fellow or attending if a bed is

available. If the patient arrives and does not require ICU level care, facilitate admission and transfer to the appropriate level of care.

8. Code Blue:
    a. The medicine resident carries the code pager, and you should respond to codes in the hospital (the code pager gives verbal instructions for where to go for all codes). For codes in the ICU, the on-call Medicine team and attending or hospitalist will respond and assist the on-call resident in the ICU. The code pager will go off every day at approximately 1100 as a test of the code system. Normally you don't carry the pager, but when the pager goes off at 1100, call the operator (dial 0) and tell them the number of the code pager you are carrying.
9. Transfers to Medicine:
    a. Patients who no longer require ICU care (approved by the CCM attending) are generally transferred to the Medicine service. Rarely they are discharged directly from the ICU. For all transfers to medicine, call the chief resident or the call pager by 1200 (1100 on weekends). If the patient was initially admitted to a medicine team and then transferred to the ICU, the patient will go back to the original team (unless that team is post-call). Call that team to advise them of the transfer. For transfers that have been in the ICU for >72hrs, write an interim summary (basically a daily progress note plus a summary of the ICU course and details of the expected plan post-ICU stay in the assessment section of the note) by 1400.
10. Equipment in the ICU:
    a. Lines – There are two carts with set-ups for central lines, cordis, arterial lines, etc. The nurses can get stuff set up for you if you ask.

b. Ultrasound – There is one ultrasound located in the equipment room. There should be sterile covers if you want to use it for central or arterial lines.
c. Electromagnetic Enteral Tube System – Generally the nursing staff takes care of Dobhoff placement, but may ask you to help if they are having trouble. They have an electromagnetic enteral tube system in the equipment room that you can use with special tubes to help you track placement (not all the nurses know how to use it, so ask around for someone to show you).
d. Cardiac – There are EKG machines available, ask the patient's nurse if you need an EKG. Defib / cardioversion equipment is also located in various places throughout the unit.
e. Bipap/Intubation – Carts are in the unit, ask respiratory therapy for help.
f. Other stuff – There are two equipment rooms and two supply closets. The equipment room is open, but ask a nurse for access to the supply closets.

11. Consults: ***
    a. Enter the consult request in CPRS, fill in a brief consult question and take care of the prerequisites for the services that require them. Then call the operator and get the pager number of the on call resident or fellow for the service and call them to let them know about the consult. If for some reason your page is not returned, call the VA Operator again for the pager number. It seems like fairly regularly you get a different pager number the second time when someone hasn't answered ...

C. Notes / Documentation:

1. Data Collection: In the ICU, vitals, I/O's, info on drips (including insulin), and daily weights are found on the PICIS system which are usually open on the computer in the patient's room. The most recent ABG is often with the paper chart

(though it will be entered and appear later in the labs section of CPRS). Everything else can be found in CPRS. If you want to look at an x-ray, CT, etc, that does not yet have a report, in CPRS go to Tools, then VISTA/Imaging and you can look at the images yourself. Do this every day for CXR's, as they will rarely be read before rounds.

2. Don't Miss:
    a. Medicine reconciliation – what can be stopped and how long other drugs (abx esp.) are expected to continue.
    b. DVT prophylaxis (SCD's, heparin, etc)
    c. GI prophylaxis (generally an H2 Blocker or PPI +/- stool softeners)
    d. VAP prophylaxis (bed at >30 degrees)
    e. Glucose control – Does pt need insulin algorithm (for drips) and if so which, how have FSBG been controlled, is baseline insulin (lantus) needed, ask IM resident or help if unsure.
    f. Sedation vacation – Should happen daily if pt is on a vent (nursing order) unless contraindicated (ex status epilepticus). Pt should have sedation lightened up enough to be mildly responsive then it can get turned back on again.
    g. Spontaneous breathing trial – what time did they go on? How did the patient do?
    h. Code status – reassess appropriateness and arrange for conversation with patient/family when not appropriate. Hospice is consulted for all ICU patients as part of VA quality assurance, but will only discuss code status with patient/family if asked (they are really great if you want their help).
    i. Social issues – Is there a medical power of attorney? Are they updated on pt's condition? Call SW for

questions/help, they are awesome and do their own rounds with pallative care on all ICU patients.

j. Decubitus ulcers?

k. Lines – Review all arterial and venous lines, as well as drips/rates:

Can any be removed?
Are any femoral/in groin?
Were any placed emergently?
How long has each been in?
Is site clean? Evidence of infection?

3. For new admits, select "Admission History and Physical" as the note title and write a full H&P.
4. For transfers, select "Pulmonary/Critical Care Inpatient Note" (same as your progress note) and write an abbreviated H&P plus the hospital course so far.
5. For all continuing ICU patients, daily notes should be titled "Pulmonary/Critical Care Inpatient Note". SOAP note format is appropriate as below:
   a. S: Update on event for pt in past 24hrs. If pt able to speak include pt's perspective.
   b. O:

Vitals: (range for past 24hrs) T, BP, P, RR, O2%, Wt (if daily weights being monitored), can be inserted as a template
Vent settings (if pt on vent): Mode, Pressure Settings, Tidal Volume, Rate, FiO2
I/O: urine output can be recorded as cc/kg/hr
FSBG: (range for past 24hrs)
Physical Exam: (follow standard format)
Meds: (can be inserted from templates, patient data objects)
Labs: (cumulative lab section just copy and paste

CBC, BMP,etc and all new micro/send out results)
Imaging: (summarize new results, note if official read is pending)
Consults: (summarize new recommendations for each consulting service)

c. A/P:

Make a problem list, generally by organ system, and write an assessment and the plan for each. Make sure to include diet, prophylaxis, and disposition.

6. For patients being transferred out of the unit who have been in the ICU for >72hrs, the note should include a summary of the ICU course and details of the expected plans for the patient in the assessment portion of the note.
7. For all major changes in patient status (i.e.. if you are called by the nurse overnight for anything more than minor issues), also select “Pulmonary/Critical Care Inpatient Note” and write a brief update of what took place and any changes you made.
8. A note titled “Interim Summary” should be written for patients remaining on the ICU service every 2 weeks. These should include a brief summary of the patient’s presentation, which can be copied from the admission H&P (cite the original note), a summary of the ICU stays, and brief review of the expected plan for the patient.
9. Discharge Summaries should be written for all patients discharged directly from the ICU and all patients who die on the service (an additional death note should also be written as below). Again, copy the patient’s presentation from the admission H&P (again cite it), write a summary of the ICU course by problem, and a summary of any necessary follow up. It is a great idea to write a hospital course section in your daily progress note and update it daily with significant events in the hospital so far. That way when it comes time for discharge/transfer, you already have the hospital course done.

This is especially useful for patients who have been in the ICU a long time.

10. Death Notes:
    a. Official policy is that the attending should be notified immediately if a patient dies, regardless of time day or night. In practice, most attendings want to be notified if a patient dies at the time, unless care was being withdrawn and the death was expected. In those cases, the attending can be notified in the morning. However, if you will be on call and care is being withdrawn on a patient, clarify with the attending in advance if they want to be notified immediately or in the morning.
    b. For all patient deaths, you must write a death note. Select new note in CPRS and then select "death note" as the title. A template will come up, fill this out and then write a paragraph at the top of the note before signing explaining the pronouncement of death. Generally, this is:

        Called to patient's bedside by nursing staff. Patient's eyes were fixed and dilated. No carotid pulse was present. No chest rise was visible. No breath or heart sounds were present on auscultation. (Describe if resuscitative efforts were made or if not that patient was DNR/DNI, and if family was present.) Time of death ____.

D. Words of Wisdom:
    1. Glucose and Electrolytes:
        a. There is some good ICU EBM about tight glycemic and electrolyte control.
        b. Glucose – There is a diabetes nurse who can help you with glycemic control, but basically think about increasing the algorithm (the insulin drip setting and how much insulin a patient gets for a given FSBG reading) if the patient's

sugars are running high. Also consider adding some baseline insulin, like lantus, for anyone running consistently high (generally ½ the patient's daily insulin requirement). Make sure to cut the baseline insulin if patient will not be getting tube feed or be NPO.

c. Important Insulin Order Sets (found as a note)
   Insulin Critical Illness Infusion
   Insulin Diabetic Ketoacidosis
   Insulin Subcutaneous

d. Na:
   If pt has sodium disturbance, correct slowly! For hypernatremia, you can consider either giving free water via NG/OG/Dobhoff tube or giving D5W. Free water deficit = [(Na-145)*Total body H20]/145
   Total body H20 = Wt in kg*correction factor
   Correction factor is 0.6 for adult males, 0.5 for adult females and elderly males and 0.45 for elderly females

e. Mg/Phos/K:
   Use the 2Mg/3Phos/4K rule and give supplemental if any of these is below (even in normal range, but make sure night team didn't replace Lytes before you double up on orders).
   Mg you can give 1 – 2 amp of Mg Sulfate IV, try not to give PO = diarrhea
   Phos, give NeutraPhos PO/G-tube or use either NaPhos or KPhos IV (pick based on other electrolyte levels).
   K, KCl 10 mEq = 1 mg/dL increase in K on BMP
   Example:
   K = 3.6, give 40mEq of KCl to raise K to 4), remember max infusion rate is 10 mEq/hr periphral IV or 20 mEQ/hr through central line. If pt is

consistently below 4, you can add KCl to maintenance fluids. For any values that are off by a lot, recheck BMP after correction. For hyperkalemia, get EKG and consider calcium gluconate, NS IVF, kayexolate, insulin + glucose, NaHCO3, albuterol nebs depending on severity.

2. Pressors/Inotropes: generally titrate to maintain MAP >65. You will get a PressorDex book with your EMRA subscription. This is a great reference. Also, there is always the internet and your CCM Fellow to guide you in all your pressor and sedative needs.
3. Increasing Oxygenation (pt desaturating on the vent)
    a. Increase FiO2, if FiO2 set on the on vent is < 60% (can press "suction" button = 100% O2 for 2 min) can do this step on your own, for any other changes have pulmonary fellow be present
    b. Increase PEEP if FiO2 set on the vent is > 60%, PEARL = if fails switch to manual (BVM/AMBU bagging)/suction before changing modes and call RT, listen to breath sounds for symmetry, Increase I:E, Place pt prone or switch to PRVC.
4. Weaning Criteria

	Minimum	Normal (not on vent)
FiO2/PEEP	<60% /< 5 cmH2O	21%
Vital Capacity	>10mL/kg	60-80mL/kg
Tidal Volume	>325mL	450mL
Minute Ventilation	<10L/min	6L/min
MIP	<-200 cm H2O	< -100 cm H2O
RR/Vt (Rapid shallow breathing index)	<105	<30

5. Weaning Steps (many of these are attending dependent)
    a. Patients should have daily morning spontaneous breathing trials, in which they are placed on only pressure support and allowed to breath on their own.
    b. Get ABG 30-60 mins after each vent change
    c. Wean FiO2 (by 10% increments) down to 40%
    d. Make sure patient IS overbreathing vent and then wean rate
    (by increments of 2) if set >16 breaths/min
    e. Wean pressure support to 10 or less
    f. Switch to CPAP (keep same FiO2, PEEP, pressure support)
    g. Wean pressure support to 5
    h. Extubate, don't forget to notify pulm fellow and attending BEFOREHAND.
6. PF Ratio
    a. PF = PaO2/FiO2
    b. PF 200-300 = Mild ARDS
    c. PF 100-200 = Moderate ARDS
    d. PF <100 = Severe ARDS
7. ARDS Criteria
    The Berlin Definition (2013)
    a. acute, with onset over 1 week or less
    b. bilateral opacities consistent with pulmonary edema must be present; they may be detected on CT or chest radiograph
    c. PF ratio <300mmHg with a minimum of 5 cmH20 PEEP
    d. Must not be fully explained by cardiac failure or fluid overload, in the physician's best estimation using available information — an "objective assessment" (e.g. echocardiogram) should be performed in most cases if there is no clear cause such as trauma or sepsis.

8. SIRS (2 or more)
    a. Temp >38 or <36
    b. HR >90bpm
    c. RR >20bpm or PaCO2 <32mmHg
    d. WBC >12,000 or <4,000 or >10% bands

9. Cerebral perfusion pressure (CPP) Calculation (normal 70-100)
    a. CPP = MAP – ICP (if ICP>CVP)
    b. CPP = MAP – CVP (if CVP>ICP)
    c. MAP = [(2*diastolic)+systolic]/3
    d. CPP protocol: Based upon available evidence, the Brain Trauma Foundation recommended CPP of 70mmHg in their 2000 guidelines, however, recent update recommends threshold of 60mmHg. Also, Brain Trauma Foundation cautions that in absence of cerebral ischemia, aggressive attempts to maintain CPP above 70mmHg w/ fluids and pressors should be avoided because of risk of ARDS.

Chapter 8:

VA Emergency Dept.

VA ED Rotation

First Day Preparation

Schedule:
You may have flexibility to make your own schedule or coordinate with another co-resident to have a total of 40 hours a week for the rotation. They generally want you to work during the afternoon and have been doing 8-10 hour shifts. If there are two residents, the schedule may include switching weeks of morning shifts and evening shifts. 1-2 weeks prior to the start of your rotation, contact Dr. Sheetal Thaker in order to schedule. Her email is: Sheetal.Thaker@va.gov, cell phone: 732-824-2583.

Computer Access:
You should have completed your fingerprinting and received your PIV card during orientation. Jodi Peters will contact you but reach out if you haven't heard from her 1 week prior to the start of your rotation to reactivate your card and get your login information. It is common for you to need to call IT or Jodi Day 1 to get access and start working.

Intubation:
In order to intubate at the VA you need to complete an in person airway training course called OORAM. You will need at least 2 live intubations (need evidence and approval in New Innovations) as well as the training to be approved for OORAM. **Email Jodi regarding training dates as currently they have limited scheduling due to COVID.** You may also complete the training at any point throughout the year if you have free time on your off service or ED rotations.

Any Problems:
Jodi Peters:

520-792-1450, ext 4517
Jodi.Peters@va.gov

Joe Whitley:
520-792-1450, ext 5140
Joe.Whitley@va.gov

Location:
The ED is located in building 50. Use the Ajo Way entrance, Lot G or if you have no sticker, any of the visitor parking lots and ED is straight in front of you. On your first day, ask the triage nurse to buzz you in and what the current code is for the ambulance bay. No need to show up early, just show up on time. Some people say to not use the sticker they provide you, as it only gets you in trouble if you park in a patient spot and they will ticket you. Your mileage may vary.

Picking up patients:
Patients are placed in the rack in color-coded folders based on acuity. Red=critical, yellow=medium, green=low acuity, blue= psych. Depending on patient volume and attending, we may pick up in order or cherry pick more acute patients (cherry picking is actually encouraged here). Their tracking board is outside of CPRS, to access you open internet explorer, click favorites, VISN, then EDIS and log in with your access and verify codes making sure to change the location to the Southern Arizona VA. Write your HPI, Physical exam, enter your orders and present to the attending. They do not typically sign out patients, so I would stop picking up any patient's at least 2 hours prior to the end of my shift and would avoid any abdominal pains, generalized weakness dispo nightmares at least 2.5-3 hours prior to the end of my shift.

Placing Orders:
CPRS is archaic. Most orders relevant to our work ups will be under the ED orders tab on the left. Any radiology/laboratory studies not there have

their individual tabs on the left that you can search for what you want to order. Any medications you want to administer in the ED are ordered by text orders. You manually type in medication, fluids, orthostatics, ABG, into the text box and the nurses administer the medications. You have to be specific about dose, route of administration (IV, PO, etc). To alert nursing on new orders placed, you click the touch screen display in the doc box that lists all the rooms which will then blink red and allow nursing to see a red light above the patient room.

Reviewing Labs & Imaging:
When selected on a patient, labs are on a tab on the bottom. In order to easily copy and paste the results, organize the labs to "all lab tests by today." All x-ray and CT imaging has the radiology read under the reports tab on the bottom. To view the imaging independently especially at night, as well as old EKGs, you open Vista imaging which will allow you to view all imaging studies and prior EKGs.

Charting:
On your first day, set up dragon with any templates you would like to use. You will be given dragon login information from Jodi so contact her if you do not receive one. Your note will be "ED Physician Assessment" template and you will select the staffing attending. They will also request that you copy and paste lab results and imaging reports into your charts.

Procedures:
Document with special note and special billing, ask your attending. Make sure to get OORAM certified early! You cannot intubate a patient in the emergency department or whole hospital for that matter, unless you are certified. Ask to do all procedures and try to be friendly with all attendings. We are extra help in the ED, so it is ok if you are spending time trying to place a central line or pigtail in a patient without having to worry about not picking up patients.

Equipment for Procedures:
Glidescope and saturn stylets are in the pixis in room 1. Ask the nurses for help in setting up as in a month long rotation you will never get fully comfortable setting up individually. To enter most pixis/equipment machines, tap on the emergency entry, take out what you need and push the green button of what you took. There are 6 of these machines, things are in them randomly; ask a nurse for help or you will never find anything.

Discharge Prescriptions:
Prescriptions for discharge at the VA can be dispensed at the on site pharmacy, tubed to the ED, taken out of a vending machine for select medications, or be mailed for non emergent medications. Pharmacists are present in the ED 10a-8p and are great resources and will help distribute and provide education on medications you prescribe. Some meds can be dispensed in the ED under the ED menu and called PickPoint. The vending machine is near the doc box and during hours that the pharmacists are there, they will grab the medication and give it to the patient. Outside pharmacist hours, you will need to ask an attending to grab the medication out of the machine.

Consulting/Discharging/Admitting:
Discharging and Admitting patients have their own separate orders under the ED orders tab with ED Decision to Admit/Discharge. Remember the attending physician name to place in the order. To admit a patient you have to page the admitting medicine physician by dialing 1-5555 which accesses their pager system. You hit 1 for individual pager and night and day the pager number is 4645. Calling any consults is the same pager system and the pager numbers can be found by opening internet explorer, clicking on call rosters on the home intranet page and finding the appropriate service. The unit clerk is also available to call consults if you call them and ask for a specific service. All consults must have a consult order placed under the consult tab so that they may write a note and bill.

D/C instructions:
There are no default discharge instructions. If something is important, write it on a piece of paper. There are work excuses in the bottom drawer between the first two computers when you enter the charting room in the yellow folder.

Bathroom: In dictation room or near the ambulance entrance.

Attendings:
Dr. Compton: Fun and easy to work with in the ED. Relatively hands off and will allow you to manage how you would like primarily and will assist you if you are uncertain during a sick patient or resuscitation. Prior UA Grad.

Dr. Miller: Nice guy who is great as long as the computers are working. He can lose his cool when running into issues and has an amazing talent for stream-of-consciousness profanity. He calls everyone Baby or Dude. He is a great teacher who lets you do your own workup. He will also talk to you for 30 minutes and allow 5 charts to pile up.

Dr. Lane: Relatively old school but will let you work pretty independently and is pretty hands off in how you manage patients.

Dr. Tranquada: Currently in leadership at VA ED. Enjoys teaching and wants to work with you. Provides good teaching on shift and will question you a bit during presenting.

Dr. Chuang: One of the younger attendings. Great to work with and helpful and knowledgeable.

Dr. Fox: Easy going and nice to work with. Has a strong base of sports medicine knowledge. (He is starting his own Sports Medicine Clinic.) UA South Grad.

Dr. Punia: Relatively new, fresh out of residency, he's fun to work with and chill, tends to shotgun labs and admits a ton of patients. When he's on the medicine service calls it "getting Punia'd".

Dr Mahoney: Former community ED physician and gives great advice about your workups and flow. Talkative and always willing to teach. Ask about her horses. UA Grad.

Dr. Stadheim: Very conservative and if you ever consider a CT you should probably order it. When using a chaperone would like you to document who and at what time the exam was performed. Will request consults frequently and will always discuss risk when assessing patients. May have you consult and force admit unnecessarily.

Dr. Thaker: Super conservative, lacks confidence, is the only one who is keeping track if you've showed up to your shift. Nice enough.

General Information:
Laid back rotation and pace relative to main campus ED. Patients tend to be elderly with significant comorbidities so plenty of possible pathology. No one keeps track of patient counts and the ED is staffed to work without you. Focus on understanding your patient and expanding your knowledge of treatment options. Procedures are relatively rare as many attendings request ICU consults early into work ups but if you hear of something about to be done, don't be afraid to ask an attending to let you take that sick patient or manage the procedure.

Chapter 9

South Campus ED

BUMC-S

South Campus ED

A. General Information:

1. EM Interns will work approx. 30% each month at BUMC-S (previously known as Kino). This depends on each class, but remains the same number of shifts/month throughout residency.
2. Location: 2800 E. Ajo Way. Emergency Department (520) 874-5600.
    a. Parking (with COVID precautions in effect): You have two options for parking. You can park in the front of the hospital and go through the main entrance to be screened. Other option (and better option) is to park outside the Behavioral Health Pavilion (on the East side of the hospital).. There are covered physician spots here and a COVID screening station.
    b. Getting to the ED: From Behavioral Health Pavilion-> Just walk through the double doors past the guard station. Continue down this hall until you go through 2 more sets of double doors. This will put you in the hallway with our charting room (if your badge doesn't work for the charting room, just talk to security, and they'll change your access, it's really easy). If you continue down that hallway until it dead ends and then make a right, you will be in the ED.
3. Radiology reports: Done at main campus and there is a list of phone numbers in the doc-box if you need to call. At night, you will call the PEDS READING ROOM or nighthawk. This seems to change monthly, so ask your junior or senior who to call. If in doubt, call the peds reading room and they will tell you where to call.
4. Ultrasound: These roam around the department but usually are outside the Doc box or by the Charge Nurse. Be sure to input the patient's MRN and your ID number to track your scans, or find the patient on the worklist if you entered an "ED POC

Ultrasound" order. If the attending is present, then list their ID number as well.

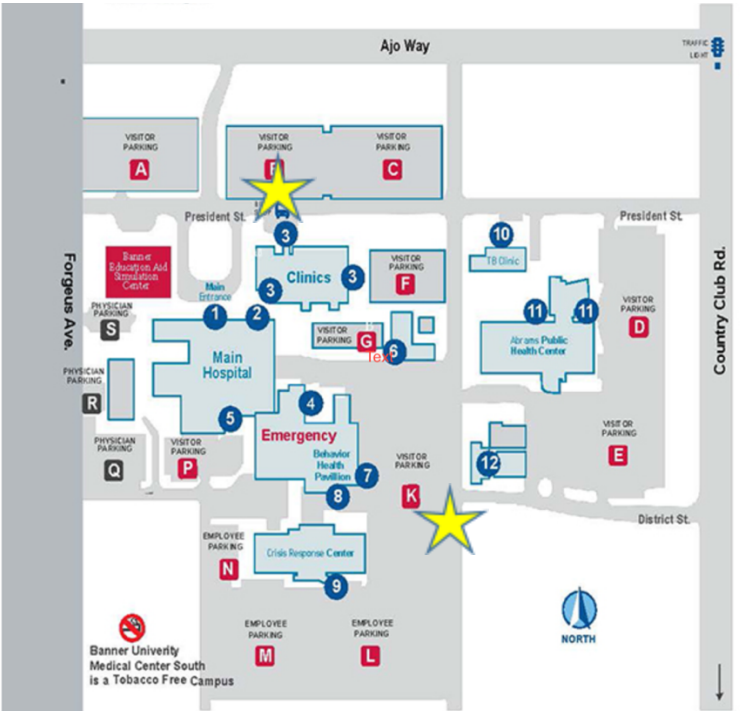
5. Psychiatric patients: Similar to BUMC-T, all psych patients must be cleared medically by you and usually require a standard psych lab work up; however use judgment as it's not always needed. For patients needing medical clearance for CRC (crisis response center), you can just do what is necessary to clear them. If the patient needs to be cleared by psych, then they want a full psych work up. The best way is to order the ED Overdose order set. This should have all of the labs you need. Just review it to make sure nothing is missing that you would want.
6. The CRC takes many of the psych patients. After being medically cleared, call the CRC to do a doc-to-doc to transfer the patient if the patient came from there (be sure to write down the accepting provider's name, often an NP, because you need to write it in your transfer order/form). Then, fill out an EMTALA form (e.g. transfer form). Psych patients can see the psychiatrists at the CRC. If the patient is a definite admit OR revoked court order OR not appropriate for the CRC, then consult Psychiatry. Ask the nurses for more information before seeing the patient. They often know them from prior visits or have documents that will give you more information. Remember to be safe and stand close to the door. Ask security to be present for ALL psych evals. Better safe than sorry.
7. Food: "Brown and Brown". There is a cafeteria with a decent selection but limited hours of operation. Your badge will be activated to scan for purchases and given a receipt with your account balance. Some people like bringing their own food as well since it's a limited variety of food (there is a fridge with snacks in the resident library). Also, unlike University campus, on the 3 rd is a floor physician lounge, where there are free sodas, water, coffee, tea, cereal, fruit, sandwiches and salads

etc stocked for residents in the fridge, actual availability varies. Wave your badge outside the door to get access in.

8. Resident Library: Located in the hallway as you enter from the ambulance bay. Use your badge to get in. This is where you will find all reference texts for South Campus. In addition, there are two computers with Dragon. Nice place to chart once your shift is over!
9. Discharging/Admitting Patients:
    a. Admit:
        1. Admissions work a bit differently at the South Campus. Attendings call admission on all FM/Medicine admits; after they are accepted for admission, you call to signout to the resident on the accepting team. You still call admission on Surgery and ICU patients.
    b. Discharges – just like main campus but after you print your instructions and prescriptions, you need to take them to the patient's nurse.
10. Working at South Campus offers you a great community ED experience and a chance to work with a different patient population than BUMC-U. You will see a variety of complaints at South Campus from psychiatric to mild complaints to very sick patients.

E. Words of Wisdom:
    1. South Campus can be challenging since you're working with a less efficient system than BUMC-T, but it still is a great place to learn medicine. The nurses are afraid of Peds. Enjoy your South Campus shifts! The faculty are mostly the same as main campus, there is good pathology, chance for interns to see sick patients, run codes, and do procedures as there is overall less coverage.
    2. Ask lots of questions to learn the system. Things are always changing so don't be afraid to ask if you don't know.

Parking Map


Ajo Way
TRAFFIC LIGHT
VISITOR PARKING
A
VISITOR PARKING
B
VISITOR PARKING
C
President St.
President St.
Forgeus Ave.
Country Club Rd.
Banner Education And Simulation Center
Main Entrance
Clinics
VISITOR PARKING
F
10
TB Clinic
PHYSICIAN PARKING
S
Main Hospital
VISITOR PARKING
G
Abrams Public Health Center
11
VISITOR PARKING
D
PHYSICIAN PARKING
R
Emergency
Behavior Health Pavilion
VISITOR PARKING
E
PHYSICIAN PARKING
Q
VISITOR PARKING
P
VISITOR PARKING
K
12
District St.
EMPLOYEE PARKING
N
Crisis Response Center
EMPLOYEE PARKING
M
EMPLOYEE PARKING
L
NORTH
Banner University Medical Center South is a Tobacco Free Campus

Chapter 10:

The History of an ED Patient

ED History

A. ED History Outline:

1. Look at the nursing triage note - this will often give you the most important parts of the pt's complaint, and sometimes provide information that the patient will not tell you.
   Occasionally the nursing triage note will be wrong (e.g. patient actually is concerned for STD but was embarrassed to tell the nurse), so don't completely anchor on it.
2. Vitals Signs – ALWAYS review vital signs before going in to see a patient so that you know whether or not they are stable and how fast you need to move/if you should ask for help early on.
3. Chart review - Prior to patient contact, quickly review patient history, meds, vitals (Try to take a max of 1 minute, a more extensive chart review can be done after seeing the patient).
4. CC : A few words that should encapsulate the patient's main issues; however, many times the true CC is different from what is in Cerner
5. HPI :
   a. The HPI is a clear chronological account of the problems for which the patient is seeking care. Tell a story that describes why the patient is here. Commonly, chief complaints involve pain/discomfort and the following elements should be clarified:
      Location, radiation, quality, severity
      Why did they come in today specifically?
      Timing, onset, duration
      Setting of onset
      Modifying factors
      Associated manifestations
      Note significant negatives to r/o life threatening problems. Include significant information such as risk factors, relevant history and meds

Cardiac history/prior workups for chest pain patients When was the last time the patient saw a doctor?
Do they have a PCP?

6. Meds: These are usually reviewed and updated by the nurse, but you should confirm them with the patient, particularly important or high-risk meds like anticoagulants.
    a. Include dose and frequency
    b. Nonprescription drugs and vitamins
    c. Herbals and home remedies
    d. Birth control
7. Allergies:
    a. Include med/foods/environmental
    b. Determine specific reactions (rash vs anaphylaxis)
8. PMH :
    a. Immunizations/Tetanus status
    b. Birth history for peds patients
    c. Childhood illnesses
    d. Adult illnesses
    e. Surgeries/ hospitalizations
    f. Last menstrual period
9. Social History:
    a. Tobacco, ETOH, IV drug abuse or other drugs of abuse
    b. Exercise
    c. Sexual History, if applicable (make sure parents and partners are out of the room, or this will often be inaccurate)
    d. Special social circumstances (nursing home/ employment/psychiatric care/homeless, etc)
    e. DNR/DNI (Do not resuscitate/intubate) very helpful to determine in the elderly, especially in the age of COVID

10. Family History:
    a. Including conditions such as DM (insulin dependent or non), HTN, CAD, CVA, high cholesterol, TB, cancer, ETOH abuse, and symptoms like those of the patient
11. Review of Systems: Your HPI should already include a more in-depth ROS for the organ systems of the patient's chief complaint(s).
    a. GEN : weight changes, weakness, fatigue, fever
    b. SKIN : color, rashes, sores, itching, nails
    c. HEAD : headache, migraines, trauma, vertigo, syncope
    d. EYES : loss of vision, color blindness, blurry vision, diplopia, scotoma, hemianopsia, trauma, inflammation, discharge, tearing, glasses, contacts, glaucoma, cataracts
    e. EARS : deafness, tinnitus, vertigo, discharge, pain, mastoiditis, hearing aids
    f. NOSE : coryza, rhinitis, sinusitis, discharge, obstruction, epistaxis
    g. MOUTH : sores, teeth, bleeding gums
    h. THROAT : hoarseness, ST, tonsillitis, voice changes
    i. NECK : swelling suppurative lesions, LAD, goiter, stiffness, limitation of motion
    j. BREASTS : development, lactation, trauma, lumps, pains, discharge, gynecomastia
    k. RESP : pain, SOB, wheezing, dyspnea, orthopnea, cough, sputum, hemoptysis, night sweats, fevers, pleurisy, bronchitis, TB, pneumonia, asthma, last CXR
    l. CV : palpitations, tachycardia, pain, exertional dyspnea, paroxysmal nocturnal dyspnea, cyanosis, ascites, edema, intermittent claudication, cold extremities, thromboses, HTN, RF, syphilis, diphtheria, last EKG/treadmill/echo/cath

m. GI : appetite, weight changes, pain, dysphagia, reflux, nausea, flatulence, diarrhea, constipation, colic, vomiting, bilious vomiting, hematemesis, jaundice, hemorrhoids, melena, hematochezia, appy, cholecystitis, hepatitis, pancreatitis, AAA, hernias

n. GU : color of urine, polyuria, oliguria, nocturia, dysuria, hematuria, pyuria, retention, frequency, incontinence, pain, stones, menstrual history, dysmenorrhea, pregnancies, birth control, venereal disease, sexual history, hernias, ectopic, SAB/TAB

o. MSK : fractures, arthritis, swelling, pain, stiffness, weakness, atrophy, gout, trauma

p. ENDO : growth changes, weakness, goiter, exophthalmos, intolerance to heat/cold, polyphagia, polydipsia, polyuria, glycosuria, secondary sex characteristics, impotence, sterility

q. HEME : anemia, LAD, bleeding, clotting, familial, transfusions

r. NEURO : disturbances of smell I; visual disturbances II-IV &VI; orofacial paresthesias and difficulty chewing V; facial weakness and taste changes VII; disturbances in hearing and equilibrium VIII; difficulties with speech, swallowing, taste IX, X, XII; limitation in motion of neck XI; paralyses, atrophy, involuntary movements, convulsions, gait, pain, paresthesias, seizures, vertigo, syncope

s. PSYCH : mood, depression, suicidal ideation/gesture/attempt, homicidal ideations, auditory/visual hallucinations, grandiose ideas, nervous breakdown, sleep disturbances, sexual changes, relationships

NOTE: You are expected to perform a ten-point review of systems on all patients to generate a level 5 chart. The sicker the patient, the more thorough a ROS you should document. In order to bill for a level 5 visit (highest billing potential), you must document at least 10 systems with 1 item in each. In order to work efficiently you should develop a standard general ROS that includes the most useful questions (nausea, vomiting, chest pain, shortness of breath, etc.). Make a dot phrase for this. But also be aware that although many patients we see qualify for a "Level 5" chart, not all actually do. The requirements for the number of items needed in you ROS or PE changes due to this. For example, if someone has a simple sprained ankle, you don't actually need a 10-point ROS. Also note, if a patient is altered and you cannot provide adequate ROS, just say so in your note under that section, and that will note disqualify your note from being at the appropriate level.

Chapter 11:

ED Charting and Dictation

ED Charting

A. General Info:

1. We have our own work room if you want to have some peace and quiet while you chart or if you need to dictate when you are not on a shift. Near back elevators on the way to radiology. **Room 1101, Code 6323 (MEBE).**
2. **"ALL patients must have completed charts within 24 hours of being seen in the ED". If the patient is admitted, there must be AT LEAST an HPI documented prior to the end of your shift.**
3. Real time charting is the goal! Be careful, do not put off your charts, as they pile up quickly and become much more difficult to remember if delayed. There are new disciplinary actions for chart delinquencies including formal review by the GME Committee for Probation. The attendings can also face disciplinary action if the notes are not in on time. They will hound you. You do not want to gain a reputation as a resident who does not do their notes. Find a system that works for you. Many of us aim to get our HPI documented right after (or while) seeing the patient, with pertinent PE findings. It's great if you can get your MDM done prior to discharging the patient but many of us end up tidying these up after we stop picking up patients.
4. Gaining a good foundation for charting is important, and we currently do not get a lot of feedback from our charting. Spend some time during your first month to learn good fundamental note-writing skills. This is the official medical documentation so your documentation should be accurate and concise. Aim to be succinct.
5. Important to include in your notes:
    a. Consults obtained
    b. Trauma Code

c. Trauma name or alias
d. Disposition
e. Discharge diagnosis

6. Note types
   a. If you were the first person to see a patient, you start an "Emergency Room Report," and use the ED Report template
   b. If you are taking signout on a patient, use "Emergency services follow up record" and use a free text template. Only the initial note is billable, so you only need to use the free text template
   c. Procedure Note: all procedures need to be documented and signed in a separate note. Choose the procedure note type and use the free text template to enter your procedure note. There is an area in the general ED note template for procedures, but due a recent change in billing practices, a new and separate note is necessary.

6. Medical Decision Making:
   a. <u>This is the most important section</u>. Include what you did in the ED. Why you ordered the tests you did. What did the results tell you and how did they help you rule out some of your differentials. Finally include disposition, and if patient is discharged write the specific instructions you gave them. (Return precautions, follow-up, medication counseling, etc.)
   b. Start with a summary statement: One liner of the chief complaint, how the patient initially presented, note any initial vital sign abnormalities, and the most pertinent physical exam findings. (Ex: This is a 54 year old male presenting with chest pain for one day. On initial exam patient was well-appearing, vital signs were notable for

tachycardia, and physical exam was notable for bibasilar crackles)

c. Next note initial interventions: patient was placed on O2, defibrillator pads were placed on patient, patient was given ondansetron for nausea and morphine for pain, etc…
d. (If needed)– "A stat bedside EKG was performed and results as interpreted by me were: "Rate, rhythm, axis, intervals, ST changes." (All EKGs need to be interpreted in your note, there is a special section for this on the right side of the note.)
e. Consults and a brief summary of their recommendations
f. Then discuss your thought process for the case and rationale for certain actions /medications given/testing/ procedures/ how you came to your diagnosis and disposition. This is the meat of your medical decision making!
g. The patient's vitals at discharge were (you want to show that you normalized abnormal vitals or justify why not)

19. MDM Pro Tips from an attending renown for her charting:
    a. Always mention vital signs, even if they are normal.
    b. If administering medications, list them and then say if the patient felt improved or there was no change.
    c. If the patient was on the monitor, say that, and say if end tidal CO2 monitoring was done.
    d. BIG THING: If you put something in your differential diagnosis, then you should talk about it in the MDM. A patient who comes in with a tension headache and is discharged after Tylenol should not have central venous thrombosis, meningitis, encephalitis, etc on their differential diagnosis, unless you directly support or refute them in the MDM.
    e. If there is an imaging study, I recommend highlighting and tagging the study. This will allow you to drag and drop the

read into your note. This documents the information we had at the time of provided care. There have been so many times that radiology changes the read on the final report, and after the note refreshes, the final report is plugged into the note. If the report is unchanged, you can type //med… and the first option for medical imaging populates all radiology reads from the past 24hrs.

f. If labs were ordered, talk about them in the MDM.

g. Be careful with "Patient appeared to be in distress" and "Patient appeared lethargic/somnolent." These phrases are red flags, and you may need to qualify the distress. Ex: "Patient is in mild distress secondary to flank pain. Patient falls asleep but is easily awoken with verbal stimulation."

h. Clinical impressions can be: symptoms, signs, complaints, lab abnormalities, imaging abnormalities.

i. If there are incidental findings on imaging studies, be clear that you spoke to the patient about them and advised them to follow up with their PCP/specialist. How awful would it be that a nodule that we didn't inform the patient about grows aggressively in a few months, and it's lung cancer that could have been caught early but patient didn't know.

j. Remember that your MDM should tell a story of what happened in the ED and why you made the decisions you made. First and foremost, your chart should be a form of communication between you and other healthcare providers. This should facilitate medical care. All they need to read is your note. Other providers should not need to search through the imaging reports, lab tab, EKGs, to get a good idea of what happened during the ED visit. You wouldn't want to do that either.

k. Remember to be professional in your documentation. Patients can always request a copy of the chart. Specialists who have never met you will read your chart. Remain

professional, don't throw people under the bus, and try to be detail oriented. A note riddled with Dragonisms and misspellings can reflect poorly on you.

l. If there are abnormal vitals initially and they have normalized, say that. "Patient's tachycardia resolved after administration of 1L normal saline bolus."

20. ED Disposition:
    a. The patient was admitted/discharged/transferred
    b. If discharged – say what the follow-up instructions were and medications dispensed. Discuss return precautions.
21. ED Diagnoses:
    a. These should auto-fill from your discharge backsheet or the admission tab.

C. Dragon

1. Dragon is a great tool to improve charting efficiency. Spend some time familiarizing yourself with the software, talk to others about how they use it, and it is recommended to “train” your Dragon using the provided tools, each taking 10-20 minutes to perform.
2. You can configure the buttons on the microphone handset with shortcuts for things like your phone number or login.
3. You can also add text into Dragon and associate a particular phrase to that text, for example saying, “my MDM low risk chest pain” would populate your note with a pre-written MDM at the point of the cursor.

Chapter 12:

FINAL PEARLS OF WISDOM

Words of Wisdom

A. PEARLS

1. **If Veronica asks, then listen and comply**. She only has your best interest at heart.
2. Keep up with charts: It gets exponentially harder to dictate the more time that goes by since you saw the patient and the higher the pile of unfinished charts. Stay current on your dictating - nothing sucks more than having to come in on your day off to dictate for 5 hours. In addition, there is a charting policy regarding delinquent charts, which is strictly enforced (you may get a nasty-gram threatening your physician privileges happens for delinquent charts on Sunday at midnight). Don't get on Al and Sam's bad side. You have 24 hours to complete!
3. Make a reading schedule. It gets very difficult to work outside of work, so structure is usually needed to keep you on the ball! Try to read one thing per day about a case you saw in the ED. Read about any patient you have, any procedure you perform or think you may perform, and any new or interesting case you have seen or heard about. If you read about your cases, the information actually will stick with you rather well, since you are pairing it with a patient you have seen. Next time, you will have a better idea about how to manage such patients. Set a list of things you want to learn on each rotation. If you don't have patient encounters to learn from, look it up and ask a senior resident to give you a brief, informal lesson on it for future use.
4. Make your patient priority over consultants. A big part of our job is inadvertently pissing off other services – no one wants to work, and every time you call for an admit or consult, you are giving someone else more work. For this reason, you often meet resistance, but do what's right for the patient – not the angry doc on the other end of the line!

5. Always arrive at work a little early. It actually reduces stress and makes you a good colleague. It takes a couple of minutes to clean off your work station, log into Cerner/dragon, grab an AzCOM phone, and grab a sheet of paper to prepare to sign out.
6. Strive to leave your shift in the ED as close as possible to the time you are scheduled to leave.
    a. It's ok to sign out – don't sign out procedures, just do your best to sign out a plan for the patient
    b. Trust your colleagues to complete work on your patients
    c. If you are consistently staying much later, you may need to work on your efficiency
    d. Try to make a dispo decision within 4 hours of patient arrival. This will help you foresee dispo problems and work them out well before your shift is over.
7. Try to see everything interesting, even if it is not one of your patients.
    a. Watch how major traumas are handled
    b. Go in to see excellent or classic physical findings
    c. Observe new (to you) procedures that others are doing
    d. DO NOT cherry pick cases – see as much as you possibly can. This will make you a well-rounded doctor and not piss off your colleagues.
8. On off-service rotations, offer to do or participate in any procedure even distantly related to emergency medicine. Be assertive. (The only thing they can say is "no.") That includes "scrubbing in" on surgical rotations. This may be the only time as a physician that you can participate in orthopedic or trauma surgeries that will be so much a part of your career. You may even learn some techniques that you can apply to your emergency medical practice.
9. **Develop good relationships with your nurses**. They may have decades of experience and really do want to help you (at

least in the emergency department). Experienced emergency physicians know that listening to nurses can often keep them out of trouble. Don't call them 'nurse,' learning their first name will help build rapport and they will be much more willing to help you.

10. You are a resident. Tell the attending what you think is wrong with the patient and how you think you should evaluate and manage the case. Then, listen for their reasoning behind any alterations they suggest. Ask them, for example, 'what was your rationale for choosing that medication or ordering that test?' Put yourself into a position of saying what you want to do. Sometimes you'll error but putting yourself 'out there,' is the fastest route to becoming an excellent emergency physician.
11. Ask! The attendings have a wealth of experience. Do ask them how they would have approached a difficult problem or patient you encountered on prior shifts. They may provide insight that isn't necessarily in the books.
12. Network. Many of the attendings have special interests, abilities, and connections. If you seem to bond with one or more faculty members, have them help you decide on your career direction and advance those goals. This individual or individuals may not be your official "advisor." That's okay; they're here to help you—really.
13. Make time for your family, friends, hobbies, and sleep—not necessarily in that order. It will keep your energy and enthusiasm high. Emergency medicine is a great career, but only if you are socially content and rested. You will be a better doctor if you are a happy, well-rounded person. Take care of yourself, so you can better take care of others.
14. Read your U/S QA emails —the U/S crew spends hours every week reviewing our scans and often have very helpful tips for improvement. Log your US exams. Figure out how to save the

exams into the ultrasound machine correctly early, or you will do lots of ultrasounds, but realize later that they weren't saved for you to get credit.

15. Keep up with your procedure logs, as well!
16. Represent on off-service rotations. Usually we gain a lot of respect on off-service rotations because we are fast, efficient, and hard workers. Your life will be easier later when you call a consultant and they remember working with you on their service. If they know you to be an intelligent, hard-worker, they are less likely to give you crap about an admission/consult. Relationships with off-service residents are invaluable.
17. Push yourself in the ED. You should always feel a little overwhelmed, but don't get in over your head. The more you see, the better doctor you become.
18. Take advantage of your days off, and realize how smart you were to go into this field that allows you a life outside of work.
19. www.facebook.com – join the University of Arizona Emergency Medicine group for general current/alum information
20. Join the WhatsApp social group for get togethers and random convos.
21. Treat your colleagues with respect. Medicine is a team sport. Good relationships with your co-workers make work fun!

Dedicated to the Great Ones who gave us this insightful document:

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GO ‘TERNS! We wish you the best of luck!