**HOW TO BE AN ALL-STAR INTERN ON SINAI FLOORS**

**Before your first day…**

**Epic Access:** Try to log in and make sure it works prior to your first day. If you encounter any problems, your first step is to call 4HELP (Epic Helpline). If they cant solve your problem, then next best place to go for questions is the medicine office (9W-180)

**Getting Signout…**

Call the intern coming off your service the night before starting to get signout on all of your patients. The chiefs may have a signout session where you can go and get signout in person

**When you arrive on the first day….**

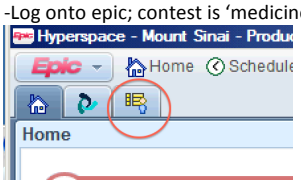
Signout from the night float interns is 6:30 AM, at the latest. Being that it is your first day and you aren't familiar with the system, I would come at 6 AM for signout. Signout is in the 10W team room and you will be getting signout from the NF covering your service—East vs. West vs. specialty (if cards, liver, onc)
To get to the team room- ask for the West Elevators of the Guggenheim Pavillion when you get the hospital main entrance. Take west elevators to 10th floor and walk down long hallway in the direction of '10w'. Before the room with a vending machine, you will have the option to go right (to the ward) or left. Go left and the team room is the last door on the right. You can leave your belongings in the team room.

Once you get signout, there are a few things you will have to do…

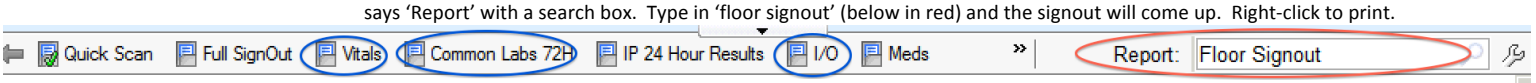
(1) forward your pager- best thing to do is ask one of the Sinai ppl how to do this. But here's how to do it in case you are brave….
42100→ 'ghost number'→ 1→7→ your actual pager # (you will find your ghost pager # in the intern survival guide that the chiefs will give you at orientation)

(2) Pick up code pager→ the chiefs will give this to you

(3) Preround- print signouts see everyone you got signout on. I'll attach a few rounding templates that I've found helpful
To access the East C list on Epic…
-Log onto epic; contest is 'medicine'. Once you get to main screen, click 'patient lists' tab on top left




-Under 'Available Lists" on bottom left, click on folders: Services MSH→ Medicine→ ex: East C. I'll teach you all how to make patient lists the first day
To print signouts….
-Open the patient list of your team (see above). Click on one of your patients. Midway down the screen there will be a box that says 'Report' with a search box. Type in 'floor signout' (below in red) and the signout will come up. Right-click to print.




[Also good tips for prerounding so you don't have to open everyone's chart- the vitals, common labs, 24hr labs and I/O are easily accessible on that screen and have saved me a lot of time while prerounding in the past]

**I'll be in early the first day, so text me with any questions and PLEASE text me ASAP if any of the patients you got signout on decompensated overnight or do not look good when you see them in the AM

We will all regroup at 7:15AM to run the list. (location TBD) I'll tell you about the new patients (who I will be seeing while you preround) and we will go see those new ones together likely during attending rounds.

**Daily Schedule (for gen med; dose not apply to specialty services)**

6-6:30AM (latest): arrive to get **signout** from NF
6:30-7:15: **preround**
7:15: 8:30: **work round** on olds/ if time go see new pts together
8:30-9AM: WORK→ prioritize what is important because not much time in the AM (prioritize calling consults, ensuring pt gets radiology studies, start dispos, sick patients)
~9-10AM: **Attending rounds**: Time TBD
10-11AM: **Social Work rounds**: Depending on where your patients are geographically located, you will go to SW rounds on their floor if they are on either 10W, 10C or 9W. Bascially you wait in a line of interns and give the one liner of SW/ dispo issues to a multidisciplinary team. It's not the most productive use of time, but they make it mandatory for interns to go. I'm at morning report during this time.
12-1PM: **Conferences:** they are VERY good. I'd recommend going.
Monday- variable; Tuesday- Intern Report; Wednesday- Intern Seminar
Friday- we have a teaching session called bagel rounds rom 11-12 where the program provides bagels and either the resident or attending do a teaching session
1PM- signout: **Get remainder of work done**→ follow up on results, write notes, update signout, finish dischrages, etc. I can help with any of this if you get overwhelmed.
2-3PM (appx 3x per week): **Teaching rounds:** usually occurs three times per week in the afternoon on gen med teams, depends on dedicated your teaching attending is. We usually find out the schedule and structure of this on the first day.

**Signout:** We run on a q2 day schedule, meaning that you are long call every other day, which basically doesn't mean much. Long call admits from 6:30AM-6:30PM and can signout at 6:30PM; short call admits from 6:30AM-3PM and can sign out at 5PM. I'm really into efficiency and like to have all the signouts done and printed 30 minutes before we are supposed to signout. My goal is to sign out on time every day. Obviously, some days it wont happen but if you are struggling to get your work done and signout is approaching, let me know and we will all tackle it together. We have to all signout as a team and we really cannot signout until all patients are tucked away (if pt is sick, we need to deal with that before we leave; if new admission, we need that admission tucked away before we leave).
Preparing for signout-
(1) print paper copies of all your signouts (just like above). I cannot emphasize how important this is to update daily! To update old signouts, click to open pt's chart. On left side of screen, click bar that says 'SignOut Medicine'.

(2) Update the hospital course in the 'SignOut' section (important); but MORE importantly, update the 'ToDo List' below it with:

-Overall status via 'A,B,C approach' to emphasize the important and relevant issues that NF should know—see below (this template will autopopulate in the box for new patients if you type ".handoffnew" in the to do list'. Update this every day!!

*MAKE SURE TO EMPHASIZE::

-Recent events in hospital course- this about receiving a signout as NF. What are events you would like to know about? Did the pt have a procedure this AM? Did they refuse dialysis? Did they recently start/get a dose of a med that frequently leads to AEs? (heparin? Lasix?, etc)

-Potential overnight events: things you anticipate happening overnight (hypoxia in someone getting aggressive fluids, fever in a septic pt, hypotension, etc) with a description of EXACTLY you want the NF to do about it

Night to do→ write you follow ups here (will also need to write them on cover sheet, discussed below)

(3) Signout cover sheet→ we print one per team per night and staple it to back of signout. It should list all the follow-ups by patient name with very description to dos for each. Every labs, test, etc that is pending overnight should be signed out for follow up.

To print cover sheet: www.sinaimed.org (password: team7000)→ rotations→ signout coversheet

**Important facts:**

**Location of patients:**

On gen med: All of your patients will be located in the Guggenheim pavilion and the majority on the 10w, 10c and 9w. There may be some on other floors, but rarely as the hospital tries its hardest to group patients geographically.

On cards: Most of your pts will be on 7c, some may be on 7E

On onc: Most will be on 11E or 11C; some may be in step down (some of the 9w beds) or on other GP floors

On liver: Homebase is 9c but patients can be on other floors

Step down unit: located on 9w, more of a concept than a location. Any of the high# beds (121-123) and low # beds (102-104) can be made step down beds. Very sick patients tend to go here. Pt can be on up to 2 drips here, including one pressor

Other random locations you should know about: MICU is on 5w, CCU is on 5E, RICU is located in back on 9w

**Team 7000**

-This means cardiac arrest. It is either called overhead (not always) or the message with location is sent to your code pager with location. We run to these! Minutes= myocardium.

-If you are on long call on gen med, you are on the code team. The interns job at a team 7000 is to rotate in and out to do compressions, which I'm sure you know are the most vital part of a code.

-We don't have a rapid response team. If a patient is decompensating, call me first. If the patient needs a unit we can call a MICU Consult to evaluate if pt needs a unit (MARS team, pager 7955 from 7am-6pm, call MICU at 45721 after 6)

**Paging/ pagers**

To page someone in medicine: amion.com (pw msmed)→ this will also have your schedule for the month

To page someone at Sinai NOT in medicine: amion.com (pw mssm)

To page using the phone (MUST do this for surgery consults, cannot text page these guys):

41300→ enter 4 digit pager # → enter your call back number #

**Phone extensions:**

All internal phone numbers at Sinai as 5 digits, starting with the numbers '4', '5' or '8'. To call an internal number from outside hospital, you can use the exchanges '241', '824' and '659' respectively. For example, if you get paged to 45678 and aren't in the hospital, you can call (212) 241-5678 to reach that number.

**Who to call for help**

First call your resident. If not available, call your attending or the SMR or MCR (in amion)

**Senior Resident Roles:**

MAR: triages new admissions/ transfers and will assign them a team at night (during the day there is often a PA doing this, known as the MAPA); runs codes during the day

MCR: consult resident during the day (shouldn't really effect you); assists with sick patients and runs codes overnight (otherwise known as SMR overnight)

**Labs:** Make sure all AM labs are ordered before you leave; phlebotomists will draw these at 6am. RN/ phlebotomists are really good at doing venous sticks. We have to do all arterial sticks

**Documentation:** H&P on new admission, daily progress note every day, event notes for brief important updates that should be documented

**Overnight admissions:**

All admissions need a separate resident and intern H&P. Sometimes there will be both from overnight, most often not. If there is no intern H&P from overnight, your note for the day will be an H&P rather than a progress note

**Weekend schedule**

Attire: Business casual, scrubs are ok for long call days and weekend days.

**What to do when…**

**My team gets an admission…**

-The resident will get paged with the admission and you will both go see the patient together

-For an admission, you will need to do (and obviously since we are a team we can split this up accordingly)…

[ ] H&P (Notes (on left) → New Note → Type (H&P)→ You can either use the standard or my template. To use the standard template: "insert smart text box", type "MS IP MD Medicine teaching admission note" and your template will autopopulate. To use my template: in the text area type .KLIPPERADMISSION and my template will autopopulate

[ ] Update date treatment team (Admission→ update treatment team on left (add the attendings name as attending provider and add ex:"Medicine- East C Service Team" or "Heme/Oncology A" as Primary service team

[ ] Allergies: just below the update treatment team tab under admissions; just document and update

[ ] Med rec: Admission→ Med rec- pt on unit→ (1) click on each med as to when last time pt was taking specific med [ not super important that this is completely accurate bc the pt usually doesn't know] → (2) reconcile home meds [ important! Go thru each of those to select what you want to resume and what you don't→ (3) Review current orders [can continue or d/c meds that have already been ordered by ED/other service/ etc], must click thru every med , (4) Admission orders (will discuss below bc this is the most important)→ (5) Review and sign (after putting in the admission orders) and then you are done

Admissions orders: Order sets are great. Under order sets in 'Admission orders" type "general medicine admission, which will allow you to select for all the most important items to order when admitting (general admission orders, ekgs, cxrs, daily and admission labs, supplemental o2, dvt ppx);

Other great order sets: Blood administration orders (if pt needs blood), diabetic agents (the only way to order insulin as well as ISS), heparin (if pt needs heparin ggt), DKA order set (for those who need insulin ggt)

Additional admission orders: here is where you add in the new meds you want to start and the admission labs/ daily labs you want to order that aren't part of the gen med admission order set

[ ] SIgnout → see above section

**I need to discharge a patient…..**

To discharge a patient, you need to complete

(1) on day prior to discharge, place order for IDP (Implement discharge plan). It gets the nurses working on the d/c

(2) Let the **social worker** know in ADVANCE (she should be updated at SW rounds every AM as well). Also needs to be informed of services the patient will need at home and transport pt will require home

(3) **Discharge follow-up appointments**: we need to make them (I know it kind of sucks). Write the dates and times out in the d/c summary. If pt is an IMA pt, then make f/u apts via follow up email address or can call at (212) 659-8551 ; or specialty clinic (212) 659-8554

(4) **Discharge med rec:** Discharge (tab on left)→ med reconciliation → (1) confirm home meds [ done the same was as was done on admission], (2) reconcile meds (decide what you want to resume on discharge [and what dose] and what you want to stop, (3) New orders for discharge [ new meds you will be starting on d/c under 'place new orders' AND 'Discharge Orders- Mount Sinai Hospital'], → (4) Review and sign

(5) **Discharge order** → is part of order set

(6) **Print discharge rxs** → should print out when you sign the med reconciliation, but if it doesn't:

Discharge (tab on left)→ med rec status→ print or print all for discharge rxs (column all the way on right)

(7) **Complete discharge summary:** Discharge→ Discharge summary (your signout will autopopulate)→ right click make text editable→ do d/c summary. To save yourself a lot of time on discharge, I would update the hospital course on the signout every day so when you are ready to discharge the majority of your summary will autopopulate in from signout.

-all discharge summaries are due in the chart within 24 hrs of discharge, however if a pt is going to SAR or nursing home, the SW will need this PRIOR to the patient leaving

**I need to transfer a patient…**

[ ] Transfer of care note: Notes→ Type (transfer of care) → type your transfer note (can use my template→ .KLIPPERTRANSFER). Only needs one from the intern

[ ] orders: make sure all meds are still ordered; if coming from one of the ICUs will need to change the timing of daily labs from 1am (which is when they are done in the ICUs) to 6am

**My patient dies….**

First take a moment of silence, someone just lost their life.

[ ] **Call the resident** (who will call the attending)

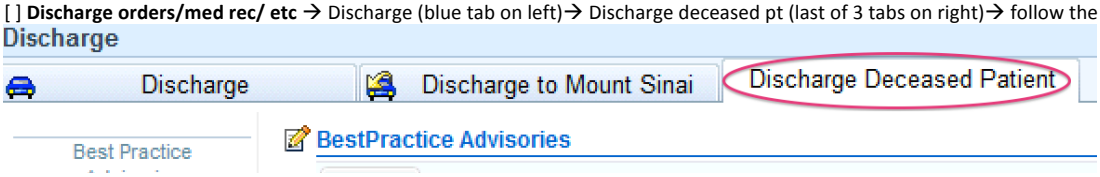
[ ] **Death exam and death note:**

Death exam: check heart for no heart sounds, lungs for no spontaneous heart sounds, pupils for reactivity, pain sensation

Death note: in notes section→ event note. Document death exam (above), date and time of death, that you informed NOK and attending, document whether or not family wants autopsy

[ ] **DAVE**→ Dave will come to be your friend. if you want to get DAVE access at Sinai, be my guest. Otherwise I can do the DAVE. For when you do get DAVE access (but are not yet individually licensed, you will want to use the hospital license # (243509)

[ ] **Discharge orders/med rec/ etc** → Discharge (blue tab on left)→ Discharge deceased pt (last of 3 tabs on right)→ follow the directions (steps 1-5)




**Templates**

I will share all of mine with you on day 1. Type into text field…

**For admission note: .**KLIPPERADMISSION

**Daily progress note:** .KLIPPERPROGRESS

**Transfer note:** .KLIPPERTRANSFER

**DAY TO DAY USEFUL FACTS:**

**Useful order sets:**

General Medicine Admission: for new admission
Diabetic Agent: to order insulin
Heparin drip protocol: standard target vs. low target
Stop Sesis Order set: allows pt to get first dose of abx faster
Blood administration:
Adult ICU daily order sets (for respiratory interventions→ bipap, vent orders; sedation, pressors, inotropes)
FPA Primary Care Diabetes→ if patient is being discharge and needs diabetic meds and all new supplies

**Consents:**

-located in 'patient works' on desktop. No matter what computer you use, will print to main printer by BA
-consent patient or phone consent proxy; place signed consent in front of chart

**Risks of basic procedures:**

-*Blood transfusion:* fever, allergic reaction, infection, shortness of breath, rarer risk includes damage to internal organs including lungs and blood cells
-*Paracentesis:* pain, bleeding, infection, rarer risk includes damage to internal organs including bowel (can inform pt that we use ultrasound to significant decrease risk of damage to organs)
-*Internal jugular triple lumen catheter placement:* pain, bleeding, infection, rarer risk include pneumothorax (can inform pt that we use ultrasound to significant decrease risk of pneumothorax)
-lumbar puncture: back pain, headache, leg pain, bleeding, infection, rarer risks include lower extremity weakness/numbness and other neurological damage

**For when your patient needs to be NPO:**

-can order 'NPO except sips with meds' if meds necessary
-insulin orders→ half lantus (if type 2 DM) and hold mealtime lispro when pt is NPO
*What procedures require NPO:*
-all surgical procedures, any procedure with sedation or anesthesia, EGDs, RUQ u/s, abdominal ultrasound, Upper GI series, Renal artery dopplers, TEE, cath, and any other procedure for which you are told to make the pt NPO

**Calling a consult:**

-all consultant pagers on amion (pw: mssm); EXCEPT surgery initial consult.
*How to call a consult:*
-Introduce yourself to consultant
-State reason for consult
-Give pt's name, MRN and location
-Prepare a solid, **focused** story (ie, If you are calling an ID consult, you should know the fever curve, WBCs, prior culture data, etc. If you are calling a renal consult you should know the electrolytes, UOP, volume status, etc)
-Ask if there is any more information (labs, imaging, etc) the consultant would like

**What is ….**

-*BA:* Business Associate→ Sits at the front of each floor; answers phones and does administrative tasks
-*MARS:* Medical Acute Response Service→ staffed by pulm fellow. Will help you with decompensating patients. Always let your resident know if your patient is decompensating; however MARS may need to be called for further assistance or if patient may need ICU level care (pager is 7955)
-*MAR:* Medical admitting resident→ will call your resident with admissions; assist with transfers to other teams/services. Contact x46142 or x49320, p7785;
-*MCR:* Medical consult resident→ will help you overnight with sick patients provides medical assistance to non-medicine services as a consultant; p2125
-*SMR*: Senior medical resident→ will also help you overnight with sick patients
-*Team 7000:* CARDIAC ARREST. We don't have a rapid response team so when Team 7000 is called, you run (if on call that day.) Your job is to rotate in/out to do compressions
-*ED location terminology: Maple* (beds 1-6B), *Birch/Cedar* (beds 7-22), *Resus* (resuscitation areas→for sick patients, located behind Maple RNs station), *RETU* (observation area→ door located in back right corner of birch area; there is an R2D2 cutout over the door)

**FREQUENT RN CALLS (GOOD FOR NF):**

**Hypertension:**

*Goal to differentiate btw HTN emergency and HTN urgency*
-HTN emergency: BP >180/110 *with* signs of end organ damage- *brain*: encephalopathy, ICH, CVA*; heart:* MI, angina, pulmonary edema, aortic dissection); *renal:* AKI, dec UOP
Tx: bring down BP; goal MAP <25% decrease in 2 hours with IV agents (do not drop >25% or else can cause CVA)
-If AMS or change in neuro exam: stat HCT (r/o bleed), nicardipine ggt
-CP/SOB: CXR, trop, EKG: nitroglycerin ggt (can only go to SDU, 7c or ICU)
-caution with IV pushes (labetalol IVP, hydralazine IVP)- can drop BP too quickly
-HTN urgency: BP >180/100 *without* end organ damage
Tx: PO antiHTNs (DO NOT use IV meds); look at pt's med list; if due for meds, give meds early; if not on max dose of med then increase dose of current antiHTN
-AEs of different PO antiHTNs: all can cause hypotension. Beta blockers=bradycardia (do not give if bradycardic); ACEi/ARB= AKI, hyperkalemia (do not give in AKI or if K elevated); hydralazine= reflex tachycardia

**Hypotension:**

*Always go see the patient; check VS trend. Is this low BP much different than baseline BPs? Does pt have AMS?
-check meds- did pt just get BP meds? If so then bolus fluids
-If in **SHOCK- call a unit.** Exam for cause→ sepsis vs. cardiogenic vs. hypovolemic

| | JVD? | Extrem | Clues? | Treatment |
|---|---|---|---|---|
| Septic | No | Warm | Elev WBCs, fever, cough/PNA on CXR, +UA/dysuria, abd pain/diarrhea | -Fluids (start with NS→ plyte if requiring a lot)<br>-empiric abx (check cx data)<br>-C/f pressors? MARS<br>-w/u: ICU venous panel, cultures, cxr |
| Cardiogenic | Yes | Cool (if shock)<br><br>Warm (if not shock) | h/o CHF, pulm rales, LE edema | -call MCR vs. CCU fellow to discuss tx for inotropes; would avoid diuresis if hypotensive<br>-w/u: ekg, trop, cxr, ICU venous panel |
| Hypovolemia | No | Cool (if shock) | Hgb downtrend, recent procedure, h/o GIB, melena/blood per rectum, | -fluids; if bleeding then blood products to target transfusion goal<br>Labs: CBC; if Hgb drop need to find out source of bleed |

Special considerations for specialty services:
-*Cards*: (as above);
Diagnoses not to forget (in the proper clinical setting): PE, PTX, cardiac tamponade
-*Liver:* albumin challenge (1 bottle of 5% albumin); if recent LVP always think of hemoperitoneum
-Onc: neturopenic (ANC <500) fever and hypotension= onc emergency. Immediately start broad spectrum abx (cefepime **2g q8h**), vancomycin if pt has a port or line/signif PNA/concern for cellulitis. Give fluids, consider source ( should pan culture like nonneutropenic pts, but also consider ports/lines/shileys, diarrehea (c.diff), abd pain (typhlitis), neck pain/photophobia (meningitis)

**Tachycardia:**

-Ask for other VS over the phone; hypotension and hypoxia would be more of an emergency.
-Go see patient; do an EKG
-*Afib/Aflutter:* metoprolol 5 IVP or diltiazem 10mg IVP if BP ok; if BP slightly low then amio bolus followed by gtt; if HD unstable then synchronized cardioversion

-*SVT:* trial vagal maneuvers, carotid massage (avoid in elderly/pts with carotid plaques); adenosine IVP 6, 6, 12 (need 2 way stopcock from micu). If HD unstable then cardioversion
-Vtach: **CCU should be called; always ask for help***. For monomorphic VT→ if stable then amiodarone 150mg bolus; if unstable then synchronized cardioversion; For polymorphic VT→ load with Mag
-Once rate controlled: check basic labs including Mag (replete lytes), if new afib/flutter (panculture, trop, TTE, CXR; TSH but unlikely to be helpful in acute illness)
*Goal rate for afib/aflutter with RVR is <110 ; goal for SVT is to break pt out of SVT

**Chest pain:**
-Examine pt; ask RN to check VS while you are walking to see pt. Chart check for age, comorbidities
-Assess characteristics of pain
-Should get an EKG if you have even slightest clinical suspicion; can reserve trops for pts that you have somewhat higher clinical suspicion for MI if EKG negative (no one will fault you for getting trops if you are unsure)
-if EKG changes in contiguous leads or trops, escalate care to a senior
-Don't forget other causes of CP other than ACS: pericarditis, PE, PNA, ptx, GERD, esophageal spasm, MSK pain

**GI bleed:**
-Vital signs; ask RN to save emesis or stool
-Melena/coffee ground emesis, elevated BUN more c/w UGIB; BRBPR either LGIB vs. rapid UGIB
-Labs: stat CBC, type/screen, coags
-Start on protonix ggt. If h/o cirrhosis with question for varicies then start octreotide ggt as well
-stop all anticoagulants; reverse with ffp if INR elevated >2
-Consult GI

**Altered Mental Status:**
-Go see patient; check to see if MS is different from baseline
-Vital signs, f/s, basic labs (CBC, BMP, ICU venous panel), EKG,
-History : ESRD→uremic? (call renal for HD), cirrhosis→ hepatic encephalopathy? (start or increase lactulose); COPD→hypercapnea? (can trial bipap is not completely altered, but would have low threshold to intubate)
-Recent meds? Opiates→ ?narcan if depressed RR or retaining CO2,
-Examine (change in neuro exam?)→ stat HCT; s/s of infection (pan culture and consider starting abx)

**Insomnia:**
-find out cause- if pain, then treat pain, if urinating frequently on Lasix (move Lasix dose to earlier)
-always try to redirect; everyone does not needs to be medicated
-avoid Benadryl, especially in elderly
-if absolutely need to give meds, can try trazadone 50 or ambien 5 (would avoid 10)

**Pain:**
*Mild pain:* use non-opiods (Tylenol 650mg→ can get up to 4g daily, liver pt can get up to 2g daily) or ibuprofen 400 q6h (avoid in renal dysfx)
*Moderate/severe pain*: opioid + non-opiod (from above); *don't forget that some of the opiods such as Percocet contain Tylenol. Starting doses for PO formulations are morphine 10 mg PO q4h; oxycodone 5-10mg q4h; hydromorphone 1mg PO q4h; if IV formulation needed starting doses are hydromorphone IV 0.2 q4h and morphine IV 2-4 q4h
-avoid morphine pts with ESRD; decrease dose of dilaudid in ESRD
-caution with both dilaudid and morphine in liver dysfunction
-pts who are already taking opiods will require higher doses
-IV narcotics take 10 minutes to work; PO narcotics take 30-40 minutes to work

**Constipation:**
-opiods cause constipation; these pts need a bowel regimen
-if abdominal pain; get an 'obstructive series' to ensure no obstruction or ilieus; if pt impacted, then needs manual disimpaction. If not then….
-start with: docusate 100mg PO TID + senna 2 tabs PO qhs
-then, add miralax or lactulose 30mg PO daily (can titrate up)
-if still constipated, would then try bisacodyl suppository; then can tap water vs. docusate enema (nothing per rectum to neutropenic pts)

**LABS:**
**Repletion:**
-do not replete lytes in pateints with ESRD or CKD/AKI without checking with your resident first
**Potassium:**
-goal >4 in cardiac patients and >3.5 in everyone else
-always replete Mag before repleting K
-always try to replete PO if possible (Kdur- pills vs. powder, powder usually more tolerable)
-if repleting IV, can do 10mEq/hr if peripheral IV or 20mEq/hr if pt has central line
-every 10 mEq of K given is expected to raise the K by 0.1 (ie. if you give 40mEq of K to a pt with K of 3.4, expect the repeat K to be 3.8)
**Magnesium:**
-goal >2 in cardiac patients and >1.5 in everyone else
-can give magnesium sulfate 1g if mag <1.5; if <1.2 can give 2g of Mag sulfate
**Phosphorus:**
*oral:* Neutraphos; IV: sodium phosphate or potassium phosphate (do not give Kphos if K is high)
*-IV:* -2.1-2.4 give 15mmol of phos IV
-1.5-2.0 give either PO neutraphos 0.25 or IV 0.25mmol phos
-<1.5 give 0.5 mmol phos IV (would have to give in multiple runs)
**Calcium:**
-calcium chloride- 13.6 mEq of elemental Ca; DO NOT give peripherally, may cause thrombophlebitis
-calcium gluconate- if iCa <1.0. Give 1g Calcium gluconate/ hr

**Lab abnormalities:**
*Always consider the clinical situation; ie if pt is hyperkaelmic and ESRD, may need emergent dialysis and not just medical management*
**-Hyperkalemia:**
-check to see if blood is hemolyzed, if so then order stat plasma K. Also make sure blood wasn't drawn off IV running K; if so then drawn from other arm
-if ESRD, talk to your resident→ may need to call renal for urgent dialysis; even if patient is going to get urgent dialysis, you should still medically manage their hyperkalemia until dialysis happens
*K 5-5.5* → recheck later that day to ensure not uptrending
*K 5.5-6.0*→ kayexelate 30g, recheck
*K >6.0*→ EKG (if peaked T waves or other evidence of cardiac destabilization, give STAT calcium gluconate 1g); medically manage with kayexelate 30g, insulin 10u (5u if renal dysfunction) + D50,
**-Elevated INR (from oral AC):**
*If not bleeding:* do NOT need to transfuse FFP
Above therapeutic range for <5: hold for one night
>5 but <9: hold next 1-2 doses
>9: hold next few doses until normalizes, give vitamin K 5mg orally
*If bleeding*→ tell your resident; order FFP (2u to start) if INR >2 bleeding

**Transfusion goals:** (if NOT actively bleeding)
*Hemoglobin:* Hgb>7 in most patients; if ACTIVE ischemia then transfuse to Hgb >9
*Platelets:* Plts >10; >20 (if febrile); >50 if bleeding

**Lab Tube colors:**

| | |
|---|---|
| BMP→ gold | CBC→ lavender |
| CMP (BMP+hepatic panel)→ gold | PT(INR)/PTT→blue |
| Hepatic panel→gold | Fibrinogen, Dimer→ blue |
| Troponin→ green | UA→ yellow |
| BNP→ green | Urine lytes→ yellow |
| ICU venous panel→ heparinized syringe | Type and screen→pink |
| ICU arterial panel→ heparinized syringe | Mag→gold |
| Vanc level→ gold | Phos→gold |

**FAQ Labs:**
[ ] if a lab isn't back by 9am, check with the RN to make sure it was drawn and call 4LABS to make sure it was received
[ ] if any hepatic labs or amylase/lipase were drawn by the ED, then a gold top tube was collected→ can add on a BMP/other lytes to this by calling the lab
[ ] Mag and phos NOT included in BMP or CMP
[ ] an ICU venous panel is just as good at evaluating acid/base status and lactate. The only reason to order an arterial panel over a venous panel are: (1) in calculating an A-a gradient to decide if PCP pt needs steroids, (2) severe

hypercapnia, (3) mechanically ventilated pts (questionable); for hypoxia, SaO2 just as good as PaO2
[ ] lactate is a marker of severe sepsis; only order if fulfills sepsis criteria; do not order for basic fever
[ ] if you forget to order an AM lab, but ordered another lab with the same tube color, you can add on the lab. To do so→ re-order the lab as 'Add-on" and call 4LABS to let them know
[ ] type and screen needs to be renewed q72hrs so if you have someone who may require transfusions order schedule t/s every T/Th/Sat for AM labs

**FLUIDS:**

**Bolusing fluids:**
-the main reasons you would bolus is for hypotension and tachycardia (after you determine it is NSR on EKG);
-Be very caution bolusing patients predisposed to volume overloaded (ESRD, cirrhosis, CHF). Discuss with your resident before giving fluids to anyone with ESRD, cirrhosis or CHF
-patients with none of these comorbilities can usually tolerate 1L IVF. You should inform your resident if a patient requires >2L IVF
-which fluid to use? Start with NS. Would switch to more balanced solution like plasmalyte if giving >3L as NS can cause metabolic acidosis. Avoid plasmalyte in pts with hyperkalemia or any condition that can predispose to high K (ie renal disease). Can bolus bottle of 5% albumin if pt with cirrhosis

**Maintenance fluids:**
-most people can go without them; only use if ongoing fluids losses or poor fluid intake;
-if just for maintenance, fluids should be isotonic to blood→ start with plasmalyte (unless contraindicated); can also do NS or D51/2NS

**OXYGEN/VENTILATORY SUPPORT**:

**Hypoxemia:**
-Goal O2 saturation >92% in most patients; for COPD goal is 88-92%
-if called that a patients is hypoxic, check to make sure there is a good waveform on monitor
-Workup: CXR, ICU arterial panel (not necessary unless you want to calculate A-a gradient); alert resident
-Stepwise uptitration of oxygen in hypoxemia: NC (can go up to 4L)→ facemask (can deliver 6-12L O2, 28-50% FiO2) or NRB (10-15L, 60-100% FiO2)→ if pure hypoxia (no hypercarbia on gas), then should be intubated
-if COPD, would trial bipap before considering intubation

**Hypercapnea:**
-To understand if acute, look at pt's baseline pCO2 as well as pt's pH and HCO3. If normal pH and elevated bicarb than hypercapnea is likely chronic.
-if acutely worsens, can trial bipap if no contraindications. Trend pCO2 on serial gases. If pCO2 improves than can stop bipap (may need nightly bipap). If pCO2 does not improve then pt requires intubation (see below)

**NIPPV→** Bipap
*Indications:* hypercapnea with COPD, cardiogenic pulmonary edema, moderate to severe dyspnea with increased WOB
*How to use*: set PEEP and PSV. In most pts can start at 10/5 vs. 12/5; may need more for pts with h/o poor ventilation
*Contraindications:* severe AMS, vomiting, copious secretions, inability to protect airway, HD instability, severe UGIB, poor mask fit
-Monitoring: trend PCO2s to ensure respiratory acidosis improving

**Indications to Intubate:** ask yourself 4 questions
(1) Failure of airway maintance or protection? AMS, inability to clear secretions
(2) Failure of of oxygenation? Remains hypoxic after brief trial of bipap
(3) Failure of ventilation? pCO2 did not improve with bipap
(4) Is there an anticipated need for intubation? Increased WOB

**Preparation for intubation:**
-page anesthesia
-Obtain (1) ambu-bag (bag and valve), (2) 1L NS (to run wide open), (3) yankauer for suction, (4) intubation tray; (5)sedation→ can do fentanyl in SDU; on floor, have RN draw up 2 of versed and 2 of dialudid (don't give any, just have it ready)
-Place patient on cardiac monitor; ensure IV access
-know: (1) most recent K, (2) BP (LV/RV dyxfx), (3) h/o difficult intubations, (4) recent cervical spinal injuries, (5) large body habitus?
*Always order a cxr after intubation so tube placement can be confirmed

**ANTIBIOTICS/MICROBIOLOGY:**
-NEVER give antibiotics before drawing cultures→ blood culture and urine culture. For blood culture, need 2 sets (4 bottles) from 2 different sites
-if BCx positive, order daily cultures until cleared x3-5 days
-pan-culture means: order blood cultures (x2), urine culture, CXR
-we generally do not start abx for a single fever in non-immunocompromised patient with stable vital signs
-if patient becomes septic on floors, can order first dose of abx through 'stop sepsis' order set; will allow pt to get abx sooner
-when deciding which broad spectrum abx to order, check 'micro' section of epic to see what organisms pt has grown before and what previous organisms have been resistant to
-Specific broad spectrum abx that require ID approval: (cefepime, zosyn, all carbepenems, aztreonam, linezolid, dapto or anything equally as broad).; IV vancomycin does NOT require ID approval. To get ID approval, page p9407 btwn hrs of 9am-5pm
-when calling ID approval or ID, always have pts weight, Cr and calculated Cr clearance ready
-Best website for dosing IV vanc: http://www.cumc.columbia.edu/dept/id/downloads/Vancomycin_5-26-05.pdf (don't forget to order vanc troughs or levels!)
-always keep track of day of abx
-narrow abx as soon as culture results return

**DVT PROPHYLAXIS:**
-heparin subq q12h is adequate unless a pt has cancer; in that situation, prophylaxis with lovenox is preferred (lovenox CI in renal failure CrCl <30)
-avoid pharmalogical ppx in pts with: thrombocytopenia <50; elevated INRs, actively bleeding, pre-procedurally; can do scds (segmental compression devices) for these pts

**PROCEDURES:**
-you must be signed off on procedures before performing any procedures on you own; procedures are logged in new innovations

**Common procedures:** Supplies to get…

**Diagnostic paracentesis:**
*Before starting:* [ ] ultrasound, [ ] consent from patientworks
*Setup:* [ ] chucks, [ ] sterile drapes (x3), [ ] bucket for supplies,
*Prep:* [ ] 3 chlorapreps, [ ] sterile gloves, [ ] 4x4 gauze sponges
*Procedure:* [ ] 1% lidocaine (without epi), [ ] 25G (orange) needle for injecting lidocaine, [ ] 20G (grey) needle for drawing up lidocaine, [ ] 5-10cc syringe for lidocaine, [ ] 22G (green) needle for performing dx tap, 30-60cc syringe for drawing up ascetic fluid, [ ] additional 22G syringe for transferring fluid into tubes , [ ] tegaderm
*Tubing:* [ ] 2 purple top tubes (for cell count, gram stain/culture→ only send one; hold onto 2nd in case lab loses original), [ ] 2 yellow (not gold) tubs for LDH, protein, albumin, [ ] blood culture bottles, [ ] specimen bags to send tubes (tube to station 91)

**Special for LVP (in addition to everything required for dx tap):** [ ] order albumin (25%, not 5%; order 1 bottle for ever 2L you intend on removing), [ ] 1-2 large orange 4L bottles; [ ] paper tape, [ ] scissors for IV tubing, [ ] angiocath (get from BA on 9C if pt is on 9C), [ ] IV tubing- cut with one screw top end remaining

**Ultrasound guided IV:**
[ ] ultrasound, [ ] 20G (pink IV) x2, [ ] IV starter kit, [ ] sterile flushes x2, [ ] alcohol swabs

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☐ ADMIT ORDERS
☐ H&P

MAPA/MAR DETAILS

HPI

VITALS
Tm Tc HR BP RR O2 I/O

VBG

CXs

EKG

IMAGING (RADS/CARDS)

ED COURSE

PMH/PSH/All

HOME MEDS

PHYS EXAM

CONTACT #

CODE STATUS

PLAN

PRIORITIES/ FOLLOW UPS:

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OVERNIGHT

VITALS
Tm Tc HR BP RR O2

I/O

BM

VBG

CXs

IMAGING

PHYS EXAM

CONSULTANTS

IMPORTANT MEDS

ANTIBIOTICS (day #)

ACCESS

FEEDS/LYTES

PPX

SW ISSUES

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**PRIORITIES:**

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DAILY TO DO:

☐ progress note
☐ replete lytes
☐ call consults
☐ d/w attending
☐ consult recs/note
☐ read attending note
☐ order AM labs
☐ update signout

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OVERNIGHT

VITALS
Tm Tc HR BP RR O2

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OVERNIGHT

VITALS
Tm Tc HR BP RR O2

I/O

BM

VBG

CXs

IMAGING

PHYS EXAM

VENT MODE RR TV FIO2 PEEP

ABX

DRIPS

MEDS

LINES

FEEDS/ LYTES

GI ppx

DVT ppx

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- ☐ replete
- ☐ review meds
- ☐ read att note

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OVERNIGHT

VITALS
Tm Tc HR BP RR O2

I/O

BM

VBG

CXs

IMAGING

PHYS EXAM

VENT MODE RR TV FIO2 PEEP

ABX

DRIPS

MEDS

LINES

FEEDS/ LYTES

GI ppx

DVT ppx

- ☐ note
- ☐ replete
- ☐ review meds
- ☐ read att note

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