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Development of Workflow User Guides for Electronic Health Records Usage at the UCSD Student Run Free Clinic Project

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**Development of Workflow User Guides
for Electronic Health Records Usage at
the UCSD Student Run Free Clinic Project**

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Abstract

The purpose of this project was to create Epic EHR user guides for each of the various roles at our UCSD Student-Run Free Clinic Project. Because this EHR system is integrated with the rest of the UCSD Health System, and because we function as the primary care providers for our patients, we need to ensure the accuracy of our patient care documentation. But at the same time, we must ensure efficient use of time at our free clinic sites, in order to respect the time of our volunteers. These user guides will therefore allow new users to become quickly acquainted with our customized free clinic EHR context, and will allow them to successfully navigate the multi-variate EHR environment. A multi-step process was undertaken to identify current EHR users at our free clinics, to outline their roles and responsibilities regarding their current interactions with the EHR system, and to create detailed yet succinct illustrated guides to ensure continuity of EHR usage across different users, different clinic sites, and across time since we transition student leadership roles every year. We then solicited user-specific feedback from their respective guides and incorporated that feedback into final versions, which are now posted in a centrally accessible location for all users to reference. We hope to ensure that future generations of free clinic providers and staff will be able to successfully utilize our EHR system, thus ensuring accuracy and efficiency in our patient care documentation.

Background

The use of electronic health records (EHRs) has changed the way we document the care that we provide for our patients, for better or for worse. As with any significant change in a clinical systems workflow, adopting an EHR system comes with both potential benefits and frustrations. Some theoretical benefits of EHR systems might include: decreased medical errors due to poor penmanship, increased access to prior medical records to decrease overlap in imaging/labs/tests/prescriptions, increased recognition of potentially dangerous drug interactions or allergic reactions to medications, improved notification of critical test results and increased follow-up thereof, increased adherence to evidence-based medicine, etc.

Despite all of these potential benefits from EHR implementation, not all changes may be beneficial. Providers now also have the opportunity to gaze into computer screens instead of into their patients' eyes while trying to document their progress notes during a patient encounter. EHR systems might also increase provider frustration due to forced computer interaction for billing purposes. Contextual menus may also often be unnecessarily complex and overly detailed, requiring menial clicking and typing just for the sake of documentation.

Some of these issues have been noted at our Student-Run Free Clinic Project (SRFCP) here at UCSD. As we are now entering the second year of our utilization of the Epic EHR system across all of our free clinic sites, there is still work to be done to adapt and optimize its use for our free clinics. Because we are an entirely volunteer, student-run free clinic project, different personnel fulfill our various roles from year to year.

Our medical students are able to take on various managerial roles during their preclinical years. These leadership roles for our first and second year medical students often require them to interact with the EHR system in unique ways. Since the SRFCP is entirely student-run and does not bill for any of its services, our workflows do not involve the usual complement of administrative staff, nurses, medical assistants, or any usual billing procedures. For example, our medical student managers, along with our Spanish interpreters who function as our callers, are tasked with scheduling appointments themselves for our specialty clinics at our SRFCP.

However, these medical student managers all transition their roles to more junior medical students as they move on to the clinical wards. As such, our clinic workflow also slightly changes with each change of leadership, usually for the better, but sometimes our student leaders reinvent the wheel each year. We have found in other aspects of our clinic leadership that defining and documenting user roles has allowed us to ensure consistency from year to year, to ensure smooth transitions, and to minimize any potential problems that may arise with such frequent transition.

But beyond providing leadership roles for our medical students, our free clinics also function as invaluable opportunities for medical education. A month-long fourth year rotation in underserved family medicine is offered almost every month of the year through our free clinic sites. These senior medical students are familiar with the Epic EHR system overall by the time they return for their fourth year free clinic rotation, but many of them are not accustomed to the unique features of our free clinic context. Therefore, it would be to our benefit to facilitate efficient navigation through our customized free clinic context and to prevent accidental initiation of billing procedures.

Since the Epic EHR system is still relatively new to our free clinics, this potential for improper usage of our customized free clinic EHR system exists not only for our medical students, but also for our extensive roster of volunteer physicians, as well as our administrative staff, interdisciplinary care providers, and our interpreters who function as our callers. Ensuring the accuracy and proper usage of our EHR system is crucial, especially since our records are integrated with the rest of the UCSD Health System. Thus, reducing user frustration with the EHR system overall may help us to also improve the quality of our patient care.

Objectives

Our overall goal was to ensure the appropriate use of our EHR at our free clinic sites. Since the implementation of the Epic EHR system across all of our clinics, our overall time spent at clinic has increased, in some cases up to an hour longer than before. Since many of our clinics take place in the evening or afternoon hours, we hope to respect the time contributed by all of our volunteers.

We hope to improve workflow efficiency and accuracy by:

1. Minimizing junior medical student confusion when using Epic for the first time. Free clinic is often the first introduction to Epic for the majority of our medical students in the first month of their first year of medical school.
2. Assist senior medical students in efficiently adapting to our free clinic-specific version of Epic. The Epic contexts used in other outpatient/ambulatory clinics across the UCSD system are slightly different from our customized free-clinic context (especially because of our virtual billing system).
3. Facilitate volunteer attending physician interaction with Epic and minimize their frustration with using an EHR system, especially for those who work with a different EHR or for those who have never used an EHR before, as we have some retired physicians volunteering with us.
4. Guide our interdisciplinary access and documentation in Epic. They are a vital part of our interdisciplinary free clinic team.
5. Decrease time spent on the computer and increase time spent with our patients.
6. Create user guides so that no one person/role is irreplaceable. For some of our administrative or scheduling roles, we only have one or two users that know how to use that aspect of our free clinic-specific system. In the event that these users leave the free clinic or become ill on a particular day, we need to ensure that we will still be able to operate and take care of our patients.
7. Ensure that all users are adhering to best practices. Especially for preventative medicine, helpful reminders for evidence-based best practices may assist in patient care.
8. Seek feedback from users regarding suggestions for changes in the EHR system or in their user-specific workflow, and work with UCSD Health Sciences Clinical Systems IT to implement desired changes.
9. Serve as the primary medical student point of contact and leader on Epic training and usage within the UCSD SRFCP.

Methods

1. Identify the various roles that exist at our student-run free clinic sites:
 - 1.1. Medical students in various roles, residents, volunteer primary care vs specialty attending physicians, administrative staff, schedulers, callers, social workers, etc.
2. Determine if and how each of these users interface with our EHR system:
 - 2.1. Outline which aspects of the EHR system are utilized by each user (ie charting/documentation, labs, orders, scheduling, secure messaging, etc.)
 - 2.2. Determine level of access for each user type
3. Assess the current EHR workflow for each of these users, create outlines of how these users currently interface with the EHR system:
 - 3.1. Initiate sit-down sessions with each user and outline their current workflow
4. Evaluate best practices with each user and with our attending physicians, and determine how to integrate those best practices into our system:
 - 4.1. For example: auto-prompts for routine diabetic foot screenings at clinic if diabetes is added as a diagnosis onto a patient's problem list
 - 4.2. Will require close collaboration between providers and IT team

5. Collaborate with UCSD Health Sciences Clinical Systems IT to implement changes:
 - 5.1. Including error reporting, troubleshooting, and suggestions for improvement
 - 5.2. Determine whether we are using the overall system as it was designed
 - 5.3. How each user template was designed to be used
 - 5.4. How we can most efficiently navigate each contextual menu and interface
6. Construct preliminary workflow guides with step by step instructions and screenshots with markup for each user role:
 - 6.1. To facilitate ease of use for first time users of our EHR system
 - 6.2. To still be useful for long time users if they need to reference for further detail
7. Provide preliminary user guides to target users and solicit feedback for improvement, clarifications, enhancements, redactions:
 - 7.1. Best feedback will be from users themselves
8. Construct final workflow guides incorporating feedback from end users:
 - 8.1. Will be a group effort with all feedback incorporated into final guides
9. House user guides in a secure and centrally-accessible location for all users:
 - 9.1. Anticipate storing users guides on our user-authenticated free clinic website
 - 9.2. All free clinic users currently routinely reference this website
10. Establish editing guidelines for future updating:
 - 10.1. User workflows will inevitably change with continual updates to the EHR system
 - 10.2. Ensure that future generations can update/create new user guides in a similar manner, via these methods outlined herein

Results and Discussion

Through utilizing the methods described above, we identified the following roles and tasks as most in-need of Epic user guides. The following guides were created and revised based upon end-user feedback, and are now housed within our user-authenticated free clinic website.

User roles and corresponding tasks at free clinic:

-All users:

- Overall summary guide to using Epic at free clinic (**Appendix 1**)
- How to download Citrix and login to Epic via CWP (**Appendix 2**)

-Medical students:

- How to document a patient encounter (**Appendix 3**)
- How to electronically order medications (**Appendix 5**)
- How to create referrals to our specialty clinics (**Appendix 6**)

-Specialty clinic managers:

- How to manage specialty clinic referrals (**Appendix 7**)
- How to create and manage specialty clinic patient lists (**Appendix 8**)

-Laboratory managers:

- How to input outside lab results from Quest into Epic (**Appendix 9**)

-Attendings:

- How to review/close an encounter after medical student documentation (**Appendix 4**)

- How to electronically sign medication orders from medical students
(Appendix 10)
 - This guide was made by a junior medical student (Selina Thomas, MS2) following the above established guidelines (objective 10.2 in the methods section above).

There are also many other roles at free clinic that could benefit from user guides as well. However, these were lower priority for this project, as these the users in these roles do not transition as frequently (and often work in their roles for many years at free clinic), and thus training for these users occurs much more infrequently.

Future guides for consideration:

- Schedulers (administrative staff, floor managers)
 - How to make appointments, reschedule patients
 - How to check-in patients on the day of clinic, change colored dots
- Specialty callers (interpreters)
 - How to make appointments for specialty clinic patients
 - How to update referral workqueues after scheduling patients
- Social workers
 - How to document social work notes in Epic (via Interdisciplinary Notes)

Ongoing Challenges:

Although the user guides are now centrally housed on a high-traffic user-authenticated free clinic website and although the new first year medical students are made aware of their existence at the beginning of their free clinic elective experience, anecdotally it still appears that many of them are unaware that these guides are available for their perusal, whether they are seeing patients in our general clinic or managing their specialty clinics. However, once made aware of these guides, many first year medical students have noted how helpful these guides are for simplifying their experience of using Epic at free clinic.

Another potential challenge arises with the frequency and scope of Epic updates. Someone dedicated to continuing this project in the future will need to be identified every year in order manually update these user guides in accordance with the updates that occur within Epic.

Acknowledgements

This project would not have been possible without the tireless support and contributions of Dr. Sunny Smith (free clinic co-medical director), Dr. Michelle Johnson (free clinic co-medical director), Magaly Quintero (Clinical Systems Application Analyst for UCSD), Dr. Ben Tsai (UCSD medical school alumnus and former project lead of the Epic transition at free clinic, now an internal medicine resident at Scripps Mercy Hospital), Carol Eames (lead workforce staff and administrator for free clinic), Selina Thomas (MS2 who continued the project by creating more user guides during my busy time in third year and during my four sub-internship rotations during my fourth year), as well as the countless other medical students and staff that contributed their feedback to this project.

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Appendices

Appendix 1: Overall Epic Workflow at Free Clinic

Appendix 2: Citrix setup and Epic login instructions

Appendix 3: Medical student workflow guide

Appendix 4: Attending workflow guide

Appendix 5: How to order medications

Appendix 6: How to create specialty referrals

Appendix 7: How to manage specialty referrals (for specialty clinic managers)

Appendix 8: How to create/manage patient lists (for specialty clinic managers)

Appendix 9: How to manually enter lab results (for laboratory and general managers)

Appendix 10: How to sign medication orders (for attendings)

EPIC Guide to Seeing Patients at Free Clinic

INSTALLING CITRIX

- Go to: <http://receiver.citrix.com> in your web browser
- Download and install Citrix Receiver (ignore when it asks for a server/email address)

ACCESSING EPIC

- Check-in with site manager for wifi instructions
- Go to: <https://cwp.ucsd.edu> in your web browser, login with your UCSD AD email account
- If it asks you to install Citrix again, click "Log on" to skip
- Click on the "Epic Gold CTX15" icon to launch Epic
- Epic will open within Citrix, login with your UCSD AD email and password

DEPARTMENTS

- It is critical to choose the right department, otherwise the patient might be billed!
- Golden Avenue/Lemon Grove 900, Baker 901, Downtown 902, Pacific Beach 903

CONTACTING EPIC

- Call the EPIC Helpdesk for any issues: 619-543-7474

OPENING A PATIENT'S CHART

- Click on "Schedule" > Click on "UCSD FREE CLINIC ___" > Select today's date on calendar
- To review chart only, single-click your patient's name > "Review"
- To begin charting, double-click on patient's name (opens an encounter, must be closed by MD)

DOCUMENTING IN EPIC

- Fill out all fields in the "Visit Navigator". Be sure to update the "CC," "Problem List," and "Visit Diagnoses".
- Ensure vital signs are recorded in "Intake" (especially BP, HR, RR, T, Wt, and Ht).
- PHQ9 fields appear if PHQ2 scores are high enough to merit PHQ9 administration.
- Update patient's social, medical, surgical, family history, and health care maintenance.
- Review allergies every encounter.
- Home medications must reflect the most up to date list including all changes made at this visit.
- Record your SOAP note in "Progress Notes". Make sure your note is "Sign at close encounter".
- Route chart to attending: "Follow-up" > "Recipient" > search for your attending's name to route chart.
- Ask your attending to see if they'd like to review your note together (i.e., if time permits).

CLOSING ENCOUNTERS (MD ONLY)

- Click on "InBasket" > "CC'd Charts" > Double-click a chart to review.
- Review all fields in the "Visit Navigator". Write brief attending note in "Progress Note".
- Accept all "Best Practice" alerts, otherwise you will not be able to close the note.
- Designate a level of service (LOS) for the visit. Close the encounter.

ORDERING MEDS

- Update all "Home Meds"
- Update "Problem List" (problems pertaining to meds must be present)
- Add problems to "Visit Diagnoses"
- "Meds and Orders" > "Reorder" (or search for new med)
- Click on med sig to edit, update quantity/frequency, associate a diagnosis, Accept
- Repeat for all meds, PEND all orders when done
- Attending must log in > open chart > Order Entry > Sign orders
- Meds will be e-prescribed to pharmacy, check with them whether they received your order

MAKING A SPECIALTY REFERRAL

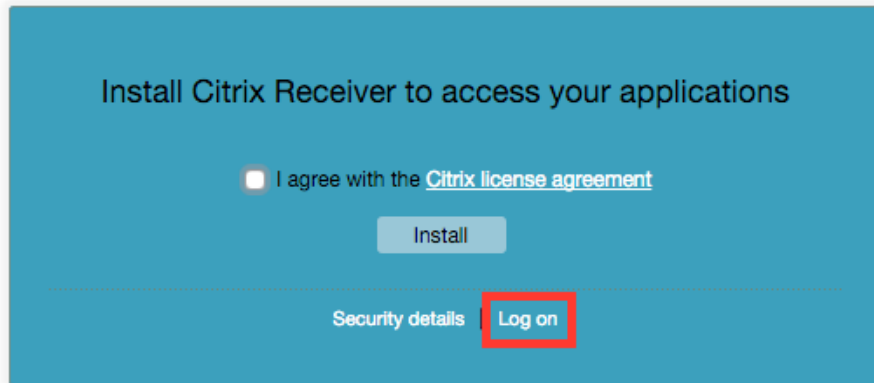
- "Order Entry" > New order: "consult" > Search
- Select desired specialty consult > Accept
- Fill out all req'd fields: location, indication for referral, associated dx > Accept
- Repeat for any other referrals, PEND orders
- Attending must log in > open chart > Order Entry > Sign orders

Appendix 2

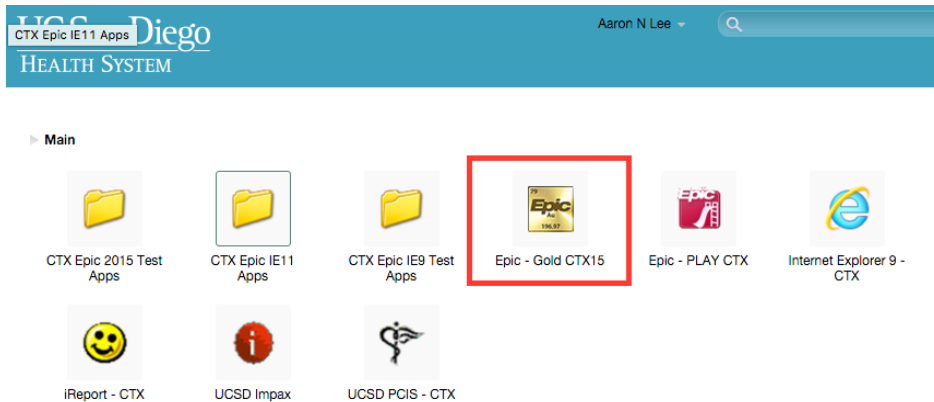
Epic Workflow- **All Users: How to install Citrix, access Epic via CWP**

1

1. Install Citrix on your computer (first time only):
 - a. Go to: “receiver.citrix.com” in your web browser
 - b. Download and install Citrix Receiver
 - c. Ignore when it asks for a server/email address
2. Access Epic: Go to “cwp.ucsd.edu”, login w/ UCSD AD (same as UCSD email)
 - a. If it asks you to install citrix again, click 'Log on' to bypass

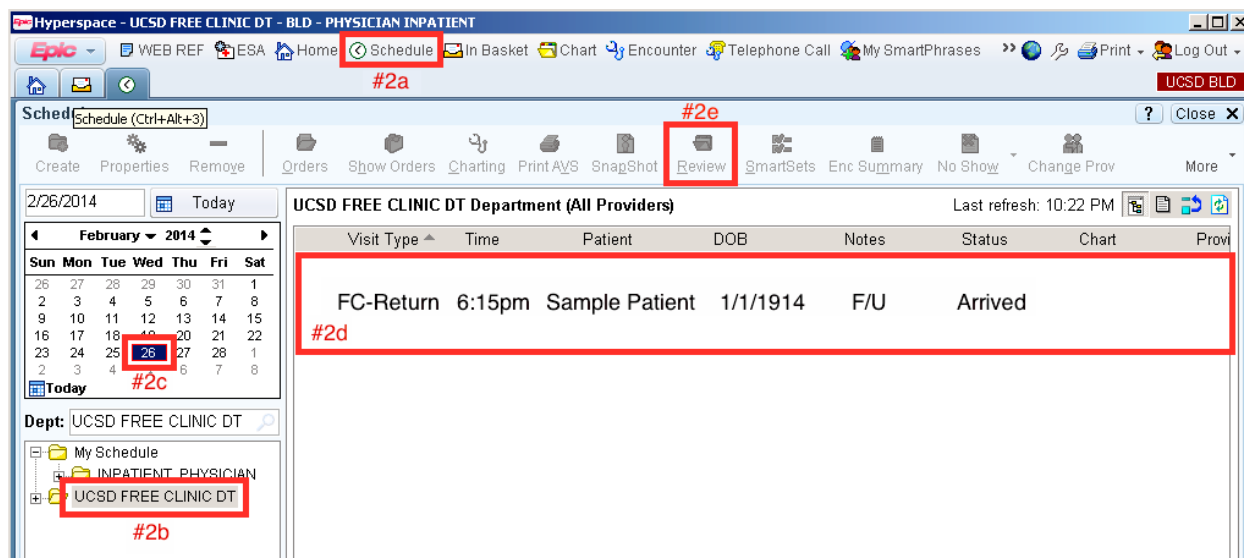


3. Click on the 'Epic Gold CTX15' icon to launch Epic



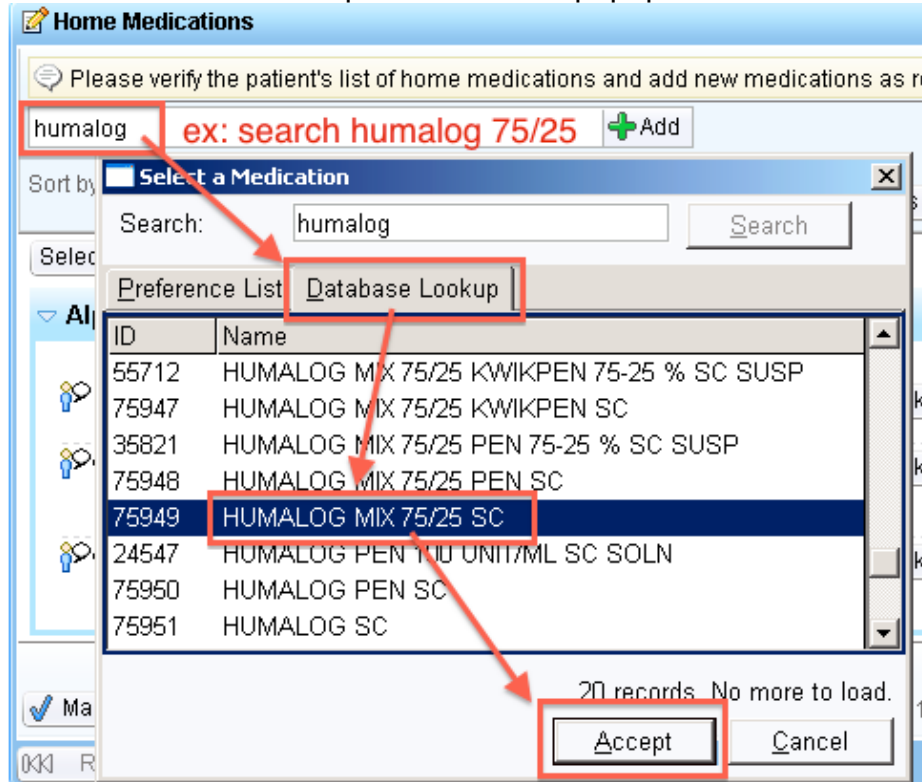
4. Epic will open within Citrix, login w/ your UCSD AD username/password
5. Departments: (make sure you are using correct department while at free clinic)
 - a. 900 GA, 901 BK, 902 DT, 903 PB
6. If any login issues, forgot username/password:
 - a. call the Epic Helpdesk **619-543-7474** for assistance

1. **Login** to Epic (see separate login instructions)
 - a. Use the right context: 900 GA, 901 BK, 902 DT, 903 PB
2. **Open patient chart:**
 - a. Click on “Schedule”
 - b. Click on “UCSD FREE CLINIC ___”
 - c. Select today’s date on the calendar (default)
 - d. Double click on your patient’s name to open the encounter
 - i. Note: All opened encounters- even if accidental- must be closed by an MD.
 - e. If you only wish to review the chart, single click on the patient, then click “Review”

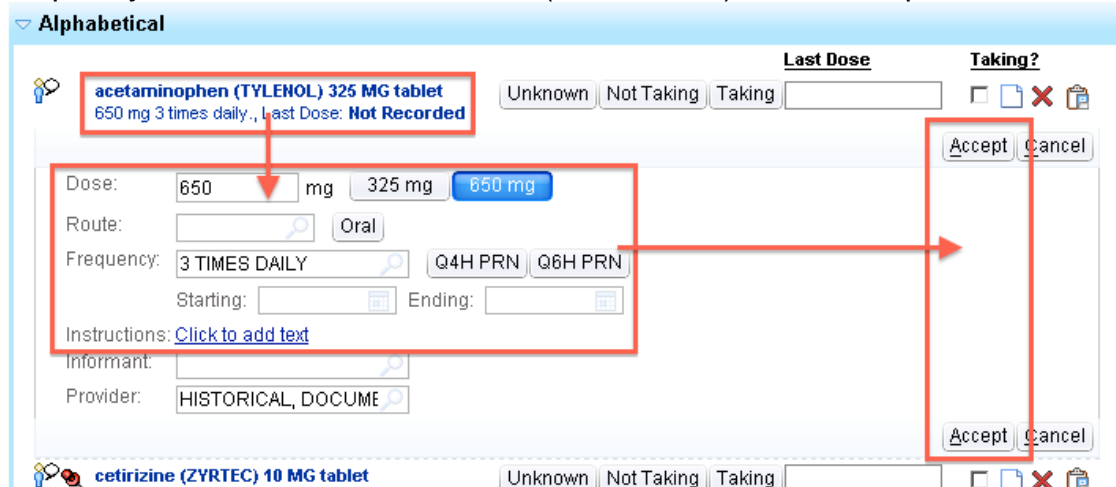


3. **Documenting:** how to use Visit Navigator to document pt encounter.
 - a. Chief Complaint: must document, otherwise attending can't close encounter
 - b. Intake: vital signs, at minimum: BP, HR, temp, weight.
 - c. PHQ2: PHQ9 will open automatically if enter a high score for PHQ2. Pay attention to the SI/HI question, which if positive, you must address in your progress note.
 - d. History: update/review pt's medical, surgical, social and family hx as needed.
 - e. Allergies: **You must review allergies at every visit, then click on “Mark as Reviewed,” otherwise your attending will not be able to close the encounter.**
 - f. Home Medications: **IMPORTANT**: for free clinic, update this to show what the patient should be taking after this visit (reflecting all changes made at this visit).

- i. Add new medication: if you cannot find the medication when searching, click on the “Database Lookup” tab in search popup window to see further options.

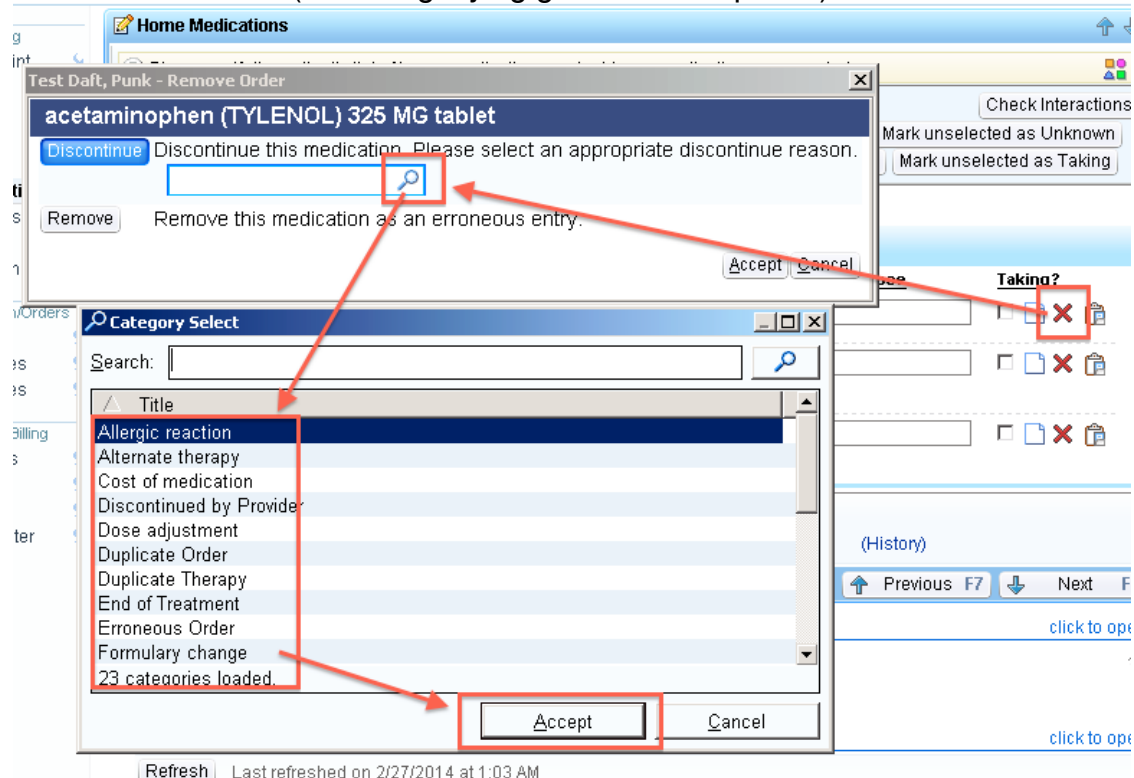


- ii. Change dose/frequency: click on blue med name to expand, input new dose/frequency or free text in “Instructions” (ie for insulin), click “Accept”.

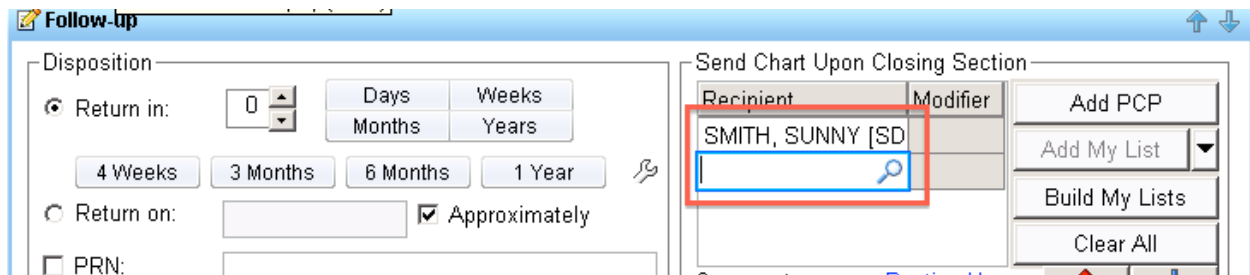


- Note: when changing dose/frequency, it sometimes may be easier to delete the medication and add it again.

- iii. Remove medication: click red “X” on far right of medication name, must indicate d/c reason (click magnifying glass to see options).



- g. Interdisc Notes: N/A for med students; used by social work.
- h. BestPractice: advisories for improving our pt care. Address any issues that arise.
- i. Health Maintenance: will open separate Health Maintenance tab (outside visit navigator). Update HCM items as appropriate:
- Double click on existing HCM item to update
 - Click “Edit Modifiers” to add new HCM (click magnifying class to see options).
 - To return to visit navigator, click on “Visit Navigator” at bottom-left of window.
- j. Problem List: all active/ongoing/chronic issues (vs including resolved issues in PMHx, i.e. PNA in 2011). Click icon under ‘Visit’ column to add to Visit Diagnoses.
- k. Visit Diagnoses: medical issues addressed today (must have at least one dx).
- l. Meds & Orders: (see separate guides for med orders and specialty referrals)
- m. Progress Notes: write your SOAP note here. Refer to FC blue card for SOAP note template. Be sure to leave the signature box as: “Sign at close encounter”.
- n. Adv. Care Plan Notes: usually N/A at free clinic; for advanced directive/living will.
- o. Pt Instructions: N/A at free clinic (prints out English-only template).
- p. Follow-up: **IMPORTANT**: you must route the chart to your attending. Click in the blank white box beneath the “Recipient” field, search for your attending’s name.



q. LOS: for attendings.

r. Close Encounter: for attendings; med students unable to close.

4. Chart completion

a. Close chart: complete visit navigator, route chart to attending → close the chart. Your attending will close the encounter after reviewing everything.

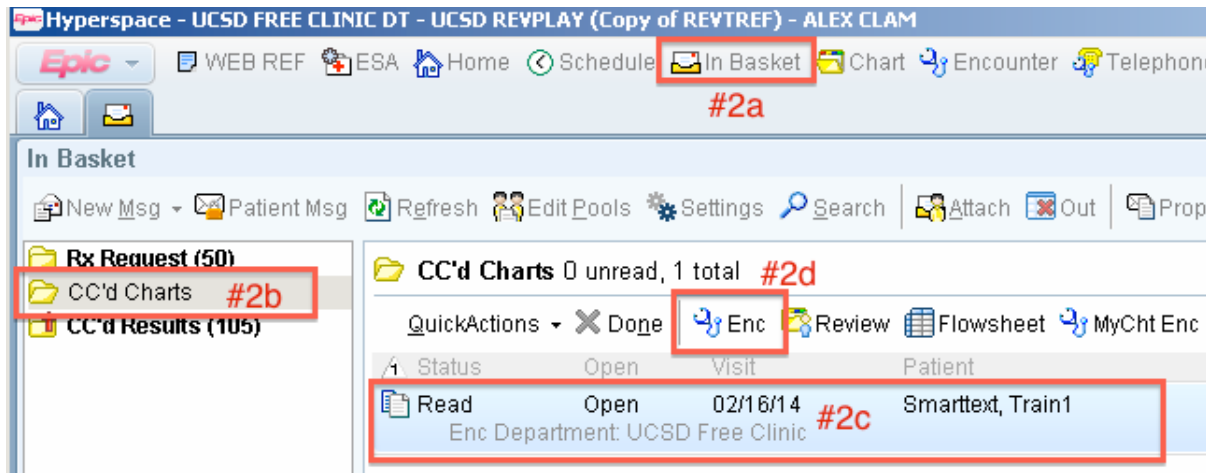
b. Attending note review: If attending still available at clinic, ask him/her to review your note for feedback/edit/teaching.

Appendix 4

Epic Workflow- **FC Attending: How to review chart, close encounter**

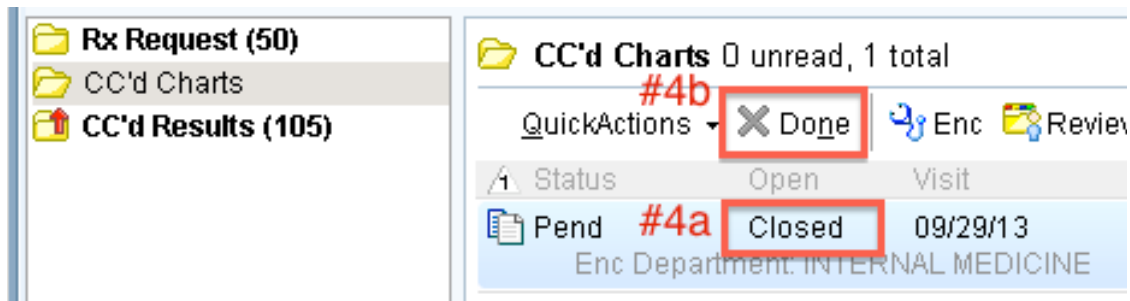
1

1. **Login** to Epic (see separate instructions for how to login)
 - a. Make sure you're in the right context: 900 GA, 901 BK, 902 DT, 903 PB
2. **Access charts:**
 - a. Click on "InBasket"
 - b. Click on "CC'd Charts"
 - c. Select a chart to view
 - d. Click on "Enc" to open a chart (or double click on chart to open)



3. **Chart review:** Your medical student should have updated each section of the visit navigator during this visit. Review each section of the chart, update as necessary, and click on "Next" to proceed to the next section.
 - a. **Chief Complaint:** a CC must be documented in order to close the encounter.
 - b. **Intake:** review intake vitals inputted by your medical student.
 - c. **PHQ2:** if your medical student administered a PHQ2/PHQ9 screening and inputted the results here, make sure that any positive results were addressed in the Assessment/Plan of the "Progress Note" section below.
 - d. **History:** review PMH, PSH, SHx, FHx. Click "Mark as Reviewed" if current.
 - e. **Allergies: Allergies must be reviewed with the patient at every visit in order to close the encounter.** Click "Mark as Reviewed" if current.
 - f. **Home Medications: IMPORTANT:** for free clinic, this should reflect all changes made at this visit. Update as needed if your medical student forgot to do so (see med student guide for instructions). Click "Mark as Reviewed" after reviewing.
 - g. **Interdisc Notes:** N/A; used by social work.
 - h. **BestPractice:** advisories for improving our pt care. Address any issues that arise.

- i. Health Maintenance: clicking on this will open a separate Health Maintenance tab (outside the visit navigator). Refer to med student guide for how to update. Click “Visit Navigator” at the bottom-left of the window to return to the visit navigator.
 - j. Problem List: review pt’s problem list. Click “Mark as Reviewed” if current.
 - k. Visit Diagnoses: there must be at least one visit dx in order to close the encounter.
 - l. Meds & Orders: (see separate guides for med orders and specialty referrals).
 - m. Progress Notes: read/edit your medical student progress note. Then, you must write your own attending note (can be brief: “Pt seen and examined w/ medical student and agree w/ note below”).
 - n. Adv. Care Plan Notes: usually N/A at free clinic; for advanced directive/living will.
 - o. Pt Instructions: N/A at free clinic.
 - p. Follow-up: N/A at free clinic; used by med students to forward charts to you.
 - q. LOS: designate a LOS for this visit. Click on the magic wand icon for assistance.
 - r. Close Encounter: after you have finished reviewing the chart, close the encounter. You may receive a warning indicating that there are some mandatory items that have not been completed. If that is the case, click on the warning links to be taken directly back to the items that need to be fixed.
4. **Chart completion**: after closing the encounter, you will arrive back at your InBasket
- a. The encounter should now indicate “Closed”
 - b. Select the encounter, click “Done” to remove this chart from your InBasket

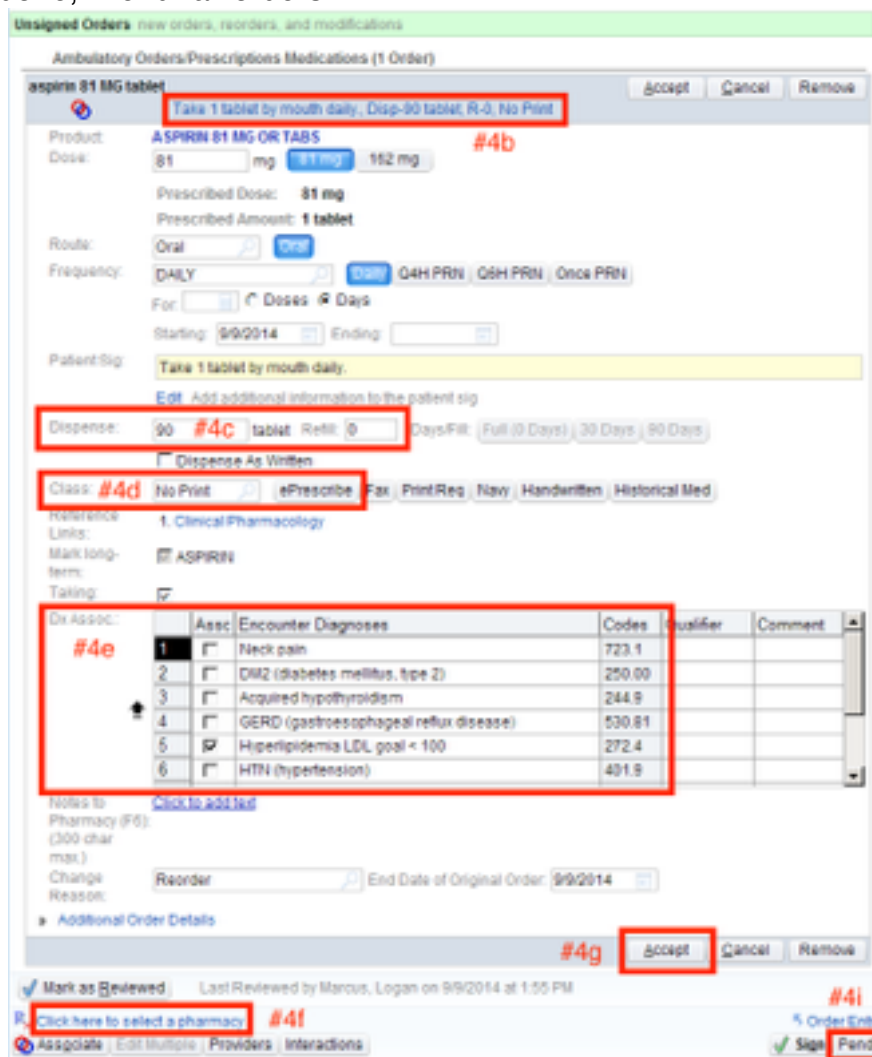


5. **Remaining charts**: repeat steps 2C-4B to review remaining charts in your InBasket

1. Update all “Home Medications” (can also add new meds here, or wait until step #4a)
2. Update “Problem List”- all problems relevant to meds must be present
3. Click paper/arrow icon to add relevant “Problem List” items to “Visit Diagnoses”



4. Go to the “Meds and Orders” tab in the visit navigator
 - a. Click “Reorder” or add new med via the search box above list of current meds
 - b. Click on med sig (instructions) to expand Rx
 - c. Update quantity (90 for 3mo supply, 3 inhalers, etc); no refills (default for FC)
 - d. Class: select “ePrescribe”
 - e. Associate a diagnosis (repeat step 2 above if pertinent dx not there)
 - f. Select a pharmacy (search for: ‘free clinic’, select correct site, i.e. DT/BK/PB)
 - g. Click Accept
 - h. Repeat above steps for each med order
 - i. When done, “Pend” all orders



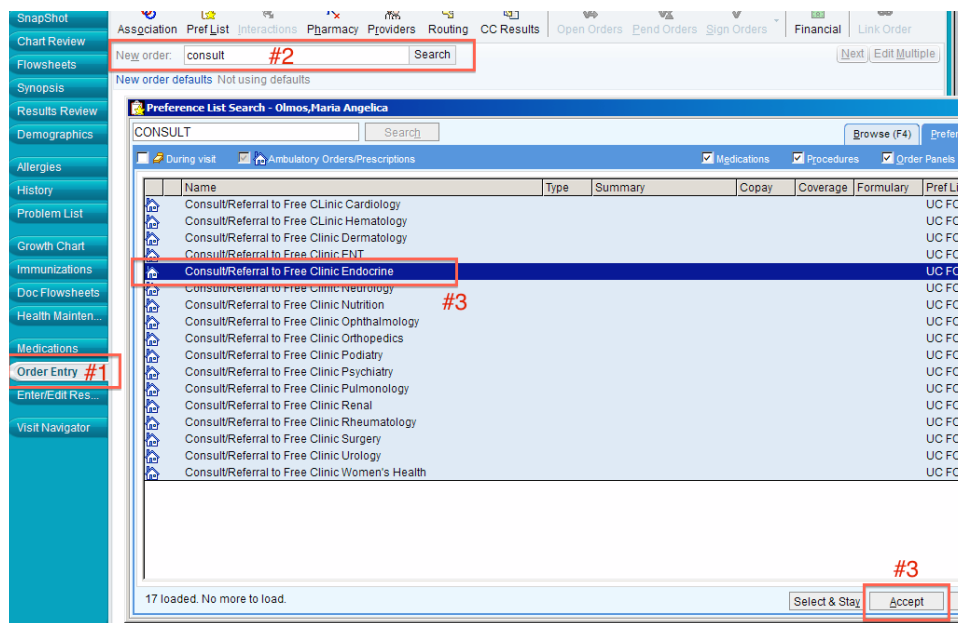
5. Route chart to attending (Follow up > Recipient).
6. Attending will log into Epic, open chart > Order Entry > Sign orders.
7. Confirm with pharmacy whether they received the e-prescription.

Appendix 6

Epic Workflow- FC Medical Student: How to Create a Specialty Referral

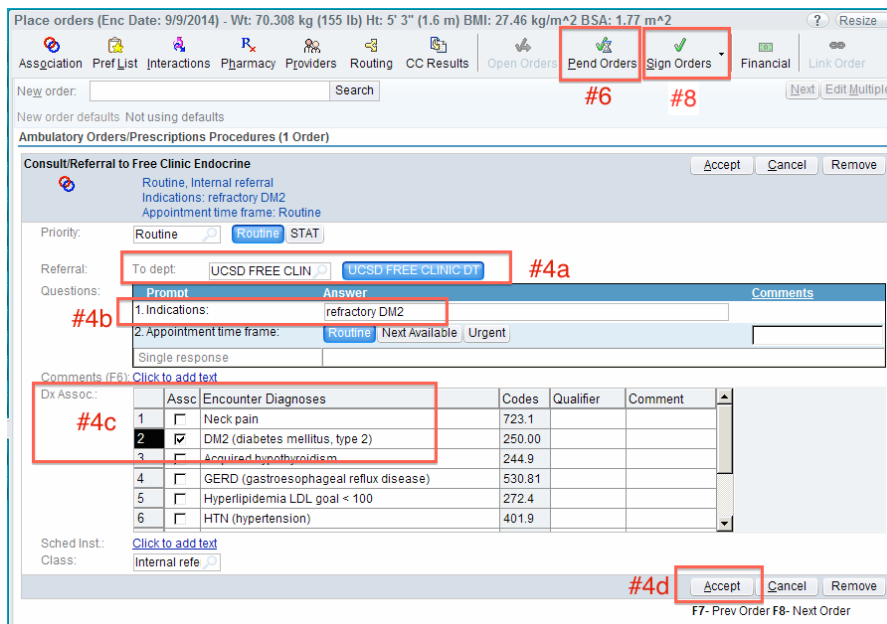
1

1. Open patient chart > Order Entry
2. New Order: "Consult" > Search
3. Select desired specialty for consult > Accept



4. Input data into required fields

- a. Location: DT/ BK/PB (some specialties only at some sites)
- b. Indication for specialty referral
- c. Dx associated w/ referral
- d. Accept



5. Repeat for any other specialty referrals
6. "Pend Orders"
7. Route chart: Visit Navigator > Follow-up > Recipient > (add attending) > Close
8. Attending must log in > "Order Entry" > "Sign Orders"

At least two weeks in advance of clinic date:

1. "Workqueue List" (top row of buttons)



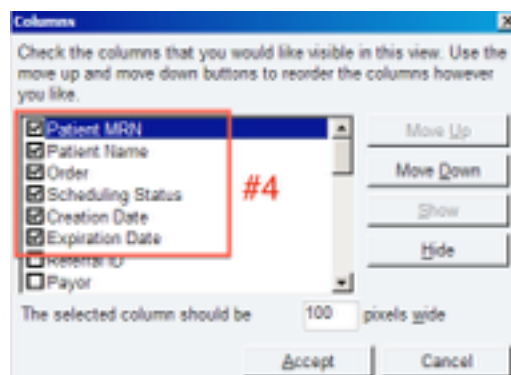
2. "Filter" > Name contains: "free"



3. Double click on clinic site (DT/BK/PB)

4. "Column Actions" (far right) > Columns

- a. Reorganize columns: MRN, Name, Order, Sched status, Creation date, Exp date



5. Click on "Order" column to sort by specialty, resize column to see full specialty name

Patient MRN	Patient Name	Order	Scheduling S...	Creation Date	Expiration Date
		CONSULT/REFERRAL TO FREE CLINIC ENDONTOLOGY		05/08/2014	12/08/2014
		CONSULT/REFERRAL TO FREE CLINIC NUTRITION		09/09/2014	12/09/2014
		CONSULT/REFERRAL TO FREE CLINIC OPHTHALMOLOGY		05/05/2014	12/05/2014

6. Double click on patient(s) you want to see at next clinic

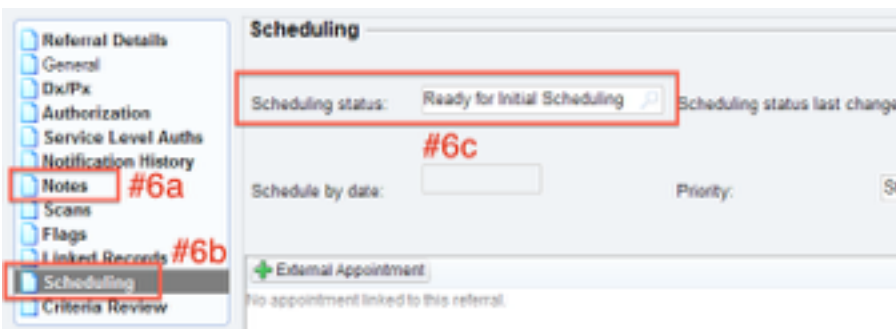
- a. Click on "Notes" (left column) > Type: Provider Comments > type in clinic date

- b. Click on "Scheduling"

- c. Scheduling status: "ready for initial scheduling"

- i. (status will change to "all visits scheduled" when pt is scheduled by caller)

- d. Accept, repeat above for each patient desired for next clinic



7. Send an Epic message to specialty caller re: patients are ready to be called

- a. Indicate clinic date, #total pts desired, and order of pts to call (which to call first)

- b. Callers will call patients and schedule (check Epic schedule for that date)

8. Day of clinic

- a. If no show: call pt, if pt wants reschedule, change status: "Ready to schedule"

- b. If another follow up needed:

- i. If you know date of follow up clinic: schedule them on-site

- ii. If you don't know date (ie f/u in 6mo): Notes > Type: Provider Comments > type month of desired f/u, change status to "Some visits scheduled"

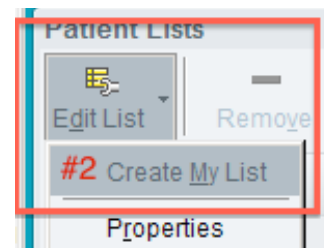
1. Every month, sort by "Some visits scheduled", sched patients due for appt

- c. If consult complete, no more specialty visits needed: Flags > Manual Release.

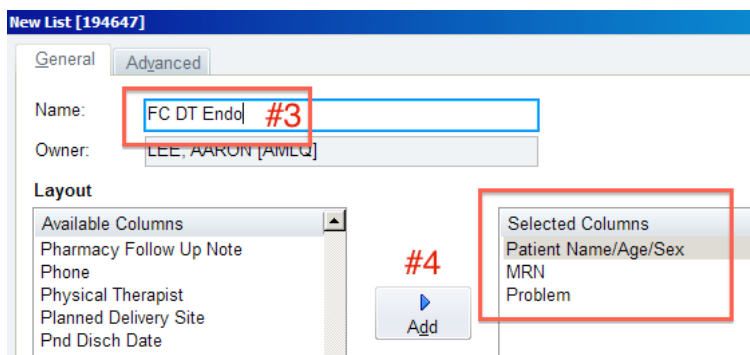
Appendix 8

Epic Workflow- **FC Specialty Managers: How to Create/Manage Patient Lists**

1. Click on “Epic” button (top left) > “Patient Care” > “Patient Lists”
2. Click “Edit List” > “Create My List”
3. Name: FC <site> <specialty> (ex: FC DT Endo)
4. Click in the “Layout” column (select any)

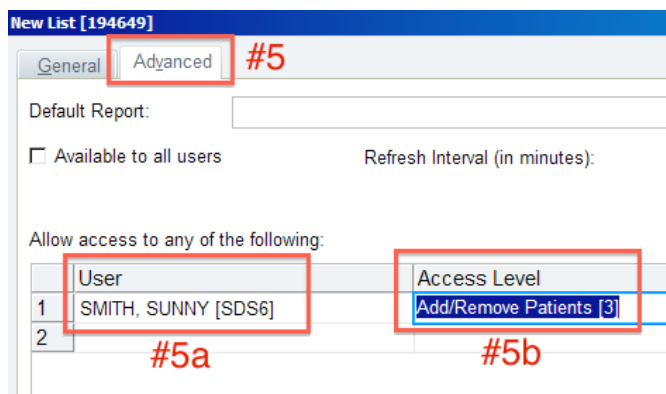


- a. Type ‘patient’ > choose “Patient Name/Age/Sex” > click “Add”
- b. Type ‘mrn’ > “Add”
- c. Type ‘problem’ > “Add”
- d. Repeat for any other columns you want in your list



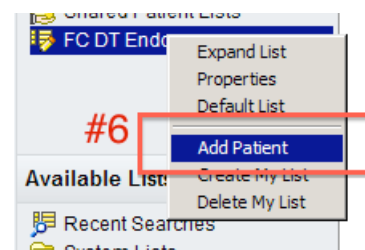
5. Click “Advanced”

- a. Under “User”, type in name of anyone you’d like to share your list with (your specialty clinic co-managers)
- b. Under “Access Level”, change to “Add/Remove Patients”
- c. Accept



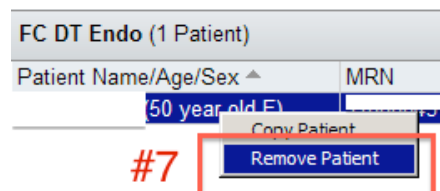
6. To add patients to your new list

- a. Open pt’s chart from work queue then close again (to get pt onto recent list)
- b. Right click on your new list name > “Add Patient”
- c. Click on “Recent Patients” > select patient



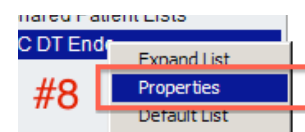
7. To remove patients from your list

- a. Right click on patient in your list > “Remove Patient”

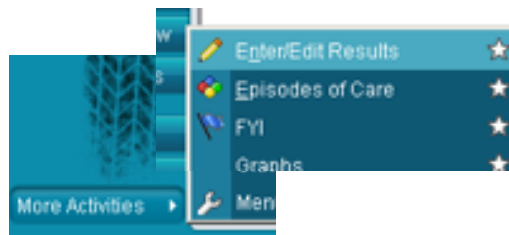
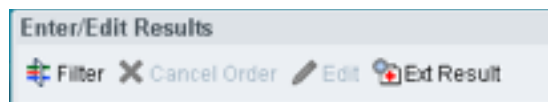


8. To edit list in future (add/rearrange columns, sharing)

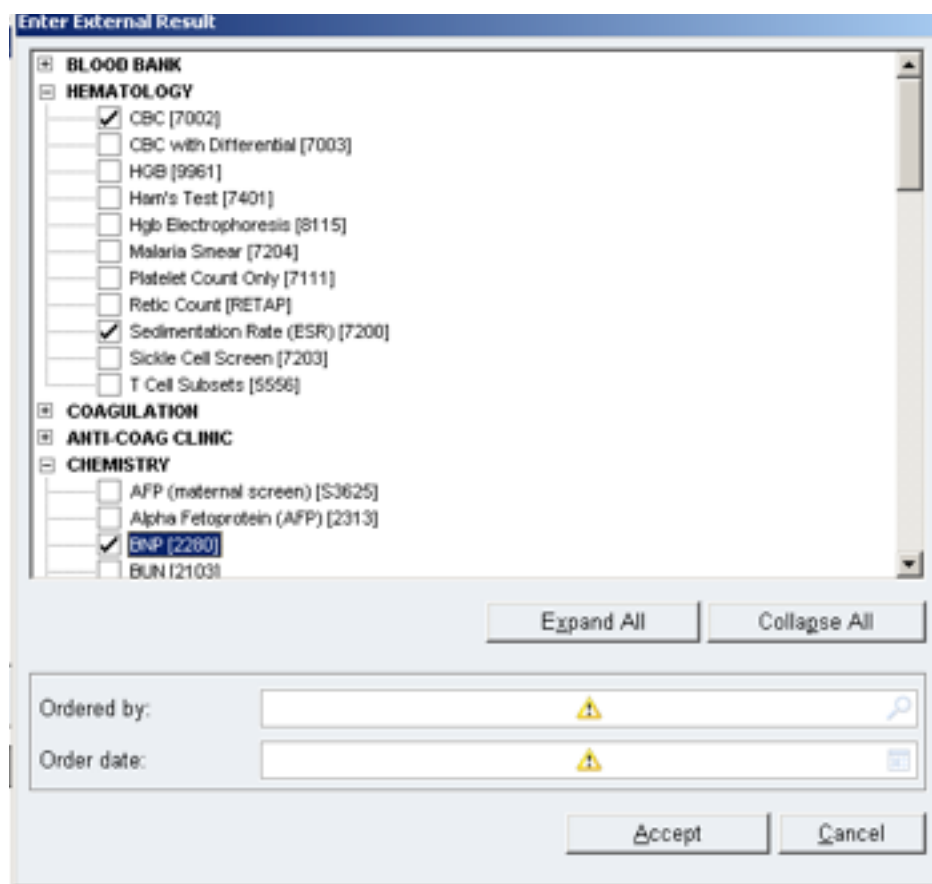
- a. Right click on your new list > “Properties”



1. Click on “Epic” (top left) > “Patient Care” > “Doc/Orders” to open a documentation encounter with pt (unless patient in clinic that day)
 - a. Find the patient (usually via MRN) > select patient
 - b. Provider: whichever FC attending is reviewing labs at your clinic
 - c. Department: 900 for GA, 901 for BK, 902 for DT, 903 for PB
 - d. Accept
2. Once chart is open, click “More Activities” (lower left of screen) > “Enter/Edit Results”
3. Click on “Ext Result” to add Quest lab results



4. Choose lab tests (make sure you do not select the same results twice) > ‘Accept’
 - a. Note: if unable to find a lab test, select ‘Miscellaneous’ > “Lab Misc Test”



5. Must fill out the following:
 - a. ‘Collection Date’ (from printed lab results)
 - b. Fill out lab results under the ‘Value’ column for the corresponding results
 - c. For any tests that you couldn’t find, you can also type in/search for the name in a blank space under the ‘Component’ section to add it in (if you didn’t select Lab Misc Test in step #4a above)

Appendix 9 (con't)

Epic Workflow- **FC Laboratory Managers: How to input lab results into Epic**

2

- d. Flag any abnormal results (high or low)
- e. **Route lab results to lab attending via Results Message > Recipient**
- f. Change the Result Date (important: this is how labs are sorted in Epic)
- g. Change the Result Status to 'Final'

The screenshot shows the 'Enter/Edit Results' window in Epic. The window title is 'Enter/Edit Results' and it has standard window controls (Filter, Cancel Order, Edit, Ext Result). The filters section shows 'Outstanding ordered on 5/2/2013 (2)'. Below this is a table of lab orders:

No.	Test	Code Type	Order Date	Auth. MD	Order Status	Result Status	Result Date	Comp	Prior
36400025	HEMOGRAM, BLOOD [7002]	Custom	05/02/2013	HISTORICAL, D	Ordered			Yes	Rout
36400026	COMPREHENSIVE METABOLIC PAN	Custom	05/02/2013	HISTORICAL, D	Ordered			Yes	Rout

Below the table are several sections with red annotations:

- Specimen**: Type: Blood [100]. Collection date: #5a (circled in red).
- Resulting Lab**: Lab name: BACK OFFICE LAB [48]. Technician: #5e (circled in red).
- Results Message**: Recipient: (empty). Modifier: (empty). Add PCP, Add My List, Build My Lists, Clear All buttons. Send results message checkbox is checked. CC list only checkbox is unchecked.
- Providers**: Billing: HISTORICAL, DOCUMENT. Resulting: (empty).
- Components**: A table with columns: Component, Value, Flags, Low, High, Range, Units, Comment. The 'PLT COUNT [7419]' row is circled in red and labeled #5c.
- Result**: Date: #5f (circled in red), 5/2/2013. Time: 11:53 PM. Abnormal: (empty). Status: #5g (circled in red), Final.

6. If multiple lab tests ordered, click on 'Accept/Next,' then repeat steps 5-8 above
 - a. Click "Yes" if it asks to continue w/o filling all recommended fields
7. Once done inputting all results, have someone else re-verify inputted lab results via the 'Results Review' tab
 - a. To **edit previous lab results**, go back to 'Enter/Edit Results', **filter by dates**, click on desired lab test, click edit, and follow instructions above
8. Go to 'Doc/Orders Only Encounter' (equivalent of Visit Navigator) >
 - a. 'Progress Notes': Create the following progress note: "Lab results reviewed by Dr. (attending), inputted by (your name), and verified by (colleague)."
 - b. **'Follow-Up' > 'Send Chart Upon Closing Section' > 'Recipient': Route entire chart to attending again**
9. Close the chart (attending will close doc/orders encounter).

Appendix 10

Epic Workflow- FC Attending: Order Medications with ePrescribe

1. Under “Visit Navigator”, go to “Meds & Orders”
 - a. “Reorder” the desired medication, or click on “New Order” to prescribe a new medication

The screenshot shows the Epic Meds & Orders interface. At the top, there's a search bar and buttons for 'New Order' and 'Patient-Reported Medications'. Below that, there's a section for 'Review open orders' and a table of existing medications. One medication, 'hydrochlorothiazide (HYDRODIURIL) 50 MG tablet', is highlighted in a blue box. The instructions for this medication are 'Take 1 tablet by mouth daily, Disp-30 tablet, R-0, ePrescribe'. The interface also shows a 'Next' button and a 'Remove' button. At the bottom, there are buttons for 'Mark All Taking', 'Mark as Reviewed', 'Click here to select a pharmacy', 'Associate', 'Edit Multiple', 'Providers', 'Interactions', 'Order Entry', 'Sign', and 'Pend'.

- b. Click on blue medication instructions within blue box
 - c. Verify that the dose, route and frequency are correct
 - d. Enter a value to dispense
 - e. Make sure that “Refill” is set to 0
 - f. Change class to ePrescribe (you must do this for every medication!)
 - g. Associate a diagnosis
 - h. Click on “[Click here to select a pharmacy](#)” and enter the first three letters of the name of your clinic site:
 - i. DOW = Downtown
 - ii. BAK = Baker
 - iii. PAC = Pacific Beach
 - i. Click “Accept”
2. Repeat all steps for additional med orders
 3. Click “Pend” to complete

Appendix 10 (con't)

hydrochlorothiazide (HYDRODIURIL) 50 MG tablet
Take 1 tablet by mouth daily., Disp:30 tablet, R-0, ePrescribe

Reference Links: 1. Clinical Pharmacology

Product: HYDROCHLOROTHIAZIDE 50 MG OR TABS View Available Strengths

Sig Method: Specify Dose, Route, Frequency Use Free Text

Dose: 50 mg 25 mg 50 mg 1c

Prescribed Dose: 50 mg
Prescribed Amount: 1 tablet

Route: Oral Oral 1c

Frequency: DAILY Daily 1c

Duration: Doses Days

Starting: 7/15/2015 Ending:

Mark long-term: HYDROCHLOROTHIAZIDE

Patient Sig: Take 1 tablet by mouth daily.

Dispense: 30 tablet 1d Refill: 0 1 2 3 Days/Fill: Full (0 Days) 30 Days 90 Days 1e

Class: ePrescribe ePrescribe Fax Print Req Navy Handwritten Historical Med 1f

Taking:

Dx Assoc:

	Assoc	Encounter	Diagnoses	Codes	Qualifier	Comment
1	<input type="checkbox"/>		Irregular heart beat	427.9		
2	<input type="checkbox"/>					

Notes to Pharmacy (F6): (300 char max.)
Click to add text

Additional Order Details

Mark All Taking Mark as Reviewed Last Reviewed by Ambulatory, Medical Assistant on 5/29/2013 at 4:28 PM

Click here to select a pharmacy 1h

Associate Edit Multiple Providers Interactions

Order Entry Sign Pend

Close F9 Previous F7 Next F8

MAKING AMENDMENTS TO MED ORDERS:

If after completing your med orders you are asked by pharmacy to alter your order you must reflect this in the patient's chart.

1. Under "Visit Navigator", go to "Meds & Orders"
 - a. "Reorder" the desired medication
 - b. Make necessary amendments order
 - c. Change class to "No print" (this will prevent pharmacy from re-ordering the medications)
 - d. Associate a diagnosis
 - e. Click "Accept"
2. Click "Pend" to complete