Empowered Learner “Cheat Sheet”

What **YOU** Can Do to Increase your own Entrustability and Intraoperative Autonomy

**Preoperatively**

1. Read about the operation  
   a. Know “textbook” operative steps and potential pitfalls
2. Read about the patient  
   a. Know why the patient needs the operation  
   b. Know patient’s co-morbidities that might contribute to complications
3. Practice applicable skills in simulation lab
4. Discuss case and set shared goals with attending  
   a. Timing: depends on attending and type of case. Evening before, if scheduled; during prep dry time or scrubbing, if add-on/urgent case  
   b. Let them know you have read and are prepared  
   c. Highlight portions of the case or similar cases you’ve done previously  
   d. Suggest operative plan and ask questions about overall plan or specific steps  
   e. Identify key goal you have for this operation  
   f. If you are struggling to gain autonomy w/ a specific attending, ask senior residents for advice on how to approach them
5. Prepare and position patient, know necessary instruments/equipment, be prepared for probable complications

**Intraoperatively**

1. Anticipate upcoming steps and ask questions accordingly
2. Suggest plan for upcoming steps or even entire operation
3. Progress through steps to advance case with instruction from faculty as appropriate for your experience level (goal for this should be agreed upon ahead of time by you and the attending)
4. Identify solutions to problems and implement solutions as appropriate for your experience level
5. If you want to re-gain autonomy:  
   a. Articulate next steps and ask if you may do that portion  
   b. Ask attending to teach you how they are doing that portion
6. If you are struggling to gain autonomy:  
   a. Ask for specific feedback then commit to work on your deficiency before next case

**Postoperatively**

1. Develop post-procedure care plan, discuss w/ attending, and implement plan
2. **ASK** for specific feedback on key areas:  
   a. operative knowledge and plan  
   b. operative independence and decision making  
   c. tissue/instrument handling  
   d. problem solving  
   e. specific areas to practice/improve
Prompters for Empowered Learners
(for specific locations/settings)

Pre-Op Setting (ideally days ahead of time)

Sample dialogue from resident/fellow to attending

I have reviewed the patient chart
I have looked at the case
I have spent time in the simulation lab practicing specific techniques related to this case
I have done portions of this type of case before
I have set a goal to try to do _____ in this specific case
What else should I do to prepare for the upcoming procedure?
Role of chief/senior resident to help advocate for you

Intra-Op Setting

Arrive in OR early and help position the patient
Make sure proper special equipment is in the room
Communicate your efforts to the attending “I have made sure_____ is in the room, what else should I be asking for as we are setting up?”
Initiate conversation to set tone of what you know, especially during set up of case to ask questions (prepping dry time, draping the patient)
Timing of discussion is important; utilize low risk times of case to help connect with faculty (i.e., when there is idle chitchat about music, movies, sports, weekends, vacations, etc.)
Watch for the faculty question, “Have you ever done this before?” when you haven’t. The faculty often wants to show you. This can become a vicious cycle. To break it, try:
   Highlighting the portions of case you have done previously
   Detail your experience with overlapping skills, simulation lab experience

Getting control of case back:
Articulate the next steps of the case and demonstrate your knowledge of the case/patient to the faculty
Get credit for what you know
Utilize “One day, I will be doing this operation solo, help me understand how you are…”
Try, “I know I need to work on … portion of the case, the upcoming portion I am improving, may I …”

Struggling intra-op as a resident:
Order matters (don’t screw up early; save your air knots until the end)
When you are struggling as a resident, manage expectations… (i.e., Castro needle driver) …
Promise to work on the deficiency before the next case and ask for very specific feedback
Talk to a chief or senior resident and have them advocate for you if you are not making progress with operative autonomy; they will likely have very specific tricks that will work well for particular faculty.
**Postop Feedback**

Ask very specific questions…
- Tissue handling?
- Decision making?
- Instrument handling?
- Hesitation?
- What specifically should I practice?
- How can I improve for this case next time?

**References**


**Authors**

Jennifer S. Beaty, MD, FACS, Creighton University, Omaha, NE
Rebecca W. Schroll, MD, FACS, Tulane University, New Orleans, LA
Edward S. Shipper III, MD