

This document contains 4 sections:

1. Rationale
2. Assumptions and ground rules
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4. 1-page outline of rounding structure

1. Rationale for a MICU rounding structure: helping to see the big picture

Imagine you are caring for a patient with acute respiratory failure from pneumonia who develops acute renal failure from septic shock-related ATN; they are on a ventilator, on pressors, and have a CVL, art line, and Foley catheter. Where do you start?

In a common ICU situation like this, there are **two main questions** we have to answer daily:

1. What can I do to achieve a desired outcome for the patient as fast and fully as possible?
2. What can I do to mitigate modifiable risks to the patient?

Question 1 generally this involves thinking about how we can get patients off life support successfully (vent, pressors, etc). Addressing this of requires that you synthesize the daily data, making decisions based on physiology, best evidence, and your sense of the patient. You need to understand how the acute renal failure-induced academia increases minute ventilation and is possibly a rate limiting step to extubation. How will you fix that? For one, you need to understand pulmonary and renal physiology to wean the ventilator further—most of the tachypnea that is being called ‘discomfort’ may in fact be physiologic. Still, you need to understand how to use the minimal amount of analgesics and sedatives to provide comfort, yet avert delirium—an independent risk factor for death. Wait, does the patient have a prolonged QTc (which limits your anti-delirium meds)? And on, and on...

Question 2 is perhaps less exciting than Question 1, but still important. Is my patient on a FASTHUG regimen? Are they doing early mobility? Can I remove a CVL or Foley? Are we doing daily awakenings from sedation—and if not, why? SBTs? If so, can we act on the information? *It cannot be emphasized enough that discussing this question and acting on it can impact long-term quality of life, psychological distress—and even survival.* We need reminders, we are human.

How can we go wrong with rounding—and fail to optimally answer these questions? Everyone has the best intentions...but there are problems. Rounds can be unfocused, unstructured, repetitious, full of interruptions, fail to address the ‘boring’ aspects of care such as FASTHUG that are actually incredibly important, and simply exhaust the participants. There is a lot of variation among attendings, fellows, and even different groups of residents. And we often don’t ‘close the loop’ with the bedside nurse, ensuring that all are on the same page with the plan for the day.

Good rounding is the process of communication and decision making performed as a team: resident, nurse, RT, fellow, PT, OT, nutrition, attending, and pharmacist. Together, we review ‘the story’ to try to attain a happy ending of sorts. Successful rounds are focused, analytical, collaborative, and evidence-based. Rounds allow the presenter to ‘make their case’ and persuade others that their plan is best. This is the time to propose new directions or adjust/optimize the current plan—and to ask, “*What can we do better today than yesterday?*” Maybe cheesy, but true.

Bottom line: the quality of rounding directly impacts the quality of care we provide in the MICU.

2. Assumptions and ground rules for morning MICU rounds

1. The purpose of MICU rounds is to:
 - make collaborative medical decisions to solve problems for very sick people
 - communicate plans among the multidisciplinary team
 - learn
2. Target hours for rounding are from 7:30 or 8 to 10:30 (some start at 8am after 30 min teaching session; others teach more during rounds).
 - there will likely be 2-3 new patients per day; these may take 20-30 min each for discussion
 - therefore, the 6-7 old patients per side must be done on average in <15 min each.
 - we should spend most of our time on the plan—not just reciting data.
3. We cannot afford to spend time inefficiently with:
 - editorializing at any point besides the plan
 - reciting information from a computer screen that does not help with decision making
 - interrupting the presenter unless it is an emergency/urgency to do so
4. Time wasted during rounds is time taken away from other patients who need our help.
 - Wasted time leads to delays in the conduct of necessary studies/tests, which in turn places our patients' health in jeopardy.
 - delays mean that we can accept fewer outside transfers who are seriously ill and need our help.
5. Residents have a few expectations:
 - orders should be entered BEFORE moving on to next patient.
 - if a decision is made to transfer a patient to the ward, you need to page 1010 as soon as possible (perhaps while moving on to next patient).
 - Help each other, be collaborative, be flexible, be thoughtful
 - Please be respectful of the presenter. Focus on the presentation and don't linger with a computer in the background doing other things, talking to someone else, etc.
 - you get what you give! Rounding efficiency = out the door faster post-call.
6. Attendings and fellows have key responsibilities too:
 - Reducing variation in rounding behaviors is desired by residents, nursing, and pretty much everyone else.
 - Please limit your interruption of residents and nurses
 - It takes energy to keep things on track, but the payoff should be worth it

3. Rounding structure for MICU

Resident—overnight events, vitals, ventilator

- Overnight events, relayed in a bullet point fashion*
- Current vital signs (*noting outlier values from past 24 hrs that have direct relevance to decision making today; if there is no relevance, do not recite ranges*)
- Vent settings
- Vent day #
- Was an SBT been performed? What was the outcome?
- ABG

*this is a major source of unnecessary editorializing and devolution into a 'plan' that is inevitably repeated in the 'plan' section at the end. If patient got hypotensive and pressors were started overnight, just say "patient became hypotensive last night and we started pressors." Save the discussion of why for the 'plan.'

Nurse—data review

- RASS and CAM-ICU*
- Was a daily awakening from sedation / analgesics been performed (and why not if it has not)?
- Lines, tubes, Foley—and can any be removed?
- FASTHUGE (the "E" stands for early mobility)**
- Drips

* Just the RASS and CAM-ICU (e.g., RASS is -1; CAM positive)—not components of these, etc.

** Here, just state the facts succinctly.

- For example: "we are at goal TF, we are using a fentanyl drip at 25mcg/hr for pain, there is no sedative, we performed an awakening from sedatives this AM and restarted at ½ the rate, patient is on SCDs and a PPI, glucose is generally <200 on SSI, and PT is working with patient."

*** BE ON LOOKOUT for team rounding—please do not wait to be asked.

**** Please make a list of questions you need answered but save questions for the END of the 'plan,' since most questions will likely be answered during the presentation that follows.

Resident—data review

- Medications
 - state 'antibiotic day #___ of an expected course of ___ days'
- Labs and micro
 - highlight pertinent negatives, positives, and trends
 - verbalize understanding of normal values with statements such as "*there are no changes in renal function or LFTs over past few days*"
 - review micro daily
 - do NOT routinely order labs, ABGs, CXRs unless they will help with decision making
 - DO NOT RECITE INFORMATION THAT IS IRRELEVANT TO DECISION MAKING
- Radiology
 - have PACS screen ready with today's and yesterday's films

Resident—plan

- Summarize problem in 1 sentence (e.g., “*Ms. X has acute respiratory failure secondary to septic shock in the setting of neutropenia*”).
- Succinctly discuss issues by organ system and plan for each.
 - prioritize organ system-based plan by starting with the biggest problems.
 - link organ systems to give a sense of ‘the story’
 - use action verbs to clearly state the plan. DO NOT say ‘consider X’ or ‘maybe we’ll do Z.’ *Actionable items only.*
 - specify your plan for each organ system (if it needs a plan)—recognize that the nurse CANNOT operationalize a plan unless there are clear parameters for action (e.g., ‘we must get out > in by 500mL today. Give Lasix 40mg IV if we have not reached our target by noon’).
 - articulate a ventilator plan/target: Yes, our RTs are the best—but you still need to understand the vent. DO NOT SAY “wean vent” in your plan.
 - don’t waffle: make a decision and justify it. This is how you learn.
- DO NOT talk just to talk. If there’s nothing new for the plan, be happy and move on.

Nurse—closing the loop

- Reflect back bullet points of plan
- Reflect back medication changes
- Clarify unanswered questions
- Write down action items

Examine patient

4. 1-page summary of MICU rounding

Resident—overnight and vitals

- Overnight events, relayed in a bullet point fashion
- Current vital signs
- Vent settings
- Vent day #
- Was an SBT been performed? What was the outcome?
- ABG

Nurse—data review

- RASS and CAM-ICU
- Was a daily awakening from sedation / analgesics been performed (and why not if it has not)?
- Lines, tubes, Foley—and can any be removed?
- FASTHUGE (the “E” stands for early mobility)
- Drips

Resident—data review

- Medications
- Labs and micro
- Radiology

Resident—plan

- Summarize problem in 1 sentence
- Succinctly discuss issues by prioritized organ system and plan for each that is relevant.

Nurse—closing the loop

- Reflect back to group bullet points of plan, especially important medication changes
- Clarify unanswered questions
- Write down action items for the shift

Examine patient