**A Facilitator's Guide for Leading Unscripted Morning Report**

The following is a guide for impromptu case facilitation—an approach to running Morning Reports with unscripted cases that are unknown to the facilitator and other audience members. We believe that unscripted cases amplify the most rewarding aspects of Morning Report, building an interactive and collaborative learning environment that focuses on clinical reasoning and decision-making rather than content mastery. In this guide, we hope to provide a general approach and specific tools for impromptu case facilitation. Please feel free to email us with any questions. We would love to hear about your experiences with unscripted cases.

Have a great year!
Dan, Manny, Juan, and Jess

**Daniel Wheeler, MD**
San Francisco VA Medical Center
University of California, San Francisco School of Medicine
daniel.wheeler@ucsf.edu

**Manuel Diaz, MD**
University of Colorado School of Medicine
manuel.diaz@ucdenver.edu

**Juan Lessing, MD**
University of Colorado School of Medicine
juan.lessing@ucdenver.edu

**Jessica Beaman, MD**
University of California, San Francisco School of Medicine
jessica.beaman@ucsf.edu
Selecting a Case
Impromptu case facilitation begins with selecting a case (or cases) to discuss during the conference. On some days, simply asking, “who has a case?” may be enough to prompt a learner to bring one forward. However, on other mornings you may need to provide additional guidance.

It is helpful to emphasize that the presenting resident need not have all the data or answers to the case. In fact, some of the best discussions come from these yet-to-be-solved cases! If necessary, you can delegate one trainee to look up the patient’s data (in the EMR, for example), while another tells the story. This strategy promotes participation and creates an environment of shared learning and responsibility. When asked to present a case, residents will frequently express concern that theirs is not long enough to fill an entire conference. However, in our experience, there is great learning to be found in every case and often a “short” case fills the entire hour. Therefore, as the conference facilitator, your goal should be to get the case started as soon as possible to leave plenty of time for discussion.

<table>
<thead>
<tr>
<th>Questions to Utilize for Identifying an Impromptu Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Were there any new admissions overnight with diagnosis or management challenges?</td>
</tr>
<tr>
<td>● Does anyone have an interesting clinical image they would like to present?</td>
</tr>
<tr>
<td>● Did anyone have a diagnostic or management dilemma in a case from the past week?</td>
</tr>
</tbody>
</table>

If a case is not quickly volunteered, announce that you will give everyone in the room 1-2 minutes to think about recent patients they have cared for to identify a case they would like to present. If your residency program is new to unscripted cases, ask the residents to think of cases a day or two ahead of time.

If there is more than one case that could be discussed on a particular morning, make note of the trainee and the case (including patient medical record number) so that you can revisit the case on another day.

Time Management and the Impromptu Case Structure
Time management is an important skill in impromptu case facilitation. At most institutions, Morning Report is allotted one hour. However, by the time a case is chosen and the conference begins, there may only be 45 minutes left for discussion. In this section, we divide the impromptu Morning Report case into three sections and provide time management strategies to employ during each phase of the discussion.
**Setting the stage**
Before the case begins, we recommend asking the resident presenter a key question:

"Would you like to spend more time talking about diagnosis or management?"

This question will help budget your time, direct attention to the most interesting parts of the case, and avoid rushing through the end (when key learning points often arise). Remember that the resident presenter has experienced the case firsthand. Whether a diagnostic dilemma or complicated management decision, the presenter knows where to find the most salient teaching points. Trust them to take you there!

Sometimes, the resident presenter may be unsure of where to take the discussion — in those instances the facilitator can help provide specific prompts.

<table>
<thead>
<tr>
<th>Prompts to Help Budget Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>● “Looking back, were there specific parts of the case that your team found particularly challenging or interesting?”</td>
</tr>
<tr>
<td>● “If we reach a point in the case where you felt challenged, let us know and we will focus there.”</td>
</tr>
<tr>
<td>● “Please feel free to let me know if we are spending too much time on a less relevant aspect of the case.”</td>
</tr>
</tbody>
</table>

**Section 1: Setting up the case - HPI, PMH, Meds, Social/Family Hx (roughly 5-10 minutes)**
The majority of Morning Report cases will include a review of the patient’s HPI, PMH, medications, and pertinent social and family history. Residents can typically present this information in less than 10 minutes. To maximize time spent on high-yield discussion, we encourage the resident to present the entire HPI uninterrupted.

After the resident has finished presenting, consider asking the audience to identify specific pieces of additional information they might find want from the HPI. This would also be an appropriate time to call on a trainee to comment on important medications or history details.

<table>
<thead>
<tr>
<th>Morning Report Pearl</th>
</tr>
</thead>
<tbody>
<tr>
<td>In order to maximize time spent discussing clinical reasoning and medical decision-making, encourage the presenter to recite the entire HPI to the audience without interruption. Once the HPI has been established, the audience can ask for additional details as needed.</td>
</tr>
<tr>
<td><strong>One way to highlight clinical reasoning is to ask audience members not just what they want to know, but why.</strong></td>
</tr>
</tbody>
</table>
Section 2: Diving into the case - Physical exam, Diagnosis, and Management (roughly 30-45 minutes)

Depending on the information given in Section 1, you may decide to pause at this point and build your differential diagnosis. **Typically, stopping here will lead to a broad differential, whereas waiting for the physical exam may narrow the focus.** To generate audience participation, you might ask a trainee to list his/her top three diagnoses without building an exhaustive differential diagnosis on the board at this time.

If you do not discuss the differential diagnosis before the exam, consider doing so after the physical exam is presented. As the audience builds the differential, ask them to identify specific labs or imaging studies that might aid in diagnosis. The resident presenter can then report the requested lab and study results, along with any additional tests they may have ordered.

This is a great point in the case to teach a diagnostic framework or the management of a particular diagnosis. Alternatively, one could teach about the way of thinking about and working up abnormal labs (e.g. DIC, acute liver injury vs. acute liver failure, hyponatremia). **Remember that you, as the facilitator, do not always have to be the teacher!** As the “content expert,” the resident presenter may be able to teach the group about a clinical concept or diagnostic approach that they used. You might also engage the audience with targeted questions to have the learners teach each other. Of course, depending on time and your comfort level, you might also opt to make a teaching point yourself.

Section 3: Closing the case - Synthesizing key learning points (roughly 3-5 minutes)

It is important to ensure that you save time to close the case for the audience. It helps to emphasize or reiterate the key learning points. Also, never worry about finishing a few minutes early! Residents won’t mind having a few extra minutes to get work done, but they will hate running late. There are some key strategies to utilize for case closure, which we review here.

<table>
<thead>
<tr>
<th>Strategies for Closing the Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Ask the resident presenter to summarize the 1 or 2 key learning points that they gained from caring for the patient.</td>
</tr>
<tr>
<td>● Ask the audience to turn to someone near them and share what they learned – if you have time, you can then ask for a couple of examples to share with the group</td>
</tr>
<tr>
<td>● Walk the audience through the learning points. One way of doing this would be: “Today we reviewed an interesting case of [insert problem representation]. We reviewed the differential diagnosis for this case and focused on [insert key learning/discussion point]. Thank you to [resident presenter] for taking us through this case!”</td>
</tr>
</tbody>
</table>
Generating/Encouraging Audience Participation
A common fear chief residents share when learning how to facilitate an unscripted case is a lack of participation by trainees. However, there are key strategies that you can employ from start to finish to stimulate engagement and audience participation.

We will review three key strategies to generate and encourage audience participation:
- The art of asking great questions
- Using the room
- The “pair share”

The Art of Asking Great Questions
In order to ask a great question, you must know why you are asking the question in the first place. Is it to engage the learner (or learners)? Is it to assess the learner’s knowledge? Is it to stimulate personal reflection about a particular aspect of the case? Each of these types of questions has a role in the Morning Report setting.

<table>
<thead>
<tr>
<th>Three Key Components of Great Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) They are specific.</td>
</tr>
<tr>
<td>2) They are at the right level for the learner.</td>
</tr>
<tr>
<td>3) They avoid the game of “guess what I’m thinking.”</td>
</tr>
</tbody>
</table>

The moment you hear yourself saying, “This is a bit of a ‘guess what I’m thinking’ question,” you should either reframe the question or simply switch course and say what you are thinking.

It is important to set clear expectations for your audience regarding how, when, and why you will ask them questions—particularly at the beginning of the year. If you plan to call on specific trainees during Morning Report, it may help to let them know ahead of time. For example, you may say something to the effect of “Manny, after Jess tells us about the physical exam, I am going to come to you to help us build a differential.” A simple warning shot allows the learner to focus and to be prepared when you call on them. Another way to ask questions is to call on a small group of trainees sitting next to each other (e.g. “You three, sitting in the middle row there—how are you interpreting this patient’s CBC?”).

By asking specific questions, you will be better able to assess a learner’s knowledge level, identify knowledge gaps, and make specific teaching points that are relevant to the entire audience. It is important to give learners time to think about their response to the question. On average, your pause for an answer should be about 3 seconds. It will feel like a long time, but the silence will almost always lead to a response – trust us!

Using the Room
During most conferences, facilitators stay planted in the front of the room or near the whiteboard. A great way to encourage audience participation is to utilize the entire space of the
room. Experiment with walking around the room at various points in the case. During parts of the case that do not require scribing on the whiteboard, move to the back of the room and continue your conversation from there!

By moving around, you will be able to engage learners in all parts of the room, rather than just those sitting in the front row. Divide the room into geographical areas and ask questions to “the back corner” or the “front right of the room” to encourage active participation and discussion from all audience members.

The “Pair Share”
The “pair share” is another strategy for audience engagement and one of our favorites. In the “pair share,” the facilitator poses a question to the group, and then asks each audience member to briefly (1-3 minutes) discuss the matter with a person sitting nearby. The purpose of the question may be to assess knowledge or stimulate personal reflection; regardless, the act of exchanging ideas gets the whole room talking. To conclude the exercise, bring the discussion back to the large group and invite a few people to share what they discussed with their partner.

Suggested Tips
Start slow - try one or two strategies in your first impromptu Morning Report and see how they work. Early on in the year, it can be helpful to practice crafting specific questions to use during the case. Push yourself to think about why you are asking a particular question. Remember that the “pair share” is an easy and effective way to encourage audience participation. Finally, it is important to thank the individual who bravely presented their impromptu case at the end of Morning Report. This will have positive reinforcement for their peers and encourage others to participate in the future.

Placing Emphasis on Diagnostic Reasoning and Medical Decision-Making
Impromptu case facilitation creates the ideal climate for talking about diagnostic reasoning and medical decision-making. During a scripted case, the facilitator is generally responsible for presenting the case and leading the discussion. In contrast, when the case is unscribed, someone else is responsible for telling the story. The facilitator is able to focus on teaching clinical reasoning and medical management. The following section offers suggestions and examples for bringing diagnostic reasoning and decision-making to the forefront of the conversation during Morning Report.

Use of problem representation and illness scripts in case discussion
In recent years, increasing attention has been paid to the use of problem representation and illness scripts in the diagnostic process. The problem representation is a one-sentence case summary that describes the patient’s epidemiology and clinical syndrome. Illness scripts are mental models of diseases that describe risk factors, time course, and clinical presentation. One way of arriving at a diagnosis is recognizing an illness script that matches the patient’s problem
representation. We have found these concepts to be particularly useful when talking about clinical reasoning during Morning Report.

**Building the problem representation**
The problem representation should be as concise as possible: it should contain all relevant pieces of clinical information without anything extraneous. There is a tendency for learners to include superfluous (and potentially distracting) information about the patient when constructing a problem representation. For example, the following are two problem representations based on the same case:

“Mr. H is a 64-year-old man with a history of diabetes, COPD, lung transplant on immunosuppression, BPH, hypertension, and osteoarthritis who presents with acute onset fever and headache.”

“Mr. H is a 64-year-old man with a history of lung transplant on immunosuppression and hypertension, who presents with acute onset fever and headache.”

Although each of these sentences is factually accurate, the former includes past medical history that is not directly relevant to the patient’s acute presentation and may obscure the important fact that the patient is immunosuppressed. The process of building and revising a problem representation allows learners to practice prioritizing information and identifying which data are clinically relevant. For example, as facilitator you might ask a resident to build a problem representation after Section 1. After the results of the examination and lab testing are revealed, you might ask another resident, “how does this new information change your problem representation?”

**Building the differential diagnosis: a framework, not a list**
Building a differential diagnosis on the fly is one of the most challenging aspects of impromptu case facilitation. However, when feeling daunted by the task, remember this: it is not your job to make an exhaustive list of possible diagnoses! Attempts to write down every single possible diagnosis will almost certainly lead to an incomplete, confusing, and non-prioritized list that risks misinterpretation by early learners. For example, listing “diabetes” and “POEMS” next to each other on the whiteboard may create the false impression that the two conditions should be considered as equally likely as the explanation for polyneuropathy.

One way to build a differential diagnosis during Morning Report is to focus on two main categories: the diseases that are **most likely** and the ones that we **cannot afford to miss**. These two groups of diagnoses may be listed separately or in a single list with special designations. When soliciting ideas from the audience, it may be useful for facilitators to explicitly ask the question: “is this a diagnosis that you think is likely, something we can’t miss, both, or neither?” Building a list of “**most likely**” and “**can’t miss**” diagnoses can still be
challenging. We often find it useful to begin the conversation by considering whether a diagnostic framework may aid the process.

Example:

**Chief Resident:** We’ve heard about the patient’s HPI, physical exam, and some basic labs – let’s pause here for a moment. Isaac, what is your problem representation for the case right now?

**Isaac the Intern:** Well, I would say we have a 59-year-old woman with a history of a DVT and tobacco use who presents with 2 weeks of fevers, a new rash on the lower extremities, leukocytosis, and an elevated creatinine.

**Chief Resident:** Excellent. Sarah, how would you approach this case?

**Sarah the Senior Resident:** It seems like there is some sort of systemic process at work, but at this point in the case, I’m not really sure what that process might be. Right now I think we should consider the broad categories of infection, autoimmunity, and malignancy.

**Chief Resident:** Great! I agree. It seems like the differential is still pretty broad. Jennifer the Junior Resident, is there other information that might help you narrow your focus?...

It is helpful to record the larger categories on the board (e.g. infection, autoimmunity, malignancy) and wait until the physical exam and/or labs or studies are reported to build a more focused differential.

**“Take me through your thought process”**

Whether a Morning Report participant gives an answer that is 100% correct or completely wrong, it can be useful to have that person verbalize his/her thought process. When explaining a correct answer or line of thinking, the resident takes on a teaching role and is able to share the thought process with the rest of the audience. In contrast, the process of deliberately talking through an incorrect answer may allow the resident to identify the problem on his/her own, while also creating a teachable moment for the rest of the group.

**Talking About Medical Decision-Making**

There are many ways to get the audience thinking and talking about medical decision-making. One is to explicitly ask an audience member to put his/herself in the shoes of the treating physician (“Juan, let’s say you’re the one admitting this patient. What are the first few steps in management you’d like to take?”).

When there is a clear dilemma in diagnostic decision-making, another strategy can be to poll the audience (“Ok everyone, show of hands. If you were all alone in this situation, how many of you would order a CT scan? How many of you would not?”). When hands are raised, you can then
Whiteboard Management
Have you ever been sitting in the back of the classroom and not been able to read the whiteboard? Or, walked in 10 minutes late to a lecture and been unable to catch up because of whiteboard disorganization?

The whiteboard is a critical tool for guiding your learners through a case, especially one that is unscripted. You do not need perfect penmanship to accomplish this task! The goal is to remain organized and use a basic format or template each time so that you can ensure key concepts remain on the board and so that your learners know where to access the information they are seeking.

Below is an example of the whiteboard format that we have used for unscripted Morning Report cases. Since you do not know the case ahead of time, you may not know how much space to allot for each section or how important various aspects of the case are. We have designated in bold the items not to erase even if you are in need of additional space, as these are the key aspects of the case that can be helpful for trainees that may come in after the case has already started or return after answering a page.

<table>
<thead>
<tr>
<th>Patient one liner</th>
<th>Vital signs</th>
<th>Problem representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPI</td>
<td>Exam</td>
<td>Differential dx</td>
</tr>
<tr>
<td>PMH/Meds (abbrev)</td>
<td>Labs/Imaging</td>
<td></td>
</tr>
</tbody>
</table>

A practice round can be helpful. Ask a co-chief resident to help you out! They can stand in the back of the room and let you know if the size of the font is adequate (this may not be applicable for smaller spaces) as well as your board organization. It can be helpful to use markers of various colors. For example, write the case in all black and use blue to highlight relevant positives and negatives or for arrows to indicate moving a diagnosis up or down on the differential based on new information.

Showstoppers
Picture this: you’re standing up in front of what is proving to be a phenomenal Morning Report. You have excellent attendance, your learners are engaged, and the case lends itself to teaching some great clinical pearls. All of the sudden, a faculty member throws out a major spoiler that takes the air out of the room. One of our mentors calls these interruptions to the flow of the case, “showstoppers,” because it truly feels like they can derail an otherwise great conference.
Here are a few key skills that you can have in your back pocket to help you navigate these showstoppers and get back to the case without skipping a beat.

For the purposes of our Impromptu Case Facilitator’s Guide, we will divide Showstoppers into 3 categories.

1) Managing Faculty Participants
2) Managing Wrong Answers
3) Miscellaneous Interruptions

Managing Faculty Participants
We love having faculty members who participate in Morning Report! They can lend an experienced voice to the conversation and serve as real-time consultants. They can even be a source of feedback on your teaching.

However, there are times when comments made by faculty participants can inadvertently disrupt the safe learning environment that is critical to a successful impromptu case session. As uncomfortable as it might be, this is where you as the facilitator may have to intervene.

Example:
Isaac the Intern: Well, I think we could consider TB in this case.

Faculty Participant, Dr. Smart: Come on! There is no way this case is TB, I would be looking for a malignancy first and foremost without a doubt!

Chief Resident: Hmm. I think TB is a totally reasonable thought in this case. Also, this is a great reminder that prominent B symptoms without a clear cause should always prompt us to consider a broad differential, including inflammatory, infectious, and malignant causes. If we are thinking about one of these categories, it’s a good exercise to also consider the other two. At the very least, I think it’d be important in this case to ask about risk factors like incarceration or travel to an endemic region.

The idea here is to avoid confrontation and respond in a way that reinforces a safe learning environment. Students, interns, and residents all need to know that they can participate without worrying about condescension or judgment. In short, they need to know you “have their back.”

Managing Wrong Answers
It is important to preserve the psychological safety of your learning environment when managing incorrect answers to your questions. Learner engagement, participation, and ultimately satisfaction with the conference will depend on a positive learning environment where it is acceptable – indeed, encouraged – to stretch past one’s comfort zone. Furthermore, wrong answers often are a source of great learning. The job of the facilitator is to turn wrong answers
into positive learning points and ensure that the group does not walk away with an incorrect association.

Broadly speaking, the best way to do this is by carefully choosing your words to acknowledge the difficulty of the question, identifying a learning opportunity, unloading the negative feelings associated with giving a wrong answer (potentially putting them on yourself), and redirecting attention towards the learning point.

Example:

**Chief Resident:** Ok guys, so we see here that the initial labs show AST and ALT both in the 5,000 range. I'll throw it out to the room: does anyone have a framework for thinking about transaminases in the thousands?

**Isaac the Intern:** I think that we need to think about alcoholic hepatitis in this case.

**Chief Resident:** Isaac, I’m really glad you mention alcoholic hepatitis here. Because alcoholic liver disease is so common, with so many manifestations, it is always important to consider. The transaminase ranges are always tricky to remember, but alcoholic hepatitis is not a disease I associate with AST/ALT in the thousands. This is a great learning point! Let’s take a minute to poll the room: who here has recently taken care of someone with acute alc-hep? (folks raise hands)…OK, Teja I’ll come to you: in the case you saw, what were the transaminases? (Teja answers “200”)…Exactly! This is one of my favorite pearls. Acute alcoholic hepatitis usually causes transaminases less than 300, and almost never higher than 500! If you see numbers higher than that, something else is going on. Great discussion, everyone. That was a pearl for all of us. Ok, so back to our framework for thinking through transaminase elevation…. The best way to respond to a wrong answer is to redirect the incorrect statement and use its own momentum to generate a teaching point. After that is done, you can move forward with the case.

**Miscellaneous Interruptions**

One of the issues that comes up from time to time is an interruption or distraction from something going on outside of the conference room. A code blue is called overhead. A fire alarm goes off. Building construction is happening next door. A wandering patient strolls into the room. Unless you have the good fortune of being at a program that holds pagers for conference attendees, pages will inevitably interrupt Morning Report and require residents to step out on a regular basis.

The key to dealing with these sorts of miscellaneous interruptions is to acknowledge that they are happening. Especially with an unscripted case, if half of the room runs out to attend a Code, you, as the facilitator, are not going to be able to keep going and pretending that nothing is going on.
Example:

**Overhead Communications:** Code Blue...Bldg 201...64-B...

**Chief Resident** (after pausing to let everyone hear the room number): Ok guys, is that anyone’s patient? Alright - go to it - let us know if you need any help....Ok so we were generating the differential for transaminases in the thousands...

Furthermore, if you as the Morning Report facilitator are called away to deal with something urgent, most senior residents or faculty members in attendance will be happy to fill in for you. As long as you react appropriately and calmly to most interruptions, the participants in the room will go with the flow.

---

**What to do when you don’t know the answer**

By definition, the unscripted case will be unknown to you. The uncertainty of the situation can be intimidating, and a common question is what to do if you are facilitating a case and don’t know an answer. In fact, there will be many moments when you don’t have the answer or the final diagnosis…and that’s okay!

**Remember that as a chief resident and Morning Report facilitator, your job is to stimulate discussion and learning. Your job is not to know everything.** Think back to what you enjoyed most about your chief residents during Morning Report. Was it their infinite knowledge? Or, did it have something to do with their ability to help people think through a case, collaborate, and solve a medical problem together? The sooner you come to recognize that your role lies in being a discussion facilitator rather than content expert, the more comfortable and liberated you and your conferences will become.

That said, it helpful to think about how you will proceed when tackling the unknown. Here are a few strategies:

**Demonstrate humility**

As chief resident, residents and medical students look up to you. Trainees will often assume you possess a level of medical knowledge that is beyond their reach. What better opportunity to demonstrate humility than to say you don’t know the answer when such a circumstance comes up? Acknowledging gaps in your own knowledge is a powerful way to reassure learners that even people they admire don’t know it all. Such acts of humility can also encourage learners to answer a question when they are not 100% sure. A simple “that’s a great question. I don’t know the answer.” Or, “I have never seen this problem or issue before, does anyone else in the room have an approach?” can do wonders.

**Use the collective knowledge of your audience**

Ask audience members their thoughts and approach. The collective knowledge and experience of the room is undoubtedly greater than that of any individual. If asked in a non-threatening way, your audience will often be ready to jump in. Examples how to do so include: “has anyone in the
room seen a case like this before?” or “That’s a great question, I actually don’t know the answer. Does anyone in the room have an idea?”

Use your attendings/specialists/experts
It is always best to direct questions to learners first. However, if you are feeling stumped, it can help to turn to attendings in the audience. They can be a great resource!

Look it up and bring back to the group
If a question comes up and you don’t know the answer, consider researching the answer after conference and reporting back to the group the following day. Not only will learners appreciate the extra effort to teach, they will also grow comfortable leaving questions to be addressed at a later time. We recommend using a section of the whiteboard to list questions to be researched later, or assigning the task of keeping track of these topics to someone in the audience. If you don’t have a system for keeping track, it becomes much too easy to forget what you said you were planning to do.

Teach to what you do know
With impromptu case facilitation, you will generally begin the case not knowing where it will lead. That is okay! As we have said before, there is great value in talking and teaching about the process. As you guide the audience through a case, feel free to stop and making teaching points about the areas where you are most comfortable. You are in control!

Consider this example: when reviewing the labs, the group learns that the patient’s serum sodium level is 127. At that time, you may not know whether the hyponatremia plays a significant role in the case, but you can still stop and teach to it! You might pause and ask, “What would you think if the sodium level doesn’t change, even after a liter of normal saline?” and go on to lead a discussion about hyponatremia. As the facilitator, you have the ability to select teaching points that work best for you. Even if it turns out that the sodium level normalized after that bolus, you still taught a useful approach to a common clinical problem.

Assign someone to look up the answer
You may hate that everyone in conference has a phone or tablet out at conference and is replying to emails, writing notes, or possibly doing online shopping in the middle of Morning Report. But why not use this to your advantage? Assign a knowledge-based question to someone in the room to look up. A quick search on PubMed or another resource may quickly find the answer you were looking for. If particularly useful, ask the audience member to share how he went about researching the question; sometimes teaching a search strategy is more useful than the answer itself.

Use your co-chief
If you are at a residency program with more than one chief resident per site, consider partnering with your co-chief to facilitate the session. Ask your co-chief to join for conference and bring a computer. When questions come up to which you don’t know the answer (e.g. does drug X cause this pattern of injury on CT scan?), have your co-chief look up the answer while the case
moves forward. During an opportune time, your co-chief can chime in with whatever information she found.

Feedback
Although your skill and comfort with unscripted cases will grow with every conference you facilitate, external feedback can have a tremendous impact on your development and we encourage you to seek it out in advance. No matter whom you approach for feedback (a mentor, program director, co-chief resident, conference attendee), be sure to give that person specific skills to watch for. The more specific your request, the better the feedback you will receive. The following section describes key areas of impromptu case facilitation and ways to focus evaluation.

Control of session: Did the conference start on time? Did you ascertain the focus (diagnostic vs therapeutic dilemma) from the outset? Were there parts to the case that could have been cut? Were there useful and fruitful discussions that you cut short? Were there ways you could help direct the resident presenter to help move the case along? Did you allow sufficient time for closing the case? Did you end on time?

Showstoppers: What were the non-productive interruptions to the case? Were there people (including attendings) that dominated the discussion? How did you respond? How might you better be able to redirect the conversation to the learners? Were there parts of the room (for example, the back) where people are less engaged or entirely disengaged? How did you respond to a resident struggling to answer a question or answering incorrectly? How did you respond to an attending who went badly off script?

Whiteboard as teaching instrument: Was your writing on the board legible? Was the text visible even from the furthest seat in the room? Could someone who walks into the conference late still be able to catch up or follow the flow of the case by reading the board? If not, what could be left unwritten to not crowd the board without losing meaning? Did the board permit you to summarize the key elements or teaching points of the case?

Morning Report Pearl
Take photos of your board, review the photos after each session, and decide what you might try differently next time. Since many topics recur frequently, with feedback and practice, board usage can improve dramatically.

The art of the great question: Did you ask questions to the appropriate level of learner? Did your questions stimulate critical thinking or did they force the trainee to “guess what I’m thinking?” Which questions came across as intimidating and how might they be made less so?
**Emphasizing clinical reasoning:** How often did you ask questions about facts vs. questions about thought process? How successful were you in building a differential diagnosis? How might you re-word your questions to prompt trainees to elaborate their clinical reasoning?

**Synthesis:** Was sufficient time allotted to synthesize the case? Which 2-3 points did you highlight (or even better, ask the learners to highlight) as key takeaways? In retrospect, are those the main teaching points from the case? How were these key points captured? Did you or should you have paused at any mid-point through the case to offer or ask for a summary statement, redirect if necessary, or adjust for the clock?

**Acknowledgements**
We would like to thank the countless mentors, attendings, residents, and medical students who have taught, guided, and inspired us over the years and fostered our love of Morning Report.

We are particularly indebted to the following people whom we wish to personally acknowledge: Dr. Gurpreet Dhaliwal, for his mentorship, generosity of time, and thoughtful feedback – without his editorial help this guide would have been twice as long and half as good. Dr. Read Pierce, whose patience, mentorship, and encouragement aided in the creation of this guide and workshop. Dr. Lawrence Tierney, Jr., whose love for medicine and Morning Report is second to none and an inspiration to us all. Dr. John Sheffield, who dutifully sat through innumerable Morning Reports to offer tangible feedback. Dr. Brad Sharpe, who, among many other lessons, taught us about and gave permission to share his framework and lessons on how to ask great questions. Not least, we wish to thank our patients, who inspire us on a daily basis.