

Developing a Blueprint for Morning Report

In this chapter, you will learn:

- Different [formats](#) and audiences for morning report.
- Time management and suggestions for achieving ideal [participation](#) at morning report.
- [Topic selection](#) and methods to ensure preparation for morning report.

Morning report is considered by many to be the cornerstone of medical education in internal medicine residency programs. This educational conference can take many forms and can cover a multitude of different topics and curricular elements. A wide variety of approaches to morning report exist, in both inpatient and outpatient settings. In this chapter, options for format, attendance, and structure are discussed.

Inpatient Morning Report Formats

Most chief residents will inherit a morning report format from their predecessors. One of the advantages of being a chief resident is the ability to evaluate existing medical education venues and adapt them to program and learner needs. This section addresses several different format options. Each of these should be adapted to meet the needs of individual programs.

Resident/Medical Student Morning Report—Case-Based Sessions

The “Resident Morning Report” is attended by residents, medical students, and the chief resident. It is typically centered on a chief resident-selected case that another resident admitted to the service a day or two prior. The resident presents the case as it developed for him or her, and the group is given a chance to ask questions and clarify the history, exam, and laboratory findings. After the case presentation and discussion, the chief resident highlights additional teaching points raised by the case and facilitates a short topic review related to an aspect of the case.

Ideally, this review would be completed beforehand (options include a few PowerPoint slides, a single-sheet handout, or some points written on the board) so that the chief resident can choose teaching points he or she feels are relevant. A willingness to modify the goals “on the fly” is imperative if the case goes in a different direction than anticipated. Closing with two or three key “take-home points” helps cement the learning goals for each session. During the session, the chief resident can reference data from pertinent review articles or randomized controlled trials to incorporate evidence from the medical literature. Articles can then be provided to the residents in portable document format (PDF). An academically rigorous morning report uses evidence-based medicine principles. The presenter should be clear about the evidence available and the evidence he or she is using.

The goals of the cases can be varied. A case can be geared toward history-taking, physical exam, diagnostic tests, therapy, or anything the chief resident feels is appropriate for the learning cycle of the other residents. Typically, faculty members are not present at this morning report. With no faculty presence, physicians-in-training are able to have more free and open discussions.

Resident/Medical Student Morning Report—Skills Sessions

It is useful to complement case-based morning reports with sessions that focus on skill development. Sessions may involve skills vital to the residency, such as reading EKGs, interpreting urinalysis results, and illustrating dermatologic manifestations of disease (see **Figure**). These also may include case-centered sessions on communication, such as training on end-of-life care discussions with patients and family members. Chief residents should consider building systems-based practice sessions in which residents troubleshoot problems that occur on the hospital service. Other topics could include health care financing and different systems of health care reimbursement. Finally, Jeopardy-style conferences drawing questions from topics discussed during the rotation can be a fun and effective way of ensuring retention of key learning points as well as rewarding those who actively engage in morning report.

Figure
Sample Skill Sessions for Resident-Only Morning Report

Topic	Approach
Effective sign-out	Distribute incomplete sign-out sheets illustrating how missing information can affect patient care. Use scenarios in which nursing contacts on-call team, who must make decisions based on incomplete sign-out information (e.g., missing code status, allergies, medication lists, active problems, etc).
PFTs, EKGs, ABGs, LFTs, CXRs, AXRs	Analyze actual patient studies as a group, illustrating common findings and key teaching points. Each study type can easily fill a full morning report session.
Peripheral blood smears	PowerPoint slides of important blood smear findings can lead to group discussions of the relevant disorders.
Wound care	Invite wound care specialists (e.g., nursing) to facilitate group discussion of common themes in wound care.
Breaking bad news	Role play scenarios as guide to effective communication: the overly technical and overly “touchy-feely” styles are entertaining, and discussing how to handle interruptions such as being paged is of great practical use.
Addressing code status	Role play patient scenarios; emphasizing the importance of addressing code status for all patients.

Senior Resident Morning Report

At some institutions, the senior medical residents have their own, separate morning report. These residents have a separate report facilitated by one of several generalist faculty members highly skilled in medical education. The focus of “Senior Morning Report” is the development of teaching skills, largely based on the Stanford Faculty Development Center teaching curriculum. After being taught the key principles of adult learning theory, the senior residents put them into practice with case-based sessions in which they practice leading the group discussion regarding cases and issues from their own team’s patients. The senior residents build an environment in which they can safely share ideas and problems with one another to help decide on a course of action, thus promoting reflective, team-based patient care. Short presentations with emphasis on the decision-making process rather than case presentation or differential diagnosis encourages the most group involvement. These practice sessions provide the senior residents with the skill set to lead other morning report sessions on their own. Each practice case involves time for feedback and brainstorming with regard to effective teaching strategies.

Combined Morning Report

An alternative structure to separate junior resident/medical student and senior resident morning reports is team-based or “combined” morning report. This structure involves the teams as a whole: medical students, residents, and faculty. Sessions are led by the senior medical residents, who choose the case and discussion topic. The senior resident meets with a chief resident the afternoon prior to the assigned morning report to discuss the teaching and learning goals for the session as well as to select the most effective and creative format for the session. The chief resident also helps the senior resident identify the most relevant and contemporary medical evidence to incorporate into the discussion. This evidence can then be referenced during the session and later provided to the residents by email. The chief resident’s role is two-fold: a) to serve as an architect for the learning session beforehand, and b) to help facilitate discussion while maintaining a sense of direction during the session itself. There are several advantages of this system. It allows the senior medical resident to gain experience leading and facilitating small groups, stimulating creative approaches to teaching. It also allows for more in-depth discussion of cases because those caring for the patient are all present, allowing collaborative case discussion. Session topics tend to be a bit more diverse because they often involve management and disposition issues integrated with diagnostic dilemmas. As an inherently discussion-based learning setting, this format encourages a shift from passive to active learning. Faculty members are encouraged to attend sessions in this format, and often the residents draw from the faculty members experiences in the “real world” to better understand the thinking process and decision-making that occurs regularly in medical practice. The chief residents debrief with core medical education faculty following each combined morning report session for 10-15 minutes. The goal of this debriefing is to enable the chief resident to provide constructive

feedback to the senior resident who led the session and to help the chief residents grow in their own group facilitation skills.

Outpatient Morning Report

In addition to the inpatient morning reports, many institutions have a morning report for residents on ambulatory clinic rotations. This provides a complement to the outpatient curricula and gives the residents a chance to reflect on cases in more detail than might otherwise be possible during a hectic clinic schedule. Sessions can be led by a senior resident or chief resident. Sessions typically include skills training (such as a review of the shoulder exam), patient-based sessions in which a patient agrees to be interviewed and examined, case-based discussions, and literature reviews in a journal club format. Supervising faculty members may be helpful in a consultative role. Session leaders should receive feedback (such as written evaluations or face-to-face discussions) for their sessions from the other residents and from the faculty participants.

Morning Report Participants

There are several different formats for morning report, with each format incorporating a different combination of participants. Each format has unique advantages and disadvantages to the varying participants. Many morning report sessions are directed at senior residents, with or without faculty attendance. This may allow higher-level discussions because less time is required for differential diagnosis construction or basic history-taking. There is also concern that senior residents may feel inhibited by the presence of more junior learners. Senior residents may have difficulty in moving away from the comfort of lecture-based teaching that they themselves often rate poorly. Additionally, junior residents may feel intimidated by the greater knowledge and experience of senior residents and faculty.

While these concerns are legitimate, they should be balanced against the potential benefits of including residents and medical students in morning report. In a resident-only morning report, residents can develop a collective *esprit de corps* under the less intimidating guidance of the chief residents, while building their knowledge base and confidence with the new and intense demands of clinical medicine. When morning report includes learners across all levels, junior learners are exposed to a different dimension of clinical decision-making and residents and students are eager to share in these more advanced discussions. This presents an excellent opportunity for senior residents to refine their teaching skills as well.

Faculty attendance at morning report is often controversial. Concerns regarding faculty-dominated discussion sometimes dissuade faculty inclusion, although faculty members are uniquely positioned to provide teaching pearls derived from years of experience. If the chief residents who facilitate morning report are empowered to fully realize this role and faculty

are mentored to clearly understand their desired role, faculty can be valuable participants at morning report. It must be remembered, however, that the goal of morning report is to educate each and every participant, and no one group's needs should diminish the value of the conference to another. Continuous evaluation of the sessions is necessary and frequent adjustments may need to be made.

Morning Report Structure and Topic Selection

Verbal interactions in morning report are often centered upon low-level factual information rather than synthesis of data and values. This, combined with a lecture-based format, can lead to purely passive learning. In contrast to this, developing an open forum for a wide range of issues provides an opportunity for both substantive discussions of traditional topics, such as medical diagnosis and management, and current topics, such as medical ethics. Therefore, a flexible structure that promotes full engagement by all participants is recommended. Residents indicate that they prefer facilitated, interactive discussions that utilize open-ended questions rather than purely didactic sessions; learner-centered techniques designed to promote active learning can be particularly dynamic and stimulating.

Case selection can be managed in several ways. Pre-selected cases allow preparation by the group leader and facilitators, but are not necessary for group discussion to be energetic. In general, it is helpful for at least one member of the group to be accountable for opening the discussion, a role which does not require significant preparation. The needs of individual groups will dictate which style is most useful at a given institution, but a less structured format may encourage more discussion and interaction among group members.

Whether one case or several cases are discussed, or whether cases are drawn from the previous admission night or earlier, will also depend on the needs of the individual group and may be addressed differently by different programs. As long as the goal of providing high-yield educational value is met, nearly any structure can be effective.

Troubleshooting

Attendance

Attendance is often a challenge at resident conferences. Attendance can be encouraged by making the conferences highly relevant to clinical practice and by including vital skill-building sessions. When turnout slumps, inquire first with the senior residents to determine the barriers for their junior residents' attendance, and make adjustments to facilitate attendance. Offering breakfast at morning report also helps improve attendance.

Attendance is usually less of an issue than tardiness. The chief resident should make a point of starting morning report on time every day regardless of on-time attendance. One technique is to start report with a *Medical Knowledge Self-Assessment Program for Students* question or interesting radiology film, yielding two or three quick pearls in the first few minutes. This way, arriving on time has its own educational value while the case presentation is not derailed by those who arrive late. Because some late arrivals are inevitable, having the basics of the case outlined on a chalk or white board allows the later arrivals to quickly get up to speed with the case and participate.

Resident Case Presentations

Early in the year, it is especially difficult for medical students and junior residents to present cases succinctly in a way that brings the group quickly to the learning points. Spend time during the afternoon prior to the morning report reading about the case and discussing the case with the presenters. The morning the case is presented, meet with the presenting resident 15 minutes before start time to review the plan and anticipated teaching points again. Residents often need coaching to adapt their presentation to the goals of the session: a session devoted to construction of a differential diagnosis needs to avoid giving away the case too soon, while a session on treatment options may need to provide the diagnosis at the beginning of the session to allow time for the desired discussion to occur.

Time Management

Time management is critical; strive to begin and end morning report sessions on time. Determining the goals of each session in advance with the group leader can be very helpful. Aiming to finish five minutes early also allows time for unanswered questions and summarizing key learning points.

A common tendency is to spend excessive time on building the differential diagnosis when this is not the goal of the session. It is often helpful for the chief resident to state the top one or two diagnosis and ask for other likely diagnoses. While being too judgmental of residents' answers will discourage participation, it is often helpful to use unusual, unexpected, or incorrect answers as a learning point for the group. As an example, "It is our experience that a dissecting abdominal aortic aneurysm seems equally likely to be offered as a potential diagnosis for patients who are 18 or 80 years old." Helping to build the characteristics of the patient into the likely differential diagnosis must be one of the chief resident's teaching goals. For example, "Yes, it is always helpful to keep in mind those diagnoses that can be life threatening. Are there any characteristics of this patient that make this diagnosis more or less likely?" To allow this type of valuable discussion, extra time must be built into each morning report session.

Resident Under-Participation

Nothing is more frightening than a case-based morning report without audience participation. Here are some steps to diagnosing and treating this problem:

1. Ask yourself if the residents feel safe participating in the morning report conference. Often, a fear of “looking dumb” will prevent participation. Do what you can at the beginning to set up the expectation that there are no dumb answers or questions—only learning opportunities. This can be role-modeled by asking questions that identify you as a learner and peer rather than a source of boundless knowledge.
2. Ask “what am I thinking” questions. Residents can only answer questions that they can understand. Try to solicit feedback on your question, asking “Does my question make sense?” If not, try to rephrase it. Questions that ask “how,” “what,” “when,” or “why” are often the best precipitants of group discussion. It is helpful for the senior residents to script their questions to the group ahead of time, since the pressure of performing in front of a group can lead presenters to resort to poorly phrased questions that leave the group confused about what is being asked.
3. Choose a room conducive to participation. Facilitate face-to-face discussion among the entire group, such as a small group format around a round table.
4. Wait long enough for answers. Some experienced teachers recommend counting to ten while waiting for an answer. Others recommend waiting for a response no matter how long it takes. Either way, make sure you are allowing learners ample time to process your question and think about an answer.
5. Avoid rescuing your learners with the “right” answer. If they know you will provide the correct answer in the end no matter what they say, then they may be waiting for you to reveal the answer. This is passive learning, and is generally less engaging and less productive.
6. Are your questions too hard (or too easy)? Make sure you are targeting the correct learner level. In a multiple learner-level morning report, questions may need to target different levels, to keep all groups engaged.
7. Try small-group teaching techniques to get the group talking. Break up into pairs, groups of four, or sides of the room and let the residents process the information safely in a small group before bringing it back to the large group. Alternatively, you can distribute mini-assignments and let participants report back the next day.

Resident Over-Participation

Occasionally one resident may dominate discussion. This problem can be lessened by asking this resident to act as the case scribe or presenter, roles that open participation to the rest

of the group. The session leader can also actively solicit discussion from other participants in a more directed manner, without needing to call on people. If the problem persists, or involves a faculty member, it may be necessary to meet with the individual to provide more specific feedback. A statement of appreciation for their participation, coupled with a request that they work to engage their peers so that everyone can get involved, can be helpful and avoids alienating the individual. In this way, a problem can be molded into something beneficial to the group.

Stumping the Chief

Perhaps the only thing more dreaded by chief residents than silence is exposure of their own ignorance. Eventually one becomes comfortable with this, but here are some techniques that may help:

1. If you do not know the answer, redirect the question: “Great question. What do *you* think about that?”
2. Table the issue and bring back the answer the next day, or have someone else bring back the answer the next day: “I’m not sure, but I’ll find out.” Doing this can powerfully role model self-directed learning.
3. Quit worrying about looking deficient. Nobody knows everything and the ability to say “I don’t know” is an admirable trait of all skilled educators.

Conclusion

Several themes have been emphasized throughout this chapter:

1. Use a variety of formats to keep morning report fresh.
2. Consider your desired participant mix, and adapt your efforts to accommodate this mix.
3. Use open discussion-based sessions for dynamic learning. Lectures and PowerPoint presentations often drain the energy out of teaching sessions.
4. Evaluation and continuous quality improvement are essential. Frequently step back and assess whether morning report is meeting its goals and achieving its full potential. If not, make changes.
5. Be willing to experiment. Morning report is a time-honored tradition at many institutions, but even time-honored traditions can be improved.
6. Perhaps most importantly, have fun with morning report. An excellent morning report should generate its own energy, so make sure you enjoy the conference.

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Recommended Reading

1. Amin Z, Guajardo J, Wisniewski W, Bordage G, et al. Morning report: Focus and methods over the past three decades. *Acad Med.* 2000;75:S1-S5.
2. Gross CP, Donnelly GB, Reisman AB, Sepkowitz KA, et al. Resident expectations of morning report: A multi-institutional study. *Arch Intern Med.* 1999;159:1910-1914.
3. Parrino TA, Villanueva AG. The principles and practice of morning report. *J Amer Med Assoc.* 1986;256:730-733.
4. Ways M, Kroenke K, Umali J, Buchwald D. Morning report: A survey of resident attitudes. *Arch Intern Med.* 1995;155:1433-1437.

