

Tailoring Morning Reports to an Internal Medicine Residency in Qatar

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Abstract

Background Morning report, a case-based conference that allows learners and teachers to interact and discuss patient care, is a standard educational feature of internal residency programs, as well as some other specialties.

Objective Our intervention was aimed at enhancing the format for morning report in our internal medicine residency program in Doha, Qatar.

Intervention In July 2011, we performed a needs assessment of the 115 residents in our internal medicine residency program, using a questionnaire. Resident input was analyzed and prioritized using the percentage of residents who agreed with a given recommendation for improving morning report. We translated the input into interventions that enhanced the format and content, and improved environmental factors surrounding morning report. We resurveyed

residents using the questionnaire that was used for the needs assessment.

Results Key changes to the format for morning report included improving organization, adding variety to the content, enhancing case selection and the quality of presentations, and introducing patient safety and quality improvement topics into discussions. This led to a morning report format that is resident-driven, and resident-led, and that produces resident-focused learning and quality improvement activities.

Conclusions Our revised morning report format is a dynamic tool, and we will continue to tailor and modify it on an ongoing basis in response to participant feedback. We recommend a process of assessing and reassessing morning report for other programs that want to enhance resident interest and participation in clinical and safety-focused discussions.

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Introduction

Morning report is a traditional core teaching session in many internal medicine residency programs, as well as other specialties. It consists of a case-based conference that allows learners and teachers to interact and discuss patient care.¹ Learners present cases to a facilitator, who uses the information as a springboard for teaching clinical reasoning.² This allows residents to develop knowledge, clinical skills, and professional identity.¹ The format of morning report varies considerably among programs.^{3,4} A systematic review by McNeill et al⁵ found that morning report has a number of different aims, which makes it difficult to define a standard format, or to measure its contribution to resident education or patient care improvement. The authors recommended that programs should tailor the format of their morning report to their specific needs.⁵

Morning report in the internal medicine residency program at Hamad Medical Corporation, Doha, Qatar, is an important component of resident education. Sessions are

TABLE 1 SUMMARY OF THE PREINTERVENTION ASSESSMENT AND RECOMMENDATIONS		
Suggested Interventions	Learner Feedback, %	Translation Into Recommendation Level
Invitation of specialists from different subspecialties	96.5	A
Case management to be addressed with more details	92	A
Diagnostic workup, to be continued as content of discussion	79.1	A
Change the presentation from postadmission team to the second-day postadmission	67.0	A
Research methods and literature review to be added to the MR	62	A
Test and procedures, to be continued as content of discussion	60.9	A
Including review of board examinations (eg, MKSAP at the end of case presentation)	60.0	A
Reducing judgmental supervision	57.4	B
Disease process, to be continued as content of discussion	55.7	B
Reviewing second on-call duty challenging cases	48.7	B
Making the environment more stimulating	47.8	B
Providing more spacious room	47.8	B
Distribution of journal articles related to the case presented	47.8	B
Facilitators in the MR should remain attending physicians only	47	B
Improving interaction	47	B
Alternating days of stepwise presentation and bullets of history to focus on management	41.7	B
Medical ethics, to be added to the MR	40	B
Preventive medicine, to be added to the MR	40	B
Avoid repetition of cases presented	36.5	C
Instructor can be senior resident, specialist, or attending physician (alternating days)	36.5	C
Reducing the number of attending physicians in the MR	33.0	C
Distribution of handout of the case presented	31.3	C
Changing the MR from case presentation style to reviewing all postadmission cases	25.2	C

Abbreviations: MR, morning report; MKSAP, Medical Knowledge Self-Assessment Program.

held daily, excluding weekends. The format entails a detailed interactive case discussion of a patient admitted to the hospital, led by an attending physician, and lasts 45 minutes.

We developed an intervention to tailor morning report to meet the expectations of our residents, using resident feedback to institute refinements to the format and content of the sessions, with the aim of enhancing learner interest and attention.

Intervention

In July 2011 we surveyed 115 of the 117 residents in our internal medicine residency, asking for their suggestions for approaches to improve our morning report. We used this information to prioritize changes and conducted a follow-

up in October 2012. Residents’ responses were confidential. Two residents were on leave and did not complete the preintervention and postintervention questionnaires. The initial survey asked residents about their expectations for their daily morning report activities. The questionnaire was designed by the authors and field tested with 17 internal medicine fellows who had recently graduated from the program, as well as a panel of 3 experts in questionnaire design. Changes were made based on feedback from both groups.

The study was submitted to Hamad Medical Corporation Research Center and was declared “exempt” under Supreme Council of Health guidelines for exempt research.

The aim of the initial survey was to evaluate whether the current morning report format meets the expectations of our residents, and to collect their suggestion for changes

BOX INTERVENTIONS TO IMPROVE MORNING REPORT

1. Changes in the content of morning report increased the focus on disease process, diagnostic workup, evaluation of tests and procedures, and management plans. We now consistently include patient management plans, diagnostic workup, and a review of the literature in the discussions. In addition, instructions for the moderator ensure time is allocated to clinical management.
2. Selection of facilitators is now based on resident feedback. The sessions are moderated by attending physicians and less frequently by clinical fellows. We provided professional development for faculty on how to conduct morning report, using workshops provided by our medical education department.
3. Resident attendance and participation in morning report are closely monitored, and this information is included in residents' semiannual evaluation.
4. We no longer offer continuing medical education credits for consultants attending morning report, which has reduced the number of consultants, offering more opportunities for resident participation. Consultants and subspecialty clinical fellows are invited on a case-specific basis.
5. We changed the schedule of the team presenting at morning report from the postadmission day to the second postadmission day, giving the presenting team more time to prepare.
6. We added 1 to 2 board review questions (related to the case presented) to the case discussion.
7. Every Wednesday, we replace morning report with a presentation and discussion of 2 relevant journal articles, and we include clinical quality improvement topics in 1 morning report on alternating weeks.

to increase value to learners and learner interests. Residents' responses were collected and were analyzed in frequency tables using SPSS version 18 (IBM Corp). The aggregated recommendations are shown in TABLE 1, with level A indicating that more than 60% of the residents agreed with a recommendation, level B indicating 40% to 60% of residents agreed, and level C indicating agreement by less than 40% of the residents. Level A recommendations were considered to be high-priority interventions, whereas level B constituted recommendations that could be introduced on a discretionary basis.

In the needs assessment survey, 107 residents (93%) reported they had difficulty maintaining their interest in the concepts presented during morning report. Reported reasons

for disinterest related to room congestion, instructors and participating faculty acting in a fashion deemed judgmental that created barriers to resident participation, repetition of topics and case organization, and content. Residents reported that patient management plans were addressed in only 46.1% of case discussions. Our intervention sought to address all factors other than room congestion.

Tailoring Morning Report to the Learners' Needs

The data from the needs assessment were analyzed and translated into recommendations. Based on resident input, we made the changes shown in the BOX.

The style of the sessions was an attending physician-led detailed case discussion for 45 minutes. Faculty development for participating faculty focused on how to stimulate residents to participate more, and how to reduce behavior deemed "judgmental" by residents. Faculty were encouraged to adopt an active learning methodology that engages learners.⁶ In addition, careful selection of facilitators and invitation of specialists from different subspecialties to attend morning report according to the presented case have resulted in changes that have satisfied both residents and faculty. We also added 1 to 2 board review questions at the end of each case presentation, and included discussion of journal articles once a week to generate scientific discussions.

We recorded some morning report presentations to allow presenters to assess themselves and improve their presentation skills. To maintain continuous bidirectional feedback, we created a drop box at the end of the conference room to receive resident and faculty input about the format for morning report, and their suggestions to improve the educational process.

Postimplementation Survey

We implemented these interventions in the summer of 2011 and surveyed residents 1 year later to evaluate the impact,

TABLE 2 REASONS FOR ABSENTEEISM AND DISINTEREST IN THE MORNING REPORT PREINTERVENTION AND POSTINTERVENTION

Factors	Preintervention, No. (%)	Postintervention, No. (%)	P Value ^a
Instructor	51 (44.3)	32 (27.8)	.016
Organization	36 (31.3)	17 (14.8)	.008
Room congestion	55 (47.8)	76 (66.1)	.009
Repetition	42 (36.5)	27 (23.5)	.053
Case content	35 (30.4)	20 (17.4)	.028
Personal factors	3 (2.6)	0	

^a Chi-square (McNemar test).

with a focus on interest and participation in morning report after the modifications. In the needs assessment survey, residents had reported that factors that negatively affected their interest in participating in morning report included judgmental behavior by faculty, lack of stimulation, and lack of interaction. The intervention resulted in significant improvement in these areas (TABLE 2). In addition, residents responded to content changes that resulted in more fully achieving coverage of key clinical topics, including disease process (82.6%), diagnostic workup (96.5%), test and procedures (95.7%), management plan (81.7%), ethics (36.5%), prevention (33.9%), and research and literature (59.1%). Learners' interest was evaluated following the intervention; 77.7% of residents found morning report very interesting or just interesting, 23% did not appreciate any changes, and 1 resident did not consider it interesting.

Discussion

The prior format of our morning report was faculty centered, providing a unidirectional transfer of knowledge, with residents either functioning as passive listeners or being embarrassed in front of their peers by a judgmental facilitator. This format reduced residents' self-efficacy. Changing the format resulted in a significant increase in learning interest and acceptance of morning report. Professional development for faculty and reducing the number of attending physicians resulted in a change in residents' perception from an approach that scrutinized their knowledge to a more educational, nonjudgmental, stimulating, and interactive environment.

Concepts and principles of patient safety and quality improvement are a continuous and longstanding commitment, beginning with the first day of training. We believe the new, more open format of our morning report, and the environment it creates, may facilitate discussion of quality and safety problems and medical errors. Studies have shown that residents generally are hesitant to discuss mistakes with attending physicians because of their perceptions of the training environment (eg, judgmental attending physicians) and associated negative emotional responses.^{3,7} After the change, residents were actively engaged in interactive sessions that addressed patient safety and quality improvements. These sessions also enhance resident understanding of the principles of clinical care quality improvement, and this has inspired some residency graduates to become actively engaged as patient safety and quality improvement specialists in their practice. We do not

have any information on the clinical benefits of our new format. A single study assessed whether incorporating evidence-based medicine in morning report affected patient outcomes, and it found reduced length of stay and lower median hospital charges for patients whose cases had been discussed at morning report.⁸

Our study has limitations. First, the survey was mainly distributed to the residents and did not include attending or clinical fellows. Secondly, during the relatively long gap between the initial assessment and reassessment, factors other than our intervention could have affected residents' perception of morning report. Third, it is a single specialty, single site study, limiting generalizability. Finally, we faced some implementation challenges, such as resistance from some faculty who continued to want to attend morning report and take the lead in discussions.

We will continue to reassess our morning report format every 6 months by questionnaire as well as drop box feedback to assess the need for additional modifications.

Conclusion

Revisions to the morning report format in an internal medicine residency, based on a needs assessment and feedback from residents, transformed a lecture format with passive participation by residents into an active, engaging forum for residents to learn and discuss patient care-related topics, including topics related to the quality and safety of care. We recommend a process of assessing and reassessing morning report for other programs that want to enhance resident interest and participation in clinical and safety-focused discussions.

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