

# Can We Make Grand Rounds “Grand” Again?

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## Introduction

In many teaching institutions, grand rounds are a weekly educational activity and a time-honored tradition.<sup>1-7</sup> A 2006 article in the *New York Times* criticized grand rounds, noting “Socratic dialogue [has given way] to PowerPoint presentation” and “grand rounds are not so grand anymore.”<sup>8</sup> The literature also suggests that the relevance of grand rounds is declining.<sup>1,5,7,9-12</sup> With decreasing attendance and a format that is drastically different from its original design, some have proposed forgoing the term “grand rounds.”<sup>5,13,14</sup>

Several studies, surveys, and editorials have tried to explain the possible reasons for the declining relevance of grand rounds and identified different strategies to make them more effective, but to date no scholarly work has systematically aggregated this information. In this article, we review the history of grand rounds and how they evolved into the current state. We also identify problems with the current design and offer strategies for more effective grand rounds sessions.

To aggregate this information, we conducted a review of the literature on grand rounds, using Google (Scholar and Search) and PubMed. The initial search utilized the terms *grand rounds*, *origin*, and *history*. References of the articles obtained from this search were then searched to further study the topic, and studies on grand rounds from a range of specialties and subspecialties were included.

Ethical approval was waived by the Institutional Review Board at the State University of New York (SUNY) Upstate Medical University.

## Grand Rounds: The History

### Classic Grand Rounds

In the late 19th century, the Johns Hopkins Medical School, led by Sir William Osler, introduced bedside

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teaching as a new approach to clinical education.<sup>15,16</sup> Residents learned as faculty passed from patient to patient, explaining their methods of diagnosis and treatment.<sup>17</sup> Participation increased, and when these rounds moved from the bedside to an auditorium, the traditional approach to grand rounds was created.<sup>1,10,17-19</sup> It is not known who coined the term.

Traditional grand rounds were a “well-organized, decorous, stately, and punctual exercise” conducted by residents.<sup>9</sup> Patients were present during the resident’s presentation or immediately after.<sup>1,3,8,10</sup> Senior physicians questioned the patient and observed any physical findings demonstrated by the resident.<sup>1,3,10</sup> After the patient exited, his or her problems were discussed in what was described as a “free discussion between thinking men of widely different interests and experience” that instilled character and inspired future physicians.<sup>1-3,8,10,19</sup> The patient, the “theoretic focus of all clinic activity,” remained the principal topic.<sup>1</sup>

### The Graying of Grand Rounds

The mid to late 20th century has been described as the “graying of grand rounds.”<sup>9</sup> Patients were no longer present, nor were they (or their attitudes, feelings, and social issues) the focus, as the diseases had taken precedence in the discussions.<sup>1,5,8,10,18,20</sup> This paradigm shift was noted in several editorials and in a 1982 questionnaire of chief residents, which found that patients were rarely or never present at grand rounds in 78% of institutions.<sup>1</sup>

What prompted this change? One explanation is that some believed the classic approach to grand rounds could lead to erroneous or conflicting information.<sup>6</sup> Additionally, there was no evidence in the literature for the educational efficacy of grand rounds.<sup>21</sup> Opponents of grand rounds argued that a “short appearance of a patient at one end of the hall was not sufficient to let the learners exercise their 5 senses.”<sup>22</sup> Cases described were often rare and uncharacteristic of what affected most patients.<sup>19</sup> Other concerns related to patient participation. Having patients disrobe in the presence of an audience was thought to be unacceptable,<sup>23</sup> and some thought patients might be troubled by recounting their history and being examined in an auditorium.<sup>23</sup> Economic pressures may also have played a role, as patients presented at grand rounds had longer hospital stays.<sup>19,22</sup>

**BOX 1 REASONS CITED FOR DECLINING RELEVANCE OF GRAND ROUNDS AND POOR ATTENDANCE**

- Poor organization
- Presenter's poor teaching skills
- Lack of patient-centered focus
- Monotonous, boring sessions
- Busy schedules/interfere with commitments and clinical duties
- Declining relevance to subspecialty practice
- Unappealing subject
- Lack of participation by departmental leaders/faculty
- Little interaction between presenters and attendees
- Food consumption
- Lack of punctuality/improper decorum
- Interruptions by pagers/noise
- Inconvenient location
- Lack of seating at the auditorium
- Lack of parking around the auditorium

**BOX 2 OBJECTIVES OF GRAND ROUNDS**

- Provide updates in diagnosis and treatment
- Provide updates in medical research
- Promote collegiality among faculty
- Provide continuing medical education credit
- Educate residents and faculty
- Provide income and generate referrals
- Make departmental announcements
- Mentor residents
- Highlight expertise in the faculty
- Showcase the department to residency applicants

### Translational Seminars

In the late 20th century and the first decade of the 21st, grand rounds had become a forum for “translational” seminars about clinical advances and research.<sup>7,10,13,18,24,25</sup> In a 2003 survey, 95% of programs had shifted to a didactic format, and only 42% incorporated cases about half the time.<sup>18</sup> In the following section, we will explore the implications of these changes.

### Grand Rounds: The Issues

A 1978 editorial on grand rounds noted that neither the presenters nor the audience were punctual; attendees stood in the back, answered pages (described as an “acoustic distraction” and the “most erosive feature”), and expressed an “egalitarian disdain of courtesy” toward the presenter.<sup>9</sup> A 1988 study showed that only 40% of residents, 10% of faculty, and 44% of medical students attended greater than 60% of grand rounds,<sup>5</sup> and a 2001 study reported 45% of faculty physicians were absent from more than 50% of grand rounds, compared with 20% of residents and 21% of medical students.<sup>24</sup> Similar data were presented in a 2003 study.<sup>18</sup> Reasons cited for declining attendance are summarized in BOX 1.<sup>1-3,5-11,18-21,24,26-33</sup>

Grand rounds are also reported to be the most expensive type of conference in most academic departments; external speakers and complimentary food account for much of the cost,<sup>5,12,18,24,29</sup> while other costs include the time and opportunity costs for faculty attendees, which could be spent on compensated clinical activities.<sup>24</sup>

Support by pharmaceutical vendors may offset some of the financial burden of grand rounds; however, an inherent conflict occurs as content presented may be influenced by the company's interests.<sup>5,18,20,24</sup> Two studies found that attendees were more likely to prescribe a presented drug (regardless of expense) when a pharmaceutical company's employee presented at grand rounds.<sup>34,35</sup>

### Restoring the Grand in Grand Rounds

The Accreditation Council for Graduate Medical Education mandates that residents and faculty regularly attend didactic sessions and conferences.<sup>36</sup> BOX 2 summarizes the objectives of grand rounds. Education is the most important, but updates in diagnosis, treatment, and research have gained importance over the past 20 years.<sup>3,5,18,20,21,24,37,38</sup> Effective grand rounds should disseminate knowledge, change physician behavior, and improve patient outcomes.<sup>26-28,39</sup> In the next sections we suggest strategies to alleviate some of the barriers to conducting effective grand rounds.

### Planning

Poor planning and preparation are reported to be a big barrier, and experts recommend planning grand rounds content at least 1 year in advance.<sup>4,7,27,30,39</sup> A study at 1 institution found that careful planning improved attendance 39% over a 3-year period.<sup>30</sup>

**Understanding Adult Learning** Research on adult learning has shown that adult learners must feel the need to learn, participate actively in the learning process, and have a sense of progress toward their goals.<sup>40</sup> They also prefer to share in the responsibility for planning and organizing their learning experiences. Undergraduate medical education has adapted to adult learning principles in the form of problem-based learning.<sup>37</sup> Experts have suggested incorporating the principles of adult learning in preparing for grand rounds as the current format is mostly based on a pedagogic strategy and may have limited appeal to adult learners compared with other approaches.<sup>12,38,39</sup>

**Offering Continuing Medical Education Credit and Other Incentives** Most departments provide continuing medical education (CME) credit for attending grand rounds.<sup>5,18,24,30</sup> One study reported that half of the faculty used attendance at grand rounds for CME credit.<sup>30</sup> Yet studies have suggested that many grand rounds are not conducted in accordance with Accreditation Council for Continuing Medical Education criteria.<sup>18</sup> One study found that 16 grand rounds sessions at 1 institution minimally reflected accepted educational practices,<sup>26</sup> and another

showed that educational needs assessments, program evaluations, and knowledge assessments were used in only 73%, 59%, and 17% of departments, respectively.<sup>24</sup> Complimentary food can increase attendance at grand rounds.<sup>18,30,41</sup>

**Leadership** The role of departmental leaders has been emphasized in making grand rounds more effective as they can promote discussion, involve the audience, and insist on regular and punctual attendance.<sup>1,6,13,18,20,31,39</sup> Departmental leaders should take an active leadership role and minimize delegation to presenters who may be unable to make important educational decisions.<sup>4,28</sup>

In addition, department leaders should adopt policies that discourage scheduling of departmental meetings and other activities at the same time as grand rounds.<sup>7,30</sup> A multifaceted approach to publicity, such as e-mail announcements, flyers, brochures, and posters, may improve attendance.<sup>30</sup> Modern techniques, such as teleconferencing, DVDs, handouts, and web-based resources may expand the audience base beyond those able to attend in person.<sup>37,42-44</sup> Planning multiple brief talks, scheduling grand rounds less frequently, and finding suitable times are other strategies mentioned in the literature for enhancing attendance and interest in grand rounds.<sup>7,43,45</sup>

## Presentation

**Format** Lecture-based instructional formats have been the mainstay of education.<sup>46</sup> Lectures are a practical, relatively easy, and efficient method of disseminating information.<sup>7,24,44</sup> Recently, however, the value of this technique has been called into question. One study found that physicians were more likely to correctly answer questions, retain information, and change their practice behavior after interactive sessions as opposed to lectures.<sup>47</sup> A systematic review noted that mixed interactive and didactic education was more effective than interactive education alone.<sup>48</sup> Emphasis should be placed on tools and teaching styles that stimulate learners and make grand rounds more “crisp, lively, and interactive.”<sup>7,31</sup> Microburst teaching and learning is a suggested model based on adult learning theory; it recommends combining various teaching and learning styles in bursts to enhance the learning process and to address the potential variability in preferred learning style among learners.<sup>39,49</sup>

**Patient Participation** Patient participation was the norm in traditional grand rounds, and some have proposed reinstating a short appearance by a patient whose case is being discussed to emphasize the relevance of the topic and to demonstrate clinical teaching to residents.<sup>5,10,14,17,20</sup> Patients with a complicated illness may benefit from a second opinion in case of diagnostic doubt and may feel more involved in their care.<sup>50</sup> A study in which patients

attended and participated in clinical grand rounds showed that 91% felt relaxed and 62% believed the meeting was useful.<sup>23</sup> At minimum, grand rounds should focus on carefully selected clinical cases, and formal discussion should be intimately related.<sup>20,25</sup>

**Topics** Often, grand rounds topics are chosen by the presenters, who may select topics that are convenient, leading to learner dissatisfaction.<sup>18,20,21,24,26-28,39</sup> A needs assessment should help address this problem.<sup>30</sup> Needs assessments are an important part of curricular development that can help identify educational needs and guide the choice of grand rounds topics.<sup>14,24,30,39,42</sup> In the past decade, the number of departments conducting needs assessments to select grand rounds topics has increased.<sup>12,18,21,24</sup> Needs assessment was 1 of several strategies used at 1 institution to improve attendance at grand rounds, resulting in a 39% increase in attendance over 3 years.<sup>30</sup>

Grand rounds should summarize advances across a specialty and its subspecialties, help facilitate interaction among faculty members, and integrate different subspecialties.<sup>5,31,51</sup> Another novel way to integrate different specialties is to ask specialists what common errors in treatment are made by nonspecialists and conduct a grand rounds on these topics.<sup>14</sup>

**Attributes of the Presentation** An uninspired presenter often has a negative impact on an educational session.<sup>18,20,24,26-30</sup> Presenters should be selected based on their ability to hold the audience’s attention rather than their level of expertise. Where this strategy has been implemented, attendance at grand rounds has improved.<sup>4</sup> Frequently, presenters speak until the end of the grand rounds session.<sup>52</sup> Ending with an interactive question-and-answer session, however, allows active participation that may help listeners to assimilate new information and is consistent with adult learning theory.<sup>7,39,52</sup> In addition, some have suggested that, an “early stopping” rule should be upheld and at least 15 minutes should be reserved for discussion at the end of the session.<sup>20,52</sup> Shorter lectures would also better suit adult learners.<sup>52,53</sup>

**Evaluation** An important part of curricular development is the evaluation of both the content and the presenter of the grand rounds.<sup>4,39</sup> Research on evaluating lectures has led to recommendations that the evaluation encompass the lecture objectives and whether the lecture demonstrated thorough knowledge of the presenter, demonstrated clarity and organization, stimulated enthusiasm, had an appropriate level of depth and detail, included effective visuals and presentation style, was at least 25% interactive, established rapport with audience, and had an overall effectiveness.<sup>51</sup>

## Conclusion

The format and objectives of grand rounds and the expectations for what this type of lecture is intended to accomplish have changed since the inception of this approach to group teaching in medicine in the late 19th century, and these changes have paralleled changes in the practice of medicine. Despite the costs of these sessions and declines in attendance, most departments continue to support grand rounds. The strategies for restoring grand rounds proposed in our review may help clinical departments revitalize this once important approach for teaching and promoting professional development in medicine.

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