

# Improving feedback students receive on documentation during the obstetrics and gynecology clerkship

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**BACKGROUND:** Students need feedback on written documentation to optimize their long-term development of this important clinical skill. The culture in surgical specialties does not always prioritize feedback regarding this skill.

**OBJECTIVE:** This study aimed to examine the effectiveness of 2 specific forms to improve the quantity and quality of feedback to students about their medical documentation.

**STUDY DESIGN:** In a multiphase quality improvement project, medical students were surveyed after the obstetrics and gynecology clerkship regarding their experience of receiving feedback on written notes. The proportions of students who received feedback on notes and those rating the feedback as meaningful were measured before and after the implementation of a required, formative feedback card. In phase 2, students were randomized to use a simplified feedback card or the original detailed card, and outcomes were compared. This study was conducted at the Medical University of South Carolina, a tertiary care academic medical center. The participants included third-year medical students that completed their 6-week obstetrics and gynecology clerkship.

**RESULTS:** Before the intervention, of 82 students, 70 (85%) and 55 (67%) received feedback on written notes in the inpatient and outpatient settings, respectively, which increased to 99.6% (254/255) and 98.5% (251/255) (P<.001) after the implementation of any feedback card. Moreover, the proportion of students who felt the feedback helped them improve their clinical documentation skills increased from 72% to 90% (P<.001) with the use of a feedback card. These improvements were noted in all clinical units within the clerkship. There was no difference (P=.3) in outcomes between the simplified and detailed cards.

**CONCLUSION:** A formative card is a simple, cost-effective, low-resource intervention that can increase both the quantity and quality of written note feedback that students receive during their obstetrics and gynecology clerkship. A less detailed card achieved comparable outcomes and increased faculty satisfaction.

Key words: electronic health record, entrustable professional activity, medical student, subjective, objective, assessment, and plan note, reviewer cards

T he documentation of patient encounters in the medical record is the most widely employed mode of

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communication among physicians and healthcare teams. The Association of American Medical Colleges expects medical students to effectively document clinical encounters before graduation; this skill is a core entrustable professional activity for entering residency.<sup>1</sup> Similarly, effective written communication, including documentation in medical records, is an essential requirement as defined by the Institute for International Medical Education and Medical Education in Europe.<sup>2,3</sup> Feedback is necessary for students to develop this skill, and critique of written notes has been associated with medical students' perception of high-quality teaching.<sup>4,5</sup> Furthermore, it promotes reflection on the clinical encounter and a sense of involvement in caring for patients.<sup>6</sup>

Rapid and widespread adoption of the electronic health record (EHR) and its regulations have limited the use of student documentation and created impediments to frequent review of student notes.<sup>7</sup> A recent profile of international health systems described 20 countries in 4 continents that have adopted EHRs.<sup>8</sup> Many institutions have restrictions, such as read-only access, that limit medical student interactions with the EHR.<sup>9,10</sup> When surveyed, most US medical students reported infrequent receipt of feedback on their notes; furthermore, two-thirds of students reported that attendings rarely or never read their notes.<sup>11</sup>

We hypothesized that the implementation of a formative feedback card would increase the proportion of students in the obstetrics and gynecology clerkship who received feedback on notes written in the EHR. Furthermore, we predicted that the number of students who rated the feedback as meaningful would increase.

## **Materials and Methods**

This was a 2-year, multiphase, quality improvement project in the Department of Obstetrics and Gynecology at the

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#### Why was this study conducted?

Effective documentation of clinical encounters is a core skill that medical students need to acquire before entering residency. Medical students often receive little to no feedback on their written documentation.

## Key findings

The implementation of a required formative feedback card substantially increased the proportion of students in the obstetrics and gynecology clerkship who received feedback on written documentation in the electronic health record. . The simplified feedback card achieved comparable outcomes with the detailed feedback card. The simplified card was associated with increased faculty satisfaction and no change in the student's perceived value.

## What does this add to what is known?

This study has presented 2 novel feedback cards that could be adapted for use by other educators. This study illustrated that a simple intervention can be implemented with minimal cost and resources to improve the frequency of feedback on written documentation and the perceived value of the feedback.

Medical University of South Carolina (MUSC). This project was deemed exempt by the institutional review board. At the end of their 6-week obstetrics and gynecology clerkship, third-year medical students at MUSC were anonymously surveyed regarding their experience with EHR documentation, specifically the quantity and quality of feedback received. Before the intervention, students in 4 consecutive clerkship blocks were surveyed.

In phase 1 of the study, we implemented a required, formative feedback card guiding preceptors to provide feedback in multiple domains related to student documentation (Figure 1). This detailed card included guidance for students in writing and preceptors in evalsubjective, objective, uating the assessment, and plan sections of a written progress note. The detailed card addressed the inclusion of pertinent information, organization, conciseness, and elements of clinical reasoning. Students were required to have 11 notes formally reviewed per the feedback card. The number of evaluations was proportional to the time spent and continuity with preceptors in each clinical setting. Moreover, the survey was administered to students after their clerkship to assess receipt of feedback and perceived impact of feedback on their documentation skills.

After phase 1, we conducted informal student and faculty input sessions, which informed the development of a simplified feedback card that recorded the occurrence of feedback without directing feedback to specific domains (Figure 2). During phase 2 of the study, clerkship blocks were randomized to use either the original detailed feedback card or the updated simplified feedback card. All students in a given clerkship block were required to use the card for which their block had been randomized. All students were asked to complete the same survey questions about the frequency and value of the feedback received.

The outcomes of interest in our project were the proportion of students stating that they received feedback on written documentation in each inpatient and outpatient setting, the proportion of students who agreed or strongly agreed that the feedback was helpful in skill development, and any differences by setting or by formative card. Descriptive statistics regarding the setting data was generated with Excel 2016. Frequencies were compared with a chi-square test, and data were analyzed using SAS (version 9.4; SAS Institute, Cary, NC) with statistical correlations indicated by P<.05 within each phase.

#### Results

The preintervention survey response rate was 98.7% (82/83). The postintervention

survey completion rate was 99.2% (255/ 257). Of note, 1 additional respondent completed only the rotation-specific questions in the postintervention survey (n=256). Before the intervention, of 82 students, 70 (85%) and 55 (67%) received feedback on written notes in the inpatient and outpatient settings, respectively, which increased to 99.6% (254/ 255) and 98.5% (251/255) (P<.001) after the implementation of any feedback card (Figure 3). Furthermore, the proportion of students who felt the feedback helped them improve their clinical documentation skills increased from 72% to 90% (P < .001) with the use of either formative feedback card compared with baseline (Figure 4).

Before the intervention, students received the least feedback in faculty (48% of students received feedback) and resident (44% of students received feedback) ambulatory clinics and inpatient benign gynecology (44% of students received feedback) (Figure 5). After the implementation of the original detailed card in phase 1 and the simplified card in phase 2, feedback on written documentation increased in all settings. The greatest improvement occurred in outpatient clinics and in the benign gynecology inpatient service.

There was no significant difference in feedback between those randomized to the detailed card and those randomized to the simplified card (Table 1). Similarly, the proportion of students who agreed that the feedback was helpful in skill development was also comparable. Of note, 91% of students found the feedback meaningful when the detailed card was used compared with 92% of students using the simplified card (P=.3).

After phase 2, a faculty feedback session yielded comments about each card, indicating a preference for the simplified feedback card. The themes of faculty feedback included an appreciation for card brevity, although some faculty members used the detailed card as a template for reviewing notes (Table 2).

#### **Principal Findings**

We found that the implementation of a required formative feedback card substantially increased the proportion of

### FIGURE 1 Original feedback card used in phase 1

## SOAP Note Review (to be completed by faculty members and residents)

Student Name:											
	Faculty Clinic		Resident Clinic			L&D	PP	AP	Gyn	Onc	
	1	2	3	1	2	3					
Subjective											
Pertinent and complete details related to chief complaint/ reason for admission											
Information is organized											
Information is concise & redundancy is minimized											
Includes only subjective information											
Objective											
Vitals, Ins & Outs (if applicable)											
Focused physical exam											
Results of new & pertinent labs/imaging											
Avoids outdated or superfluous content											
Information is organized											
Includes only objective information											
Assessment/Problem List & Plan											
Includes all abnormals from S & O sections as problems											
Each problem has an assessment/differential											
Each problem has a plan											
Includes a follow-up or dispo plan											
Note is original											
Evaluator Initials											

Students were required to have at least 1 note formally reviewed on each inpatient rotation and 6 notes in the ambulatory setting. SOAP, subjective, objective, assessment, and plan. Wagoner. Improving feedback medical students receive on documentation. Am J Obstet Gynecol Glob Rep 2022.

students in the obstetrics and gynecology clerkship who received feedback on written documentation in the EHR. We hypothesized that students' perceived value of the feedback would be higher for the detailed card; however, students reported the simplified card to be as valuable to the development of their documentation skills as the detailed card. This suggests that the value of the card rests in prompting the feedback interaction rather than guiding the discussion. Overall, faculty satisfaction was higher with the simplified card.

## Strengths and Limitations

Our findings may not be generalizable to all education settings, although we anticipate that many international academic centers will have clerkships that are structured similarly to ours. A limitation of our project was that although

## FIGURE 2 Simplified feedback card used in phase 2

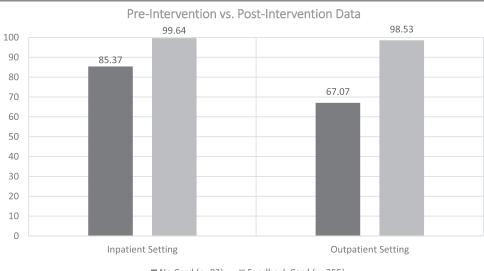
Student Name:

SOAP Note Review (to be completed by faculty members and residents)

	Fa	Faculty Clinic		Resident Clinic			L&D	РР	AP	Gyn	Onc
	1	2	3	1	2	3	Lab			O J II	One
Note was written and reviewed											
Evaluator Initials											

SOAP, subjective, objective, assessment, and plan. Wagoner. Improving feedback medical students receive on documentation. Am J Obstet Gynecol Glob Rep 2022.





■ No Card (n=82) ■ Feedback Card (n=255) Wagoner. Improving feedback medical students receive on documentation. Am J Obstet Gynecol Glob Rep 2022.

each phase involved new students that were previously unexposed to the previous feedback framework, the same resident and faculty preceptors were involved in all phases. Thus, we were unable to identify if preceptor use of the detailed framework for feedback persisted when using the simplified cards.

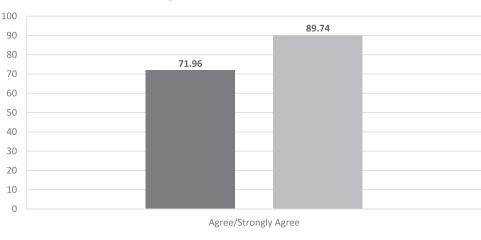
If we started with the simplified card and then transitioned to the detailed card, it is possible that our findings would have differed.

## **Results in Context**

The obstetrics and gynecology clerkship presents unique challenges to student

documentation, including high acuity and volume of patients, experiences in various settings that may use different EHR platforms (labor and delivery, operating room, and outpatient), and regulatory concerns.<sup>12</sup> EHR use is becoming more widespread globally and presents barriers to medical student documentation.8 A

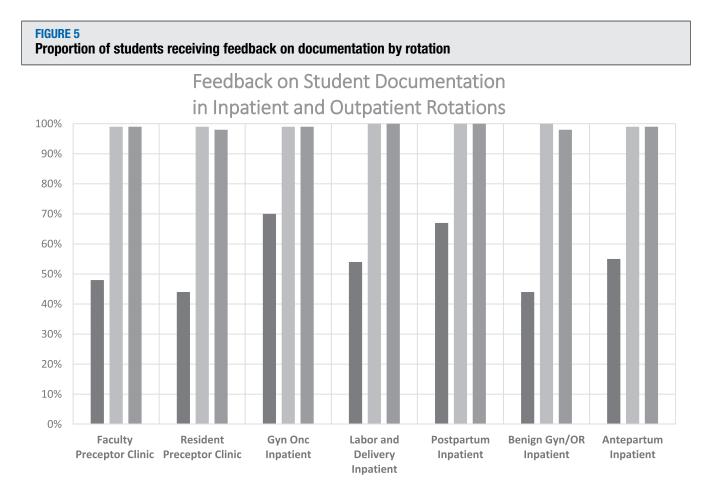




## Increasing Clinical Documentation Skills

No Card (n=82) Feedback Card (n=255)

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■ No Card (n=82) ■ Detailed Card (n=97) ■ Simplified Card (n=159) Wagoner. Improving feedback medical students receive on documentation. Am J Obstet Gynecol Glob Rep 2022.

recent survey of 19,546 US medical students found that only 58% percent of medical students entered an inpatient progress note into the EHR during their obstetrics and gynecology clerkship.<sup>13</sup> However, recent US regulatory changes that permit student documentation to be used in provider documentation for billed services may increase student documentation.

## Conclusion

Our findings illustrated a simple intervention that can be implemented with minimal cost and resources to improve not only the frequency of feedback on

## TABLE 1

Comparison of students randomized to the detailed feedback card vs students randomized to the simplified feedback card

Comparison of detailed and simplified feedback cards						
Student survey questions	Detailed card (n=81)	Simplified card (n=95)	P value			
Inpatient feedback was received	100%	98.9%	.3			
Outpatient feedback was received	100%	96.8%	.08			
Feedback improved clinical documentation (agree or strongly agree)	91.0%	92.3%	.3			
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## TABLE 2

## Faculty comments regarding the detailed and simplified cards at study completion

Faculty comments					
"The first (detailed) card took me a long time to complete."	"I liked that the longer card gave me a template for reviewing notes. I think the feedback I gave with that card was much more thorough."				
"I don't think my feedback is influenced by the card that is used."	"My students seemed to write better notes when they had the detailed cardlike they were using it as a guide."				
"The shorter card is easy and quick to complete. I would rather use that in the future."	"The detailed card takes longer to fill out, but I like going through the break- down of each part of the note with my student, and I am less likely to skip over things with that card."				
"The card encourages students to seek review of their notes, but I don't think the type of card used really matters. I think most of us would rather have the shorter one."	"The shorter card works just fine. I don't think there is much of a difference."				

written documentation but also the perceived value of the feedback.

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