Implications of Excluding the Assessment of Thesis from Subspecialty Certifying Examinations on Pass Rates and Reliability

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Conflict of Interest Disclosures

1Authors are full-time employees of the American Board of Obstetrics and Gynecology.

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Impact of excluding thesis from certifying examinations
Excluding thesis assessment from the 2022 Obstetrics and Gynecology subspecialty certifying examinations did not change the pass rates or score reliability compared with those from the 2021 administration.

Short Title: Impact of excluding thesis from certifying examinations
Objective

The American Board of Obstetrics and Gynecology (ABOG) certification for the four obstetrics and gynecology subspecialties (female pelvic medicine and reconstructive surgery [FPMRS]; gynecologic oncology [GYN ONC]; maternal–fetal medicine [MFM]; reproductive endocrinology and infertility [REI]) is a two-step process that requires passing a computer-based qualifying examination and then an oral certifying examination. Each fellow completes at least 12 months of research experiences during fellowship training and completes a thesis in the subspecialty area. Prior to 2022, the subspecialty certifying examinations included an assessment of each candidate’s thesis and an assessment of knowledge, skills, and judgement in the subspecialty by using standardized structured cases and a candidate’s personal practice case lists (Table 1).

During the COVID-19 pandemic, fellowship training programs across the United States faced various disruptions in clinical, didactic, and research activities. Obstetrics and Gynecology subspecialty programs were similarly affected. Because each subspecialty’s program requirements and certification standards include a minimum of 12 months of research and completion of a related thesis, assessment of the thesis in the certifying examination could disadvantage fellows who experienced disruption in research and thesis development. Thus, to aid process fairness, thesis assessment was excluded from the four certifying examinations in the year 2022. Thesis assessment had been included in the 2021 subspecialty examinations. The objective of this study is to assess the implications of exclusion of thesis on the pass rates and reliability of scores.

Study Design

Impact of excluding thesis from certifying examinations
The 2022 ABOG subspecialty certifying examinations were administered virtually between April 4, 2022 and April 7, 2022 and did not include a thesis assessment. In the 2022 examination, the thesis section was replaced with structured cases that assessed either research design, methodology and evidence-based medicine, and clinical topics, as determined appropriate by our job task analysis. The scoring of this section’s cases contributed the same weight in 2022 as the actual thesis assessment did in 2021. The difference in the subspecialty certifying examination structure from 2021 and 2022 is displayed in red in Table 1. Each candidate’s thesis was still reviewed by the respective ABOG subspecialty division members using a standardized rubric to ensure that it met ABOG requirements to be eligible for the certifying examination. First-time taker and overall (first-time and repeat taker) pass rates for the 2022 certifying examinations were compared with the corresponding pass rates from the administration in 2021 using the two-proportion z-test in R.\(^4\) P values less 0.05 were considered significant. Reliability of scores for the 2022 certifying examination was compared with those of the 2021 administration since the scoring methodology was the same for these two administrations.\(^5\)

**Results**

The observed pass rates are displayed in Figure 1. There were no significant differences in the overall and first-time taker pass rates between the 2022 and 2021 examination administrations.

Reliability of scores were the same for REI and MFM across the two years (0.97 for both).

Reliability of scores in GYN ONC increased slightly from 0.96 to 0.97, and 0.94 to 0.96 in FPMRS from 2021 to 2022.

**Conclusion**

Impact of excluding thesis from certifying examinations
Replacing the assessment of thesis with additional assessment of knowledge, skill, and judgment using standardized structured cases did not significantly alter the overall and first-time taker pass rates or the reliability of scores compared with those of the preceding administration of the subspecialty certifying examinations. Standardized structured cases seem to be a reasonable alternative to the assessment of thesis in the certifying examinations. During continued surveillance of the disruption of the COVID-19 pandemic to fellowship training programs, these findings may aid future decision making regarding the structure of subspecialty certifying examinations.
Table 1. Structure change from 2021 to 2022 Subspecialty Certifying Examination

<table>
<thead>
<tr>
<th></th>
<th>Section 1</th>
<th>Section 2</th>
<th>Section 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 minutes</td>
<td>5 structured cases</td>
<td>5 structured cases</td>
<td>2021: Thesis - weighted 5 times</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2022: Thesis replaced with 5 structured cases (combination of research/evidence-based medicine and clinical standardized cases)</td>
</tr>
<tr>
<td>30 minutes</td>
<td>Case list (weighted)</td>
<td>Case list (weighted)</td>
<td>Case list (weighted)</td>
</tr>
</tbody>
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Impact of excluding thesis from certifying examinations
Figure 1: First-time and overall taker pass rates by ABOG subspecialty certifying exam and year

Impact of excluding thesis from certifying examinations
84 **References**


