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- Comments from the reviewers and editors (email to author requesting revisions)
- Response from the author (cover letter submitted with revised manuscript)*

*The corresponding author has opted to make this information publicly available.

Personal or nonessential information may be redacted at the editor’s discretion.

Questions about these materials may be directed to the Obstetrics & Gynecology editorial office:

obgyn@greenjournal.org.
RE: Manuscript Number ONG-20-2977

Women's Work: The Double Discrimination of the Pay Gap in Gynecological Surgery and its Impact on Quality of Care

Dear Dr. King:

Your manuscript has been reviewed by the Editorial Board and by special expert referees. Although it is judged not acceptable for publication in Obstetrics & Gynecology in its present form, we would be willing to give further consideration to a revised version.

If you wish to consider revising your manuscript, you will first need to study carefully the enclosed reports submitted by the referees and editors. Each point raised requires a response, by either revising your manuscript or making a clear and convincing argument as to why no revision is needed. To facilitate our review, we prefer that the cover letter include the comments made by the reviewers and the editor followed by your response. The revised manuscript should indicate the position of all changes made. We suggest that you use the “track changes” feature in your word processing software to do so (rather than strikethrough or underline formatting).

Your paper will be maintained in active status for 14 days from the date of this letter. If we have not heard from you by Dec 17, 2020, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1: The authors seem to make two main points: that gynecologists are compensated at lower rates than other surgical specialists, and that this leads to a worse quality of surgery than is found in other surgical fields. Certainly, gynecologic surgery should be performed well, and those who perform it be compensated fairly. An excellent defense of these propositions would include well-substantiated facts, coherent arguments that hang together well, and persuasive rhetoric.

The authors make assertions of fact that could be better substantiated, and omit important and material facts.

1. The oft-stated claim that women in medicine are paid less than men needs to be corrected for specialty, workload, overhead and (if doctors work in environments where salary is keyed to seniority) experience. Reimbursement is not the same as income, because overhead costs vary among physicians and specialties. Assertions about reimbursement and income need to be carefully reported. Reimbursement must be distinguished from income. If there are apparent discrepancies, economic analysis is important. This manuscript presents few data. Mere references to primary literature are insufficient. It would be beneficial to have data reported in sufficient detail so a reader could conclude from the data that:

   a. Gynecologists receive less reimbursement than other surgeons
   b. Gynecologists receive lower income than other surgeons
   c. These discrepancies are not due to non-RVU factors such as
      i. Practice overhead;
      ii. Higher costs of malpractice insurance;
      iii. Differences in cost-effectiveness (e.g., elective procedures versus life-saving procedures.

2. Similarly, actual data should back up the authors' claim that gynecologic RVU's are, specifically, compensated at a lower rate than urologic RVU's. If that is the case, the same considerations apply to these differences as in the previous point—namely, that overhead and cost-effectiveness are not factors in compensation.

3. The authors do not mention that there are about 35,000 ACOG Fellows and Junior Fellows in practice, performing 600,000 hysterectomies. Unboarded specialists probably perform gynecologic surgery; certainly, there are gynecologists who only have osteopathic
credentials. If procedures were evenly distributed among ABOG providers, and nobody else operated, each would be performing a hysterectomy about every 3 weeks. This results in low volume per doctor, so it would be necessary to pull many gynecologists out of the practice of major surgery to ensure high numbers per gynecologic surgeon. Note that if 10% of doctors did half of hysterectomies, that would still leave 31,500 surgeons performing 300,000 hysterectomies. This is not a matter of compensation, but is intrinsic to the manpower/workload balance. As the authors note, the length of generalists’ gynecologic surgical training experience is far shorter than that of other surgeons. I doubt that the shorter OB/GYN residency—4 years as compared to five years for general surgery, urology, and orthopedics—significantly modifies RVU as a basis for payment. The junior author has written about gynecologic manpower, and can probably supply this information easily. American rates of major surgery are high relative to some nations with which we compare ourselves, so it is probably not a good idea to pay gynecologists more so that they will do more surgery to increase their volume. higher volume. Perhaps the authors can go beyond analysis and criticism, and propose ways to have major surgery performed by high-volume providers in high-volume centers.

4. There is no a priori reason to believe that insurance companies are holding down reimbursement to ‘punish’ bad surgery. Indeed, if they wanted to reward well-performed surgery, they would want to give gynecologic subspecialists higher rates of payment. If there is evidence regarding insurers' business practices, that evidence should be presented.

5. Many of the best residents in the field clamor for 2- to 4-year fellowships in gynecologic subspecialties. They are looking to devote the bulk of their practice to surgery. If poor payment were a deterrent, these fellowships (oncology, MIS, REI, and urogynecology—the last of which the authors omitted in their discussion) might not be highly competitive. Places in these programs rarely go unfilled. How can the competitiveness of surgical gynecologic fellowships be reconciled with the authors’ thesis?

The structure of the authors' argument develops reasons for the putative causal chain of low reimbursement leading to low volume, leading to low quality. The authors also maintain that there are unjust pay differentials relative to other fields. If true, this is unfair, if true, regardless of whether it affects outcome. My comments:

1. Evidence points to the link between high volume and good outcome. I agree that surgical quality would be improved if more surgery were in by high-volume surgeons in high-volume institutions.

2. But let us assume now, for argument’s sake that gynecological reimbursement is unfairly low. This is, at heart, an economic issue. Let us further assume, for the sake of argument, that the analysis I sought in my previous comments shows that there is no identifiable reason why gynecologists should have worse reimbursement and/or income than any other surgeons. I can think of three reasons why this may be the case. First, it could be based on residual payment arrangements constructed many years ago, that these were fair at the time, but that conditions have changed to make them unfair. Second, it is possible that disinterested market forces devalue gynecologic surgery compared to other procedures. Finally, we must consider collusion by the many insurers, including government insurers, targeting gynecologists and their patients. Let us factor in the reality that most gynecological surgeons are now employees. Gynecologists' employers presumably would want to maximize their employees' reimbursement. If reimbursement were unfairly low, rational employers would fight for higher rates. Is the reimbursement primarily an economic problem or a problem of discrimination? The essay is short on economic analysis. It should be possible for economists to decide which of these three causes are responsible for the differential reimbursement. Then, if negotiations between employers and professional organizations (on one hand) and payors (on the other hand) were unsuccessful, then litigation would be an option. If differentials were the result of a disinterested free market, then legislators could decide whether to set a price for gynecologic services that gave gynecologists more than they could get through the marketplace.

3. Along these lines, it would seem, a priori, that gynecologists would be in a stronger position than other surgeons to demand greater reimbursement. Gynecologists can easily retreat into obstetrics and office practice if they consider surgery insufficiently remunerative. Other surgical specialists cannot do this; all they know is surgery. Why don't payors take advantage of this and restrict reimbursement to these other specialists? To flip the coin, why hasn't ease of exit from gynecologic surgery been an effective negotiating tool for gynecologists?

4. Courts must respond to a legal wrong with a specific and appropriate remedy. If there is gender or sex discrimination, then why wouldn't litigation achieve an effective remedy? Alternatively, if women and their gynecologists are disadvantaged, then there should be pressure for legislative solutions. Of course, if there is discrimination, a possible solution would be to lower
payment to those receiving better reimbursement than gynecologists. Not all remedies are through government channels. Is there a role for professional organizations to support their membership, or would this be a violation of antitrust laws?

The authors' rhetorical posture seems self-defeating. It isn't clear what audience the authors are addressing, and to what end. Much of what they say seems to be more an exercise in expressing a position than an exercise in persuasion. These points should be viewed as tentative suggestions. Perhaps it is not the authors' primary intent in this essay to be persuasive, but rather to express their views in a frank and forthright manner.

1. The article has been submitted to a journal published by ACOG, and distributed to all of its Fellows. The authors are telling every Fellow and Junior Fellow that many, if not most, of them, do inferior surgery compared to surgical subspecialists—so inferior that it causes the authors "moral distress" (line 132). If journal subscribers are target readers, I doubt that it is an effective persuasion tactic.

2. The authors devote a great deal of space to praising the late Justice Ginsburg. This occupies column space that could be used to strengthen their substantive points; the authors have a word limit. In addition, the authors must understand that Ginsburg was controversial. If the authors are writing to confirm the beliefs of those who agree with them, talking about Ginsburg may be appropriate. If they are writing to persuade the unpersuaded, the extensive discussion of Justice Ginsburg is, at best, distracting.

3. The Ledbetter case is an example of a statutory approach to wage discrimination that reached the Supreme Court. The Ledbetter majority, consisting of textualist justices, upheld the letter of a poorly drafted statute, and Congress soon corrected the statute. At least that is one way to interpret the motivation of the Ledbetter majority. If I wanted to be persuasive rather than divisive, that is how I would characterize the case. It is generally better to assume that other people have good will than to assume that they intend to be unfair. Use of Ledbetter is a fair analogy. I don't think any of the justices argued that women should be underpaid, or that this was a covert agenda of the majority. The authors are well aware that the justices often are thinking beyond the instant case, and that it is likely that the aim of the majority was to establish a standard of judicial interpretation that declined to rewrite statutes, with the substantive issues being secondary.

One last point. The paragraph beginning on page 155 is tangentially related to the rest of the article. It also is poorly substantiated. It could be deleted. Mentioning a laundry list of complaints as a 'by-the-way' at the end of the manuscript will not make unconvinced people take the authors more seriously. But, as it stands, the authors write that lower billing (they probably mean lower reimbursement) leads to "less administrative support, less nursing support, less operating room time, and less funding for pilot studies leading to less major funding for research." Their citation is to an article in a non-scholarly publication of the Northwestern University Business School summarizing scholarly work by a faculty member. The citation was to work of journalism, not a work of scholarship, though the journalism fully cited the scholarship that it reported. The magazine piece actually says that women in all fields receive smaller initial grants than men, with no reference to specialty. Furthermore, the magazine piece made no reference to the worse clinical support claimed by the authors. These errors need to be corrected. It is curious that the authors of this manuscript under review journalism rather than the original scholarly article. The authors might want to read the original source of the information and cite the primary data instead of the magazine article. It is not the role of a peer reviewer to cite check each reference in a manuscript. I recommend that the authors review their other citations to confirm that their attributions are accurate.

Reviewer #2: Women's surgeons are not paid adequately for their work, and women surgeons are not paid adequately for their work. This is highlighted too little of the time, and this prestigious journal is the perfect platform to highlight this important work by two lawyers in the field.

Reviewer #3: Powerful editorial. This topic of pay discrimination is timely. Here are a few minor corrections and clarifications:

Line 48 change "meet" to "meat"

Line 60: women paid 71% of men's salary in medicine; It might be useful to cite data of the financial impact from the personal toll of carrying the majority of household responsibilities by female physicians. Linda Brubaker wrote a recent JAMA editorial on this.
Line 140-147: would be useful to add FPMRS to this paragraph and how 2-3 year fellowships have become so competitive; workforce issue

The Remedies section is my favorite! So many good recommendations. The movement has started

Reviewer #4: This highly important clinical commentary presents evidence for significant pay inequality in gynecologic surgery that is disproportionately borne by female surgeons who make up the majority of our workforce. This is ethically unacceptable. In addition, the authors develop an argument that low reimbursement contributes to lesser care for women, hence the double female discrimination.

This paper provides the basis for major lobbying efforts to CMS and insurance carriers and will likely get national press attention. Overall, it is well-written and presents some essential, salient points.

While the evidence regarding pay inequality is very well presented and easy to follow, it is a little more difficult to understand their argument that lower reimbursement has "played a part in developing and maintaining a workforce of low volume gynecological surgeons who provide lesser care". For example, they state that: "Gynecologic surgeons today receive less training in residency and have lower volume practices than general surgeons."- While this is a true statement, you have not proved that lower billing rates are the cause of this phenomenon. This argument could be more simply developed with a clear topic sentence that read something like: "Poor reimbursement for gynecologic surgery forces many Ob/Gyn providers to preferentially perform Obstetric services resulting in a high prevalence of low-volume gynecologic surgeons, a metric that is closely tied to higher complications." And then presenting the evidence to support this topic sentence.

In addition to this primary criticism, please address these other minor issues:

Abstract
1. Replace the word "review" with commentary
2. Could you potentially find a better alternative to "lesser care"

Manuscript:
Line 35: "When we were public interest lawyers, studying her arguments, opinions, and philosophy helped to form our vision of gender equality."- Ginsberg defined the vision of gender equality for a much larger audience than just public interest lawyers- please revise to reflect.

Line 147: The development of the subspecialty of Female Pelvic Medicine and Reconstructive Surgery has added a large armamentarium of surgical sub-specialists who are proficient in transvaginal and MIS surgery and should be included in this paragraph.

Line 158: Data regarding the high percentage of male chairs is not proven to be tied to surgical reimbursement. This is indicative of many other gender inequilities in our field but does not seem directly relevant to argument about "double discrimination".

Line 170: Therefore, ACOG should partner with allies to advocate for sex-parity in reimbursement rates for gynecological surgery, including removing gynecologic surgery reimbursement from budget neutrality until parity can be achieved- I don't understand the 2nd part of this sentence. Please clarify. At present, it seems like lawyer language.

Line 178: "While insurers set the payment associated with those RVUs they are not considered employers under this law."- I believe that this sentence would make sense if there was a comma after RVUs?

EDITOR COMMENTS:

1. The Editors of Obstetrics & Gynecology are seeking to increase transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:
   A. OPT-IN: Yes, please publish my point-by-point response letter.
   B. OPT-OUT: No, please do not publish my point-by-point response letter.
2. Obstetrics & Gynecology uses an "electronic Copyright Transfer Agreement" (eCTA). When you are ready to revise your
manuscript, you will be prompted in Editorial Manager (EM) to click on "Revise Submission." Doing so will launch the resubmission process, and you will be walked through the various questions that comprise the eCTA. Each of your coauthors will receive an email from the system requesting that they review and electronically sign the eCTA.

Please check with your coauthors to confirm that the disclosures listed in their eCTA forms are correctly disclosed on the manuscript's title page.

3. Standard obstetric and gynecology data definitions have been developed through the reVITALize initiative, which was convened by the American College of Obstetricians and Gynecologists and the members of the Women's Health Registry Alliance. Obstetrics & Gynecology has adopted the use of the reVITALize definitions. Please access the obstetric data definitions at https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-obstetrics-data-definitions and the gynecology data definitions at https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-gynecology-data-definitions. If use of the reVITALize definitions is problematic, please discuss this in your point-by-point response to this letter.

4. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Current Commentary articles should not exceed 12 typed, double-spaced pages (3,000 words). Stated page limits include all numbered pages in a manuscript (i.e., title page, précis, abstract, text, references, tables, boxes, figure legends, and print appendixes) but exclude references.

5. Specific rules govern the use of acknowledgments in the journal. Please note the following guidelines:

* All financial support of the study must be acknowledged.
* Any and all manuscript preparation assistance, including but not limited to topic development, data collection, analysis, writing, or editorial assistance, must be disclosed in the acknowledgments. Such acknowledgments must identify the entities that provided and paid for this assistance, whether directly or indirectly.
* All persons who contributed to the work reported in the manuscript, but not sufficiently to be authors, must be acknowledged. Written permission must be obtained from all individuals named in the acknowledgments, as readers may infer their endorsement of the data and conclusions. Please note that your response in the journal's electronic author form verifies that permission has been obtained from all named persons.
* If all or part of the paper was presented at the Annual Clinical and Scientific Meeting of the American College of Obstetricians and Gynecologists or at any other organizational meeting, that presentation should be noted (include the exact dates and location of the meeting).

6. Provide a short title of no more than 45 characters, including spaces, for use as a running foot.

7. Provide a précis on the second page, for use in the Table of Contents. The précis is a single sentence of no more than 25 words that states the conclusion(s) of the report (ie, the bottom line). The précis should be similar to the abstract's conclusion. Do not use commercial names, abbreviations, or acronyms in the précis. Please avoid phrases like "This paper presents" or "This case presents."

8. The most common deficiency in revised manuscripts involves the abstract. Be sure there are no inconsistencies between the Abstract and the manuscript, and that the Abstract has a clear conclusion statement based on the results found in the paper. Make sure that the abstract does not contain information that does not appear in the body text. If you submit a revision, please check the abstract carefully.

In addition, the abstract length should follow journal guidelines. The word limit for Current Commentary articles is 250 words. Please provide a word count.

9. Only standard abbreviations and acronyms are allowed. A selected list is available online at http://edmgr.ovid.com/ong/accounts/abbreviations.pdf. Abbreviations and acronyms cannot be used in the title or précis. Abbreviations and acronyms must be spelled out the first time they are used in the abstract and again in the body of the manuscript.

10. The journal does not use the virgule symbol (/) in sentences with words. Please rephrase your text to avoid using "and/or," or similar constructions throughout the text. You may retain this symbol if you are using it to express data or a measurement.

11. ACOG is moving toward discontinuing the use of "provider." Please replace "provider" throughout your paper with either a specific term that defines the group to which are referring (for example, "physicians," "nurses," etc.), or use "health care professional" if a specific term is not applicable.

12. Please review examples of our current reference style at http://ong.editorialmanager.com (click on the Home button in the Menu bar and then "Reference Formatting Instructions" document under "Files and Resources"). Include the digital object identifier (DOI) with any journal article references and an accessed date with website references. Unpublished data, in-press items, personal communications, letters to the editor, theses, package inserts, submissions, meeting presentations, and abstracts may be included in the text but not in the reference list.

In addition, the American College of Obstetricians and Gynecologists' (ACOG) documents are frequently updated. These
documents may be withdrawn and replaced with newer, revised versions. If you cite ACOG documents in your manuscript, be sure the reference you are citing is still current and available. If the reference you are citing has been updated (ie, replaced by a newer version), please ensure that the new version supports whatever statement you are making in your manuscript and then update your reference list accordingly (exceptions could include manuscripts that address items of historical interest). If the reference you are citing has been withdrawn with no clear replacement, please contact the editorial office for assistance (obgyn@greenjournal.org). In most cases, if an ACOG document has been withdrawn, it should not be referenced in your manuscript (exceptions could include manuscripts that address items of historical interest). All ACOG documents (eg, Committee Opinions and Practice Bulletins) may be found at the Clinical Guidance page at https://www.acog.org/clinical (click on "Clinical Guidance" at the top).

13. Authors whose manuscripts have been accepted for publication have the option to pay an article processing charge and publish open access. With this choice, articles are made freely available online immediately upon publication. An information sheet is available at http://links.lww.com/LWW-ES/A4B. The cost for publishing an article as open access can be found at https://wkauthorsservices.editage.com/open-access/hybrid.html.

Please note that if your article is accepted, you will receive an email from the editorial office asking you to choose a publication route (traditional or open access). Please keep an eye out for that future email and be sure to respond to it promptly.

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If you choose to revise your manuscript, please submit your revision through Editorial Manager at http://ong.editorialmanager.com. Your manuscript should be uploaded in a word processing format such as Microsoft Word. Your revision’s cover letter should include the following:

* A confirmation that you have read the Instructions for Authors (http://edmgr.ovid.com/ong/accounts/authors.pdf), and
* A point-by-point response to each of the received comments in this letter. Do not omit your responses to the Editorial Office or Editors’ comments.

If you submit a revision, we will assume that it has been developed in consultation with your co-authors and that each author has given approval to the final form of the revision.

Again, your paper will be maintained in active status for 14 days from the date of this letter. If we have not heard from you by Dec 17, 2020, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,
Dwight J. Rouse, MD, MSPH

2019 IMPACT FACTOR: 5.524
2019 IMPACT FACTOR RANKING: 6th out of 82 ob/gyn journals

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: https://www.editorialmanager.com/ong/login.asp?a=r). Please contact the publication office if you have any questions.
Dear Dr Nancy C. Chescheir MD, Dr Dwight J. Rouse, MD, MSPH, Editors and Referees,

We wish to thank you and the four referees for your recent consideration of our manuscript “Women’s Work: The Double Discrimination of the Pay Gap in Gynecological Surgery and its Impact on Quality of Care” for possible publication by Obstetrics and Gynecology and for the opportunity to revise.

We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We confirm that we have read the Instructions for Authors.

We have studied carefully the reports submitted by the referees and editors. We have responded below to each point raised (italics) either by directing you to changes in the manuscript or by making what we believe to be clear and convincing arguments as to why no revision is needed. We are grateful to you all for considering our revisions and responses as well as potential publication of this manuscript.

We have no conflicts of interest to disclose.

Thank you for your kind consideration of this manuscript.

Sincerely,

Louise P King MD JD
Responses of Louise P King MD JD & Katie Watson JD

REVIEWER COMMENTS:

Reviewer #2: Women's surgeons are not paid adequately for their work, and women surgeons are not paid adequately for their work. This is highlighted too little of the time, and this prestigious journal is the perfect platform to highlight this important work by two lawyers in the field.

We wish to thank Reviewer 2 for their work in reviewing our manuscript, and we are delighted that they think our commentary is important.

Reviewer #3: Powerful editorial. This topic of pay discrimination is timely. Here are a few minor corrections and clarifications:

We wish to thank Reviewer 3 for their work in reviewing our manuscript and for their recommendations. We are delighted they find our commentary powerful.

Line 48 change "meet" to "meat"

Thank you for this comment. The original written by Justice Ginsburg uses “meet.” See https://www.supremecourt.gov/opinions/06pdf/05-1074.pdf To be honest, we were equally confused by this use of “meet.” We believe it to be a reference to the following: 2 Timothy 2:21, King James Version (KJV): “If a man therefore purge himself from these, he shall be a vessel unto honor, sanctified, and meet for the master's use, and prepared unto every good work.” The term "meet" was used similarly to describe Eve as a "help meet for him" in Genesis 2:18 and is taken in these passages to mean “precisely adapted to a particular situation, need, or circumstance.” We suspect that Justice Ginsburg used this terminology for this meaning and with a nod to its use in Genesis when describing Eve. We have found no literature of historical or judicial scholarship supporting this explanation, however.

Line 60: women paid 71% of men's salary in medicine; It might be useful to cite data of the financial impact from the personal toll of carrying the majority of household responsibilities by female physicians. Linda Brubaker wrote a recent JAMA editorial on this.

We love the Brubaker editorial, thank you for highlighting it here! We decided not to cite this data because we know final compensation is the result of many complex variables. These may include women surgeons and physicians choosing part-time or other less remunerative paths in order to meet the disproportionate burden of home & childcare they confront. However, other data suggests that despite working full time in highly remunerative specialties, women still incur lower compensation than men as demonstrated in the articles by Heisler et al and Dossa et al. The underlying forces of discrimination that women face professionally and in society are exceedingly varied. For the sake of our argument we sought to keep a tight focus on one important factor in
pay disparity, reimbursement discrimination, in one specialty. For that reason, we did not add the Brubaker reference, nor did we add a recent series of papers demonstrating that women spend more time with patients resulting in better outcomes for their patients. While getting to the absolute cause and effect for all these factors is work that should be done, our focus here is on discriminatory actions that are inequitable on their face.

Line 140-147: would be useful to add FPMRS to this paragraph and how 2-3 year fellowships have become so competitive; workforce issue

Thank you for highlighting this. A sentence has been added to our draft.

The Remedies section is my favorite! So many good recommendations. The movement has started

Thank you for this compliment.

Reviewer #4: This highly important clinical commentary presents evidence for significant pay inequality in gynecologic surgery that is disproportionately borne by female surgeons who make up the majority of our workforce. This is ethically unacceptable. In addition, the authors develop an argument that low reimbursement contributes to lesser care for women, hence the double female discrimination.

We wish to thank Reviewer 4 for their work in reviewing our manuscript and for their recommendations. We are delighted they believed our commentary was highly important.

This paper provides the basis for major lobbying efforts to CMS and insurance carriers and will likely get national press attention. Overall, it is well-written and presents some essential, salient points.

Thank you.

While the evidence regarding pay inequality is very well presented and easy to follow, it is a little more difficult to understand their argument that lower reimbursement has "played a part in developing and maintaining a workforce of low volume gynecological surgeons who provide lesser care". For example, they state that: "Gynecologic surgeons today receive less training in residency and have lower volume practices than general surgeons." - While this is a true statement, you have not proved that lower billing rates are the cause of this phenomenon. This argument could be more simply developed with a clear topic sentence that read something like: "Poor reimbursement for gynecologic surgery forces many Ob/Gyn providers to preferentially perform Obstetric services resulting in a high prevalence of low-volume gynecologic surgeons, a metric that is closely tied to higher complications." And then presenting the evidence to support this topic sentence.
Thank you for this insightful comment. Your suggested wording has been added directly to our abstract and is referenced on page 5, 7, 8 and 9. We believe the evidence that follows from there is supportive.

In addition to this primary criticism, please address these other minor issues:

Abstract
1. Replace the word “review” with commentary

Thank you, this change has been made

2. Could you potentially find a better alternative to “lesser care”

Thank you, we propose “potentially lower quality care” and have made this change throughout

Manuscript:

Line 35: “When we were public interest lawyers, studying her arguments, opinions, and philosophy helped to form our vision of gender equality.” - Ginsberg defined the vision of gender equality for a much larger audience than just public interest lawyers- please revise to reflect.

Thank you for this perspective, we cut that sentence to reach that larger audience.

Line 147: The development of the subspecialty of Female Pelvic Medicine and Reconstructive Surgery has added a large armamentarium of surgical sub-specialists who are proficient in transvaginal and MIS surgery and should be included in this paragraph.

Thank you for this comment. We have added this and apologize for the oversight as we agree completely with your assessment of the importance of this discipline.

Line 158: Data regarding the high percentage of male chairs is not proven to be tied to surgical reimbursement. This is indicative of many other gender inequalities in our field but does not seem directly relevant to argument about “double discrimination”.

Thank you for this observation, we cut that sentence.

Line 170: Therefore, ACOG should partner with allies to advocate for sex-parity in reimbursement rates for gynecological surgery, including removing gynecologic surgery reimbursement from budget neutrality until parity can be achieved - I don’t understand the 2nd part of this sentence. Please clarify. At present, it seems like lawyer language.

We have removed this reference as it is no longer timely. (It referred to CMS regulations that require all proposals for medical reimbursement to be budget neutral – what is given to some must be taken from others. However, the rules in question go into effect 1/1/2021 and thus there is no longer time to achieve the suggested remedy. ACOG was successful in removing obstetrics from
these cuts but only very recently circulated a petition in an attempt to protect gynecologic surgery.)

Line 178: “While insurers set the payment associated with those RVUs they are not considered employers under this law.”- I believe that this sentence would make sense if there was a comma after RVUs?

Thank you, comma was added.

Reviewer #1: The authors seem to make two main points: that gynecologists are compensated at lower rates than other surgical specialists, and that this leads to a worse quality of surgery than is found in other surgical fields. Certainly, gynecologic surgery should be performed well, and those who perform it be compensated fairly. An excellent defense of these propositions would include well-substantiated facts, coherent arguments that hang together well, and persuasive rhetoric.

We wish to thank Reviewer 1 for their work in reviewing our manuscript.

We respectfully disagree with the reviewer’s implication that our commentary is lacking in “well-substantiated facts” and “coherent arguments.”

We start with the premise that all patients deserve equitable safe care and that reimbursement levels as set by CMS should incentivize this. Reviewer 1 does not seem to take issue with this premise.

We then present high quality evidence that women’s surgery is compensated at a lower rate (RVUs) than men’s and that women surgeons, who are predominantly gynecologic surgeons, are compensated at a lower level than men’s surgeons. The reviewer takes issue with this evidence, suggesting that we must provide in depth economic analysis. While we know of no economists who have written on this topic, other scholars cited in this paper have carefully analyzed the data presented and concluded that historic and discriminatory practices (not overhead or malpractice) account for these disparities, and Reviewer 1 offers no specific cause to question the conclusions derived from prior research. As the other three reviewers did not call for a full economic analysis, we will not pursue one at this time.

Next we demonstrate that in gynecologic surgery, a body of high-quality evidence links low surgical volume to lower quality of surgical care. We note that gynecologic surgeons are predominantly low volume and our complication rates as a discipline exceed those of other surgical disciplines. Reviewer 1 agrees with these points but somehow disagrees with our opinion that this would cause all surgeons “moral distress,” mischaracterizing our statements. [“Many who focus on gynecologic surgery in their practice describe moral distress when regularly confronted with the natural sequelae of our current system.” “It might be easy to deride surgeons’ calls for increases in billing as self-serving, but the devaluation of women’s surgical care results in a
profound injustice to patients and moral distress to surgeons”) (discussed further below and slight edit added to draft)

We term this “double discrimination.” While the factors that contribute to levels of individual compensation for surgeons are necessarily complex, it is clear from research cited that compensation on the whole for OBGYNs is less than for other surgical specialties. (discussed in detail below). Whether we seek to remedy the discriminatory reimbursements alone or the downstream effects we see stemming from them, one potential solution is obvious and that is to create equitable reimbursement for surgery for women. We believe this would be a first step towards rectifying discriminatory compensation and may also lead to further restructuring affording women more access to high volume surgeons which in turn would likely lead to increases in safety and quality.

The authors make assertions of fact that could be better substantiated, and omit important and material facts.

1. The oft-stated claim that women in medicine are paid less than men needs to be corrected for specialty, workload, overhead and (if doctors work in environments where salary is keyed to seniority) experience. Reimbursement is not the same as income, because overhead costs vary among physicians and specialties. Assertions about reimbursement and income need to be carefully reported. Reimbursement must be distinguished from income. If there are apparent discrepancies, economic analysis is important. This manuscript presents few data. Mere references to primary literature are insufficient. It would be beneficial to have data reported in sufficient detail so a reader could conclude from the data that:

   a. Gynecologists receive less reimbursement than other surgeons
   b. Gynecologists receive lower income than other surgeons
   c. These discrepancies are not due to non-RVU factors such as
      i. Practice overhead;
      ii. Higher costs of malpractice insurance;
      iii. Differences in cost-effectiveness (e.g., elective procedures versus life-saving procedures).

    Thank you reinforcing the distinction between reimbursement and compensation – we addressed this on pages 4 and 5 we added “in part” to one sentence, (“The wage gap created in part by lower reimbursement rates ...”); and added a new sentence “ Compensation is a complex entity related to multiple factors but there is no denying that the starting point for compensation for gynecologic surgeons falls far behind that of urologists.”

Articles cited in our paper that provide answers to questions posed above.

A) Goff et al and Dossa et al describe the persistent disparity in reimbursement between gynecologic and urologic surgery. (We are unclear if the reviewer has objections to the methods used in these papers or the conclusions drawn. As the specific objection is not
shared, we cannot address it. We believe the evidence is clear on this point. This alone is
discrimination and unethical. It is hard to imagine how these discriminatory and unethical
practices could not contribute to gynecologists receiving lower income than other surgeons
as described in B.

B) Heisler et al and Benoit et al, as well as Goff et al and Dossa et al provide comprehensive
evaluations of these issues and have clearly shown that gynecologists receive both less
reimbursement and less income than other surgeons.

Adding to this is evidence reviewed by Heisler et al that with more women joining the workforce in
gynecology (and pediatrics) reimbursement rates decreased while rates remained static in
orthopedic surgery and urology. The following figure is taken from the background article cited by
Heisler “When a Specialty Becomes "Women's Work": Trends in and Implications of Specialty
Gender Segregation in Medicine” and clearly demonstrates this relationship with reference to the
specialty as a whole.¹

C) We agree that factors that affect compensation are varied, and we leave the details of
these additional factors in final income for others to analyze because they are beyond the
scope of our commentary. However, as noted in our commentary, “studies comparing
billing codes between urology and gynecologic oncology, disciplines with similar years of
training, have shown the reimbursement differential endures, indicating a sexist

¹ Pelley E, Carnes M. When a Specialty Becomes "Women's Work": Trends in and Implications of Specialty
Gender Segregation in Medicine. Acad Med. 2020 Oct;95(10):1499-1506. doi:
10.1097/ACM.0000000000003555. PMID: 32590470; PMCID: PMC7541620.
discriminatory effect.” Thus, the allusion to elective versus life-saving procedures is erroneous. Malpractice insurance for gynecologic surgery only practices is not as high as for those who practice obstetrics — this metric should not be included when assessing how gynecologic surgeons are reimbursed for the care of women as opposed to men. A recent workforce study from ACOG notes that gynecologic surgeons who practice gynecology only on average earn up to 100K less than OBGYNs. If malpractice were driving the lower compensation for OBGYNs as opposed to poor reimbursement then this dichotomy should be different. Moreover, it does not explain the changes seen in pediatric compensation in the graph above. Finally, if practice overhead differed so dramatically between surgical disciplines so as to drive a gender-based disparity, which seems unlikely, these factors should be included in considerations driving increases not decreases in reimbursement. The cost should not be borne by patients in the form of less reimbursement to their surgeons. Stated another way, CMS set reimbursements ultimately should facilitate, not detract, from equitable care.

2. Similarly, actual data should back up the authors’ claim that gynecologic RVU’s are, specifically, compensated at a lower rate than urologic RVU’s. If that is the case, the same considerations apply to these differences as in the previous point—namely, that overhead and cost-effectiveness are not factors in compensation.

We believe this has already been proven by the primary literature cited. We would specifically direct the reviewer to papers written by Goff et al and Dossa et al. and our response above.

3. The authors do not mention that there are about 35,000 ACOG Fellows and Junior Fellows in practice, performing 600,000 hysterectomies. Unboarded specialists probably perform gynecologic surgery; certainly, there are gynecologists who only have osteopathic credentials. If procedures were evenly distributed among ABOG providers, and nobody else operated, each would be performing a hysterectomy about every 3 weeks. This results in low volume per doctor, so it would be necessary to pull many gynecologists out of the practice of major surgery to ensure high numbers per gynecologic surgeon. Note that if 10% of doctors did half of hysterectomies, that would still leave 31,500 surgeons performing 300,000 hysterectomies. This is not a matter of compensation, but is intrinsic to the manpower/workload balance. As the authors note, the length of generalists’ gynecologic surgical training experience is far shorter than that of other surgeons. I doubt that the shorter OB/GYN residency—4 years as compared to five years for general surgery, urology, and orthopedics—significantly modifies RVU as a basis for payment. The junior author has written about gynecologic manpower, and can probably supply this information easily. American rates of major surgery are high relative to some nations with which we compare ourselves, so it is probably not a good idea to pay gynecologists more so that they will do more surgery to increase their volume. higher volume. Perhaps the authors can go beyond analysis and criticism, and propose ways to have major surgery performed by high-volume providers in high-volume centers.

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We agree that the current workforce in OBGYN is geared towards obstetrical volume instead of gynecologic volume. We agree that shorter residency does not determine RVU, which is why we began the paragraph on page 8 with “Some might argue…” We do believe that some might offer this as a rationalization for the disparity, so we wanted to address it.

Our goal is not to reimburse gynecologic surgery more so as to encourage more surgery, although the senior author (Dr King) has written in other publications that this may be a downstream effect in a fee for service system. Nor do we believe that RVUs are informed by shorter surgical training in OBGYN. Instead, as described previously, we approach the question from the following premise: every person deserves equitable access to safe surgical options. This is an ethical requirement of our profession. Safety is tied to volume. Volume in OBGYN is driven in part by reimbursements and in part by the structure of our workforce. As another reviewer pointed out below “Poor reimbursement for gynecologic surgery forces many Ob/Gyn providers to preferentially perform Obstetric services resulting in a high prevalence of low-volume gynecologic surgeons, a metric that is closely tied to higher complications.” (see reviewer 4)

As a discipline and as professionals we have an ethical duty to remedy this situation. Our commentary does “go beyond analysis and criticism” and we review a number of alternative remedies from a workforce standpoint. We can split the discipline, but we do not favor this option because we believe we will lose so much that is unique and valuable in OBGYN. We can track OBGYNs in both residency and practice, and we believe this is the way forward as demonstrated by Kaiser, but financially, such an option is currently untenable in fee for service systems without an increase in reimbursement for gynecologic surgeries. Therefore, equitable and ethical reimbursement rates are our proposed solutions to appropriately incentivize “ways to have major surgery performed by high-volume providers in high-volume centers.”

4. There is no a priori reason to believe that insurance companies are holding down reimbursement to 'punish' bad surgery. Indeed, if they wanted to reward well-performed surgery, they would want to give gynecologic subspecialists higher rates of payment. If there is evidence regarding insurers' business practices, that evidence should be presented.

We have not alleged that insurance companies are “holding down reimbursement to 'punish' bad surgery.” Instead, we believe that women’s healthcare and women’s work is devalued by society and this is reflected in CMS rates, which are then followed by insurers, and have not been successfully challenged to date by our professional societies. We suspect that historical discriminatory practices have resulted in a devaluation of women’s surgical care by CMS when assessing these rates. That said, we are neither historians nor economists--but we need not fully explain a discriminatory practice to call attention to it.

5. Many of the best residents in the field clamor for 2- to 4-year fellowships gynecologic subspecialties. They are looking to devote the bulk of their practice to surgery. If poor payment were a deterrent, these fellowships (oncology, MIS, REI, and urogynecology—the last of which the authors omitted in their discussion) might not be highly competitive. Places in these
programs rarely go unfilled. How can the competitiveness of surgical gynecologic fellowships be reconciled with the authors' thesis?

This is an insightful question, thank you. We believe many residents follow their passion. If medical students and residents in general were solely guided by a quest to obtain maximum compensation it would be difficult to fill many residency programs. As is addressed more fully below, many trainees express moral distress at the level of surgical training they receive and at the volume of surgery they perform in practice. This is documented in work by Einarsson et al, Klebanoff et al and Siedhoff et al cited in our paper. We believe residents clamor for surgical training because they want to be sure they are affording their patients the best possible care. Few if any of them are even aware of these reimbursement differentials while in residency and how they might affect their eventual compensation.

The structure of the authors’ argument develops reasons for the putative causal chain of low reimbursement leading to low volume, leading to low quality. The authors also maintain that there are unjust pay differentials relative to other fields. If true, this is unfair, if true, regardless of whether it affects outcome. My comments:

Thank you, we agree the well-proven pay differentials discussed by Heisler et al, Benoit et al, Goff et al and Dossa et al are unfair even if they don’t alter surgical outcomes.

1. Evidence points to the link between high volume and good outcome. I agree that surgical quality would be improved if more surgery were in by high-volume surgeons in high-volume institutions.

We agree that the starting point for all analysis of this question is that women deserve high volume surgeons.

2. But let us assume now, for argument’s sake that gynecological reimbursement is unfairly low. This is, at heart, an economic issue. Let us further assume, for the sake of argument, that the analysis I sought in my previous comments shows that there is no identifiable reason why gynecologists should have worse reimbursement and/or income than any other surgeons. I can think of three reasons why this may be the case. First, it could be based on residual payment arrangements constructed many years ago, that these were fair at the time, but that conditions have changed to make them unfair. Second, it is possible that disinterested market forces devalue gynecologic surgery compared to other procedures. Finally, we must consider collusion by the many insurers, including government insurers, targeting gynecologists and their patients. Let us factor in the reality that most gynecological surgeons are now employees. Gynecologists’ employers presumably would want to maximize their employees’ reimbursement. If reimbursement were unfairly low, rational employers would fight for higher rates. Is the reimbursement primarily an economic problem or a problem of discrimination? The essay is short on economic analysis. It should be possible for economists to decide which of these three causes are responsible for the differential reimbursement. Then, if negotiations between employers and professional organizations (on one hand) and payors (on the other hand) were
unsuccessful, then litigation would be an option. If differentials were the result of a disinterested free market, then legislators could decide whether to set a price for gynecologic services that gave gynecologists more than they could get through the marketplace.

Thank you for sharing your rich thoughts on the issues raised by our commentary. The differential in reimbursement is easily seen simply by looking at the data published by Goff et al and Benoit et al., and regardless of the reasons behind it (which may, or may not, ever be able to be definitively identified or proven) this is an issue of fairness and justice (as the reviewer stated above). The three causes listed above: historical (discrimination), market forces (ie societal discrimination), collusion (ie intentional discrimination) may all be at play. Identifying the exact nature of each contribution to discrimination is not necessary to propose a simple and necessary solution to discriminatory practices: equal reimbursement for equal work. The marketplace is not an appropriate ally in attempts to overcome historically discriminatory practices especially as marketplace forces are not present in federally controlled and set reimbursement schema under CMS.

3. Along these lines, it would seem, a priori, that gynecologists would be in a stronger position than other surgeons to demand greater reimbursement. Gynecologists can easily retreat into obstetrics and office practice if they consider surgery insufficiently remunerative. Other surgical specialists cannot do this; all they know is surgery. Why don’t payors take advantage of this and restrict reimbursement to these other specialists? To flip the coin, why hasn’t ease of exit from gynecologic surgery been an effective negotiating tool for gynecologists?

Our goal is to open a conversation and we find it affirming that our commentary seems to be engaging the reviewer in that way—we hope it will lead others in the field to examine and answer questions like these.

OBGYNs do preferentially practice obstetrics and this leads to lower quality surgical care – as the reviewer notes above. So, the end result of the proposed “negotiating tool for gynecologists” is lower quality surgical care for women.

Moreover, negotiation of rates occurs at various levels. ACOG lobbies CMS to set how RVUs are calculated typically with heavy preference towards protecting and enhancing payment for obstetrical service as this represents the bulk of our workforce’s practice. ACOG has not to date lobbied successfully to increase reimbursement for gynecologic surgery. Hospitals afford privileges and may negotiate rates but can’t deviate to any great degree from CMS set rates. It is difficult to limit the practice of a licensed board-certified physician for a variety of reasons tied to state law although some hospital systems have done so (Kaiser is the example in our paper). But Kaiser normalized salaries between OB and Gyn, as does Mayo, (essentially requiring OB reimbursement to subsidize gyn reimbursement) whereas most systems have not taken this route nor does this route address the underlying unethical discrimination in RVU rates between male and female anatomically based procedures. Malpractice insurers may at some point require volume cut-offs for surgeons to practice but this will not affect CMS rates. It’s unclear how any individual gynecologic surgeon would have leverage to negotiate in this system as suggested by the reviewer. Of note, CMS will be decreasing reimbursements to all surgeons effective January 2021 and ACOG
has released a petition to object (having previously successfully lobbied to remove obstetrical billing from this action).

4. Courts must respond to a legal wrong with a specific and appropriate remedy. If there is gender or sex discrimination, then why wouldn’t litigation achieve an effective remedy? Alternatively, if women and their gynecologists are disadvantaged, then there should be pressure for legislative solutions. Of course, if there is discrimination, a possible solution would be to lower payment to those receiving better reimbursement than gynecologists. Not all remedies are through government channels. Is there a role for professional organizations to support their membership, or would this be a violation of antitrust laws?

In our remedies section, we propose a role for professional organizations and in the alternative litigation. Professional organizations lobbying on behalf of their members does not violate antitrust law. Yes, a possible solution would be to decrease payment for urology, but this would seem odd in relation to other surgical specialties.

The authors’ rhetorical posture seems self-defeating. It isn’t clear what audience the authors are addressing, and to what end. Much of what they say seems to be more an exercise in expressing a position than an exercise in persuasion. These points should be viewed as tentative suggestions. Perhaps it is not the authors’ primary intent in this essay to be persuasive, but rather to express their views in a frank and forthright manner.

We wish to express the facts and the conclusions we draw from them in a frank and forthright manner. We believe our evidence and logic will be persuasive to those who wish to ensure the safest and best surgical options for our patients.

1. The article has been submitted to a journal published by ACOG, and distributed to all of its Fellows. The authors are telling every Fellow and Junior Fellow that many, if not most, of them, do inferior surgery compared to surgical subspecialists—so inferior that it causes the authors “moral distress” (line 132). If journal subscribers are target readers, I doubt that it is an effective persuasion tactic.

It pains us to say yes, but this is the unfortunate conclusion that must be drawn from the meta-analysis written by Mowat et al. – the reviewer is correct that “every Fellow and Junior Fellow [], if not most, of them, do inferior surgery compared to surgical subspecialists.” We do not enjoy being the bearers of bad news, but in her role as an educator one author [King] has met hundreds of trainees and surgeons who expressed “moral distress” once they realized this was true. This is reflected in the paper by Einarsson et al. and Kelbanoff et al. and Siedhoff e al. Many OBGYNs in practice are not fully aware of these deficits. When they become aware, they will surely also experience “moral distress” and hopefully will pursue change. We feel confident all of OBGYNs wish to see their patients receive the best care possible as individuals and on a systems level. The way forward is to ensure high volume surgeons in high volume centers. To achieve this, we need to begin by appropriately and non-discriminatorily reimbursing gynecologic surgeons.
2. The authors devote a great deal of space to praising the late Justice Ginsburg. This occupies column space that could be used to strengthen their substantive points; the authors have a word limit. In addition, the authors must understand that Ginsburg was controversial. If the authors are writing to confirm the beliefs of those who agree with them, talking about Ginsburg may be appropriate. If they are writing to persuade the unpersuaded, the extensive discussion of Justice Ginsburg is, at best, distracting.

In the next paragraph the reviewer notes that the Ledbetter case is a good analogy. We are unsure how to address these two conflicting comments and have opted to retain our discussion of the Ledbetter case.

3. The Ledbetter case is an example of a statutory approach to wage discrimination that reached the Supreme Court. The Ledbetter majority, consisting of textualist justices, upheld the letter of a poorly drafted statute, and Congress soon corrected the statute. At least that is one way to interpret the motivation of the Ledbetter majority. If I wanted to be persuasive rather than divisive, that is how I would characterize the case. It is generally better to assume that other people have good will than to assume that they intend to be unfair. Use of Ledbetter is a fair analogy. I don’t think any of the justices argued that women should be underpaid, or that this was a covert agenda of the majority. The authors are well aware that the justices often are thinking beyond the instant case, and that it is likely that the aim of the majority was to establish a standard of judicial interpretation that declined to rewrite statutes, with the substantive issues being secondary.

Thank you for sharing your view of this case. We cited the facts of this case correctly and cited to Ginsburg’s view of the case which was then adopted into federal law. We made no comment on the intentions of the majority. Ginsburg’s view of the majority was not that they were unfair but instead that they did “not comprehend, or [were] indifferent to, the insidious way in which women can be victims of pay discrimination.” Similarly, the myriad and somewhat conflicting objections listed in this review seem to ignore the insidious and obvious ways women suffer discrimination in medicine both as patients and as physicians. As you state, we believe it is a fair analogy and hope for legislative changes to address discriminatory reimbursement under CMS with the additional hope that this will result in downstream benefits for women surgeons.

One last point. The paragraph beginning on page 155 is tangentially related to the rest of the article. It also is poorly substantiated. It could be deleted. Mentioning a laundry list of complaints as a ‘by-the-way’ at the end of the manuscript will not make unconvinced people take the authors more seriously. But, as it stands, the authors write that lower billing (they probably mean lower reimbursement) leads to “less administrative support, less nursing support, less operating room time, and less funding for pilot studies leading to less major funding for research.” Their citation is to an article in a non-scholarly publication of the Northwestern University Business School summarizing scholarly work by a faculty member. The citation was to work of journalism, not a work of scholarship, though the journalism fully cited the scholarship that it reported. The magazine piece actually says that women in all fields receive smaller initial grants than men, with no reference to specialty. Furthermore, the magazine piece made no
reference to the worse clinical support claimed by the authors. These errors need to be corrected. It is curious that the authors of this manuscript under review journalism rather than the original scholarly article. The authors might want to read the original source of the information and cite the primary data instead of the magazine article. It is not the role of a peer reviewer to cite check each reference in a manuscript. I recommend that the authors review their other citations to confirm that their attributions are accurate.

We felt the journalist review was more accessible but will correct the citation which stands for the proposition that women receive less funding in general. We have reviewed our citations carefully and our attributions are accurate.

Thank you for highlighting the billing/reimbursement switch – we corrected page 5 and page 9 to say reimbursement.