OBSTETRICS & GYNECOLOGY

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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.*

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Questions about these materials may be directed to the *Obstetrics & Gynecology* editorial office: obgyn@greenjournal.org.

Date: Aug 08, 2019
To: "Pooja Mehta" [redacted]
From: "The Green Journal" em@greenjournal.org
Subject: Your Submission ONG-19-1213

RE: Manuscript Number ONG-19-1213

Racial inequities in preventable pregnancy-related death in Louisiana, 2011-16

Dear Dr. Mehta:

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 21 days from the date of this letter. If we have not heard from you by Aug 29, 2019, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1: The authors report on their investigation comparing rates of preventable maternal deaths in the State on Louisiana between 2011-2016.

It is laudable that they made good use of a rigorous review process and analyzed the information provided from the committee.

The conclusion that preventable maternal deaths are far more frequent among non-Hispanic black women is an important finding and one that has implications for medical, social, economic and ethical aspects of life in our society.

Reviewer #2: Mehta and colleagues present findings from a retrospective study of the Louisiana Pregnancy-Associated Mortality Review (2011-2016) designed to evaluate racial disparities in preventability of maternal mortality. The authors evaluated a total of 47 pregnancy-related maternal deaths occurring during the time interval noted. Review teams evaluated each case of maternal mortality to identify cause of death, preventability and contributing factors. As anticipated, maternal mortality was higher among non-Hispanic black women when compared to non-Hispanic white women. The authors also noted a significantly higher rate of preventable maternal deaths among non-Hispanic black women when compared to non-Hispanic white women. The authors also evaluate findings in context of maternal level of care. The manuscript is exceptionally well-written and provided important insights into our understanding of causes of maternal mortality and potential preventability. A point-by-point critique of the paper follows:

1) Although the study's numbers are small, the systematic approach to case review, conferencing, and consensus decision making brings strength to the study. The description of the review teams are only superficially described in the paper. It would be useful to provide additional details regarding the review team composition and how these teams interacted with the actual review committee. These additional specifics would increase readers understanding of the results presented.

2) The authors identify 3 leading causes of pregnancy-related death were 1) hemorrhage, 2) cardiomyopathy and 3) cardiovascular or coronary conditions. For the conditions where there as potential for preventability, what were the specific interventions or opportunities that the review committee deemed as potential benefit. There is some very vague commentary in the discussion but it would be useful to provide concrete examples, from the actual cases reviewed, of what opportunities/intervention that made a given case potentially preventable. This additional death-level data would be highly useful to the readership.

3) The authors provide an interested evaluation of their observations according to maternal facility level. The authors note that the State of Louisiana is beginning to designate maternal levels of care (line 161-162), but this does not seem to have been in place in the years of the mortality review (2011-2016). How was the maternal facility level determined for the analysis? Self-reported by center vs review committee opinion vs other? Additional insights regarding how the maternal facility level was determined would be useful to include in the revised paper.

Reviewer #3: This is a very well written paper addressing disparity in maternal morbidity in the state of Louisiana from 2011-2016. The authors have done an admirable job of reflecting the challenging work of a MMR committee in that state and examining racial inequalities in maternal morbidity -- specifically finding that not only is pregnancy-related death more common amongst non-Hispanic black women but also that the rate of preventable pregnancy related mortality is higher among this group. Interestingly, the rates of preventable deaths were not different between higher and lower risk facilities. Although this retrospective cohort includes a small number of patients, given the rareness of maternal death it is actually a decent size cohort and because it is confined to one state, authors are able to explain and examine details in a way that other publications done at the national level do not. This would add to the literature significantly.

A few thoughts:

Results:

Could you consider including as a separate analysis the pregnancy associated deaths or at least a supplement describing what those were? I wonder if inclusion of these 11 patients alters the results (I would suspect it does not)

Could you include a supplemental table outlining at which level (patient, family, provider, facility, system, community level) the deaths were preventable, or did the MMC not report this in that granular of detail? While I worry that attributing some of the preventable components to the patient or family could allow "victim blaming" and I believe that even factors at those levels are attributable to inequities in our system, I am curious if the preventable deaths were more likely to be provider vs facility vs system issues --- I think understanding these levels is important to go forward in attempt to improve outcomes.

Lines 185-187, can you give a p value/RR for these differences in rate of pregnancy-related death?

Discussion:
The discussion is very eloquent and demonstrates the authors' thorough and complete understanding of the complex contributors to maternal mortality. The authors highlight two seemingly contradictory things -- first that failure to transport to a higher level of care was the leading contributing factor to pregnancy related deaths in LA in a separate study from 2011-2016 and then that in their study receiving care at a higher level facility did not eliminate racial inequity in preventable death. Can the authors speak to this contradiction more? I assume the deaths examined in the cited MMR review report were the same as those included in the current study?

Although authors point out that inclusion of the pregnancy check box increased cases starting in 2012 , they do not speak to the significant increase/proportions of death that occurs in 2016 -- is there any explanation for thi and might it have biased results in some way (increase seen in table 1 -- could also use ANOVA to potentially illustrate that the only statistical difference was between 2011 and the other years, perhaps 2016 is not a statistical outlier?)
The authors' call to action is appropriate and well written, with concrete suggestions for improvements.

STATISTICAL EDITOR COMMENTS:

The Statistical Editor makes the following points that need to be addressed:

Tables 1, 2, 3, 4: Since the total N = 47, (and fewer for row entries of Tables 2,3,4) should round the %s to nearest whole number, not to 0.1%.

Was the analysis of "preventable, not preventable or unable to determine" made with the reviewer's blinded to the race/ethnicity of the decreased?

lines 185-187: Should include the data for the denominators for the non-Hispanic black and non-Hispanic white cohorts and then add CIs and test whether the rates were statistically different.

lines 163-165, 194-195: If Fisher's test was used, 19/32 vs 1/11 has p = .005, not .03 by Fisher's exact test.

lines 197-199: 2/4 vs 14/27 has p = 1.00 by Fisher's.

EDITOR COMMENTS:

1. Thank you for your submission to Obstetrics & Gynecology. In addition to the comments from the reviewers above, you are being sent a notated PDF that contains the Editor's specific comments. Please review and consider the comments in this file prior to submitting your revised manuscript. These comments should be included in your point-by-point response cover letter.

The notated PDF is uploaded to this submission's record in Editorial Manager. If you cannot locate the file, contact Randi Zung and she will send it by email - rzung@greenjournal.org.

- We no longer require that authors adhere to the Green Journal format with the first submission of their papers. However, any revisions must do so. I strongly encourage you to read the instructions for authors (the general bits as well as those specific to the feature-type you are submitting). The instructions provide guidance regarding formatting, word and reference limits, authorship issues, and other things. Adherence to these requirements with your revision will avoid delays during the revision process, as well as avoid re-revisions on your part in order to comply with the formatting. For instance, we do not number our sections.

- This bears some comment in the discussion--If I'm reading this correctly, over 2/3 of "maternal deaths" were not considered by the review teams as potentially pregnancy-associated deaths. Presumably most of these were A. not actually pregnant or post delivery within 42 days so miscoded or B. Not pregnancy related--such as a MVA and the victim happened to be pregnant. Please provide, here in the results, a break down of how you got down to 59 from 187.

- Do you have data to tell us what the age distribution of pregnant women in Louisiana is? Is this age distribution of women who died different than the overall age distribution of pregnant women in your state?

- again, what is distribution of Medicaid payment for births in Louisiana. This sort of data in a vacuum is not informative. Similar throughout your paper.

- please be consistent w/ terminology. non-Hispanic white?

- I don't understand sentence from 220-220. This of course does not include deaths from ectopics, miscarriages. Period (line 221) indicates a time frame such as the 42 days post partum, while "labor and delivery" is a place. Based on data presented online 180-182, could you simplify this by saying something like " we found a striking disparity in preventable deaths when focusing on intrapartum and 42-days post partum periods". Did you present data in results that show that these time periods, while they accounted for about 85% of deaths as I understand your data at 180 was particularly at higher risk for disparity? I just see that this is when most of the deaths occurred.

- 44% of your deaths occurred at Level 1/2 hospitals. Where does 36% come from? Please provide this in results section.

- You studied deaths over a 6 year period. Please describe in the methods section when these were reviewed--all at once using the most current CDC guidelines or yearly? If yearly, did the process change over the 6 years? If process changed, this may need to be part of limitation.

- is this "health care system-patient partnership? Respectful partnerships with patients"? "Patient partnership" isn't very clear.

2. Can you please tell us when you identified (and how) the deceased woman's race when the mortality reviews were being done? This question is raised due to the potential for bias if the reviewers knew the woman's race before assignment of preventability.

3. 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.

4. As of December 17, 2018, Obstetrics & Gynecology has implemented an "electronic Copyright Transfer Agreement" (eCTA) and will no longer be collecting author agreement forms. 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.

5. In order for an administrative database study to be considered for publication in Obstetrics & Gynecology, the database used must be shown to be reliable and validated. In your response, please tell us who entered the data and how the accuracy of the database was validated. This same information should be included in the Materials and Methods section of the manuscript.

6. Please submit a completed STROBE checklist with your revision.

Responsible reporting of research studies, which includes a complete, transparent, accurate and timely account of what was done and what was found during a research study, is an integral part of good research and publication practice and not an optional extra. Obstetrics & Gynecology supports initiatives aimed at improving the reporting of health research, and we ask authors to follow specific guidelines for reporting randomized controlled trials (ie, CONSORT), observational studies (ie, STROBE), meta-analyses and systematic reviews of randomized controlled trials (ie, PRISMA), harms in systematic reviews (ie, PRISMA for harms), studies of diagnostic accuracy (ie, STARD), meta-analyses and systematic reviews of observational studies (ie, MOOSE), economic evaluations of health interventions (ie, CHEERS), quality improvement in health care studies (ie, SQUIRE 2.0), and studies reporting results of Internet e-surveys (CHERRIES). Include the appropriate checklist for your manuscript type upon submission. Please write or insert the page numbers where each item appears in the margin of the checklist. Further information and links to the checklists are available at http://ong.editorialmanager.com. In your cover letter, be sure to indicate that you have followed the CONSORT, MOOSE, PRISMA, PRISMA for harms, STARD, STROBE, CHEERS, SQUIRE 2.0, or CHERRIES guidelines, as appropriate.

7. 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 and gynecology data definitions at https://www.acog.org/About-ACOG/ACOG-Departments/Patient-Safety-and-Quality-Improvement/reVITALize. If use of the reVITALize definitions is problematic, please discuss this in your point-by-point response to this letter.

8. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Original Research reports should not exceed 22 typed, double-spaced pages (5,500 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.

9. 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).

10. 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 limits for different article types are as follows: Original Research articles, 300 words. Please provide a word count.

11. 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.

12. 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.

13. In your Abstract, manuscript Results sections, and tables, the preferred citation should be in terms of an effect size, such as odds ratio or relative risk or the mean difference of a variable between two groups, expressed with appropriate confidence intervals. When such syntax is used, the P value has only secondary importance and often can be omitted or noted as footnotes in a Table format. Putting the results in the form of an effect size makes the result of the statistical test more clinically relevant and gives better context than citing P values alone.

If appropriate, please include number needed to treat for benefits (NNTb) or harm (NNTh). When comparing two procedures, please express the outcome of the comparison in U.S. dollar amounts.

Please standardize the presentation of your data throughout the manuscript submission. For P values, do not exceed three decimal places (for example, "P = .001"). For percentages, do not exceed one decimal place (for example, 11.1%").

14. Please review the journal's Table Checklist to make sure that your tables conform to journal style. The Table Checklist is available online here: http://edmgr.ovid.com/ong/accounts/table_checklist.pdf.

15. 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 via the Clinical Guidance & Publications page at https://www.acog.org/Clinical-Guidance-and-Publications/Search-Clinical-Guidance.

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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.

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 21 days from the date of this letter. If we have not heard from you by Aug 29, 2019, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

Nancy C. Chescheir, MD
Editor-in-Chief

2018 IMPACT FACTOR: 4.965
2018 IMPACT FACTOR RANKING: 7th out of 83 ob/gyn journals

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We would like to thank the reviewers and the editor for their thoughtful review of our manuscript. Please see below for a point by point response to the reviewers, in *italics*. Line numbers listed may altered due to presence of track changes in the manuscript draft.

Reviewer #1: The authors report on their investigation comparing rates of preventable maternal deaths in the State on Louisiana between 2011-2016. It is laudable that they made good use of a rigorous review process and analyzed the information provided from the committee. The conclusion that preventable maternal deaths are far more frequent among non-Hispanic black women is an important finding and one that has implications for medical, social, economic and ethical aspects of life in our society.

We thank the reviewer for the kind words and agree that our findings have broad and important implications.

Reviewer #2:
1) Although the study's numbers are small, the systematic approach to case review, conferencing, and consensus decision making brings strength to the study. The description of the review teams are only superficially described in the paper. It would be useful to provide additional details regarding the review team composition and how these teams interacted with the actual review committee. These additional specifics would increase readers understanding of the results presented.

Thank you for this point and we agree that providing more detail would be useful. We have now added additional information to lines 155-163 in the methods section:
"Leading state experts conducted a modified review from October 2017 to May 2018 in response to an urgent need for up-to-date data on pregnancy-related deaths. The maternal mortality review team consisted of two general obstetrician gynecologists, four maternal fetal medicine specialists selected for regional representation, one nurse executive with background in labor and delivery, and a forensic pathologist. All review team members were members of the larger Louisiana Pregnancy-Associated Mortality Review program. This expedited, targeted review examined pregnancy-related deaths that occurred among Louisiana residents in the state of Louisiana from January 1, 2011 through December 31, 2016."

In addition, we have added more information on how this review team process informed changes to the ongoing review committee in lines 452-462 in the revised Discussion:
"Several recommendations were made in the recent publicly available report summarizing the full review of 2011-16 pregnancy-related deaths that is the subject of this secondary analysis. First, the review team recommended a broader structure for future reviews, incorporating representative expertise in issues facing impacted communities, with a call to "build committee expertise on addressing social determinants of health and the negative impact of policies, practices, and systems on people of color." Subsequently the Louisiana Pregnancy-Associated Mortality Review has been broadened to include members representing anesthesiology, emergency medicine, critical care, psychiatry with specific expertise in addiction, public health, injury prevention, behavioral health, midwifery, doula care, nursing, and community-based intimate partner violence prevention."

2) The authors identify 3 leading causes of pregnancy-related death were 1) hemorrhage, 2) cardiomyopathy and 3) cardiovascular or coronary conditions. For the conditions where there was potential for preventability, what were the specific interventions or opportunities that the review committee deemed as potential benefit. There is some very vague commentary in the discussion but it would be useful to provide concrete examples, from the actual cases reviewed, of what opportunities/intervention that made a given case potentially preventable. This additional death-level data would be highly useful to the readership.

Thank you for this important point. We have now included a summary of key recommendations relating to these top 3 causes in the revised discussion, lines 463-474:
"Specific to the leading causes of pregnancy-related death identified, reviewers recommended building systems for continuous quality improvement leveraging the state perinatal quality collaborative, and addressing equity by incorporating patient advisors, community input, and training on implicit bias into quality improvement efforts. The review team recommended a focus on facility-level policies and protocols, with attention to systems for recognition of early warning signs, as well as development of local facility criteria for transfer to higher level of care. Other recommendations focused on collaboration with emergency rooms and recognition of repeat emergency visits as a signal of risk; furthering access to contraception, medically-indicated abortion, and reproductive life planning; integration of behavioral health and addiction treatment; and shared attention to the social determinants of health. A full list of recommendations is available in the Louisiana Department of Health's publicly available Maternal Mortality Review Report, and falls outside the scope of this study."

3) The authors provide an interesting evaluation of their observations according to maternal facility level. The authors note that the State of Louisiana is beginning to designate maternal levels of care (line 161-162), but this does not seem to have been in place in the years of the mortality review (2011-2016). How was the maternal facility level determined for the analysis? Self-reported by center vs review committee opinion vs other? Additional insights regarding how the maternal facility level was determined would be useful to include in the revised paper.

Thank you for this insightful question. We have now revised the manuscript to include the following statement in the methods section, lines 221-231:
"Place of death was extracted from death certificates and used to determine facility maternal level of care. Maternal levels of care were introduced through health standards licensing in Louisiana in 2007 to ensure appropriate access to services and acuity level of maternity care for those at risk for medical complications, and updated in accordance with consensus opinion from the American College of Obstetricians and Gynecologists in 2017.[20] Under this system, Louisiana birth facilities can be designated as freestanding birth centers, level I (basic care), level II (specialty care), level III (subspecialty care), and level IV (regional perinatal center). The variable for "maternal level of care" was obtained from an field in the maternal mortality review dataset that is updated annually by an epidemiologist based on a list provided by Louisiana Health Standards to the Bureau of Family Health at the Louisiana Department of Health."

Reviewer #3:
Could you consider including as a separate analysis the pregnancy associated deaths or at least a supplement describing what those were? I wonder if inclusion of these 11 patients alters the results (I would suspect it does not)

Thank you for this question. For the expedited review process that is this subject of this secondary analysis, the review team only reviewed deaths that met ICD-10 criteria for pregnancy-related deaths, eleven cases of which were categorized as pregnancy-associated by the review team upon more detailed review—even though the ICD-10 code for cause of death listed on the death certificate met "pregnancy-related" criteria. We are hesitant to include such a table in the manuscript as we would like to avoid misinterpretation by readers that these 11 cases represented all of the pregnancy-associated deaths taking place in Louisiana from 2011-16. They only represented the subset of pregnancy-associated cases with a "pregnancy-related" ICD-10 code, which were ultimately reassigned to "pregnancy-associated" by the review team. Furthermore, once a case was re-labeled "pregnancy-associated" or "unable to determine pregnancy relatedness" by the review team, no further determination was made regarding preventability or categorization of cause of death, limiting our ability to conduct an appropriate sensitivity analyses regarding the primary outcome of this secondary analysis, which is association

between race and level of care with preventability. Given that these excluded cases represent scenarios that the review team unanimously felt were pregnancy-associated and not related, and the findings of our paper focus on preventability among pregnancy-related causes, alone, we do not feel that the inclusion of these cases is relevant to our study findings or alters our results. For the reviewers' interest regarding the possibility of bias in our study results, we can share that of the 11 cases with "pregnancy-related" ICD-10 codes reassigned by the review team as "pregnancy-associated," 5 occurred in non-Hispanic white women, 6 in non-Hispanic black women, and one in a person classified as non-Hispanic other. Eight occurred in women who were insured through Medicaid during their pregnancy, 1 who was privately insured, and 3 in whom insurance status was unknown. In current reviews (of deaths occurring from 2017 through 2019) all pregnancy-associated are reviewed by the full committee, but this was not the case for this expedited review for cases from 2011-16.

Could you include a supplemental table outlining at which level (patient, family, provider, facility, system, community level) the deaths were preventable, or did the MMC not report this in that granular of detail? While I worry that attributing some of the preventable components to the patient or family could allow "victim blaming" and I believe that even factors at those levels are attributable to inequities in our system, I am curious if the preventable deaths were more likely to be provider vs facility vs system issues --- I think understanding these levels is important to go forward in attempt to improve outcomes.

Thank you for this insightful comment. We have clarified in the revision that our review committee did not code for the level of preventability in detail given the scope of the review (in current reviews committee members are in fact reporting preventability in the manner requested, in accordance with recommendations from the Centers of Disease Control):
"The specific level of preventability, along the spectrum from individual to community, was not coded by review team members." (line 436-437)

However, "contributing factors" were listed and coded for the recent Maternal mortality report, giving some idea of the level of preventability. In the revision we have clarified in the discussion that that provider and facility factors were more frequently identified compared to community factors, to help inform next steps, as the reviewer suggests:
"For example, Louisiana's recently released maternal mortality report summarizing 2011-16 pregnancy-related deaths reports the frequency at which certain contributing factors defined in the CDC's "Review to Action" guidelines were thought to be relevant to the outcome of a case by review team members. The "Failure to screen/inadequate assessment of risk" code—defined by the Centers for Disease Control and Prevention's Review to Action program as cases in which "factors placing the woman at risk for a poor clinical outcome [were] recognized, and the woman was not transferred/transported to a provider able to give a higher level of care"—was identified as the leading contributing factor to 2011-2016 pregnancy-related deaths in Louisiana, present in 36% of cases; provider, facility, and individual level contributing factors were generally the most frequently identified."(lines 392-402)

Lines 185-187, can you give a p value/RR for these differences in rate of pregnancy-related death?

Thank you for this request. Please see below for confirmation that the confidence intervals are non-overlapping and therefore that the rates are different. We use confidence intervals in keeping with the aligned request from the statistical editor.

non-Hispanic black 32/140785 = 22.7 per 100,000 births (95% CI 15.5 – 32.1)
non-Hispanic white 11/197630 = 5.6 per 100,000 (95% CI 2.8 – 10.0)

In the manuscript revision, lines 287-289 we have now included additional statistical reporting with denominators and confidence intervals, also requested by the statistical editor:

"The rate of pregnancy-related death among non-Hispanic black women (22.7 per 100,000 births, 95% CI 15.5, 32.1; N=32/140,785) was 4.1 times the rate among non-Hispanic white women (5.6 per 100,000 births, 95% CI 2.8, 10.0; N=11/197,630)."

Discussion:
The discussion is very eloquent and demonstrates the authors' thorough and complete understanding of the complex contributors to maternal mortality. The authors highlight two seemingly contradictory things -- first that failure to transport to a higher level of care was the leading contributing factor to pregnancy related deaths in LA in a separate study from 2011-2016 and then that in their study receiving care at a higher level facility did not eliminate racial inequity in preventable death. Can the authors speak to this contradiction more? I assume the deaths examined in the cited MMR review report were the same as those included in the current study?

Thank you for highlighting this need for clarification. In order to be clearer, we have stated more clearly throughout the manuscript that this study is a more focused secondary analysis of the review findings that are summarized in a publicly available report from the Louisiana Department of Health. In the manuscript revision we have also revised the statement highlighted to clarify that the "inadequate assessment of risk" is a predefined category for review coding established by the CDC that is qualitatively coded by the review team at the time of review, and not specific to quantitative findings regarding preventable pregnancy-related death by race which is the scope of this more focused secondary research analysis (quoted above). We have also included a clarifying statement in the revised discussion in the paragraph on maternal levels of care:
"However, the results of our secondary quantitative analysis examining facility level of care and preventability of death do not show a detectable relationship between occurrence of pregnancy-related death, racial inequity and the specific maternal level of care of the facility where a pregnancy-related death occurs." (lines 406-409)

Although authors point out that inclusion of the pregnancy check box increased cases starting in 2012 , they do not speak to the significant increase/proportions of death that occurs in 2016 -- is there any explanation for this and might it have biased results in some way (increase seen in table 1 -- could also use ANOVA to potentially illustrate that the only statistical difference was between 2011 and the other years, perhaps 2016 is not a statistical outlier?)

Thank you for this thoughtful comment regarding how the differences in the numbers of pregnancy-related deaths identified in each year in the study period may impact results. As this study is a focused cross-sectional analysis of the total cases included in one particular committee review, we do not feel that including a statistical test to look at variation by year in the manuscript is relevant. However, please see below for statistical testing on variation across the years during the study period for the reviewers' interest, indicating that the only years where there is a statistical difference are 2011 compared to 2016. We will defer to the reviewers' judgment as to whether this information should be included as a supplemental table.

Year	*Rate per 100,000*	*Lower 95% CI*	*Upper 95% CI*
2011	*3.25*	*0.39*	*11.75*
2012	*11.22*	*4.51*	*23.13*
2013	*11.13*	*4.47*	*22.92*
2014	*12.49*	*5.39*	*24.61*
2015	*13.95*	*6.38*	*26.48*
2016	*22.18*	*12.13*	*37.21*

In terms of a possible explanation for the rise in pregnancy-related deaths detected, while the checkbox on the United States standard death certificate was added with the 2003 revision, which Louisiana adopted in 2012, Louisiana has had a checkbox in place since 1989 to assist with identifying women who had been pregnant within 90 days of death. We therefore anticipate that the revision in 2012 impacted rates of pregnancy-associated and pregnancy-related deaths occurring within a year of pregnancy, but not the 42-day definition used for the relevant maternal mortality review, public report, and by extension, this study. We must assume that in keeping with national data, the pregnancy-related death rate in Louisiana is in fact rising. We have attempted to clarify this issue in the manuscript revision with inclusion of the statement below in the limitations section, lines 426-433:
"Second, due to the inclusion of the pregnancy checkbox on Louisiana death certificates in 2012, there was a jump in case detection of deaths occurring during or within a year of the end of pregnancy during our study period, with possible underreporting earlier in the study period. The impact of this limitation is mitigated by the focus of the relevant maternal mortality review process, report, and by extension, this study, on the subset of pregnancy-related deaths occurring within 42 days of the end of pregnancy. Previous to adoption of the United States revised death certificate in 2012, Louisiana death certificates have featured a checkbox indicating pregnancy within 90 days of death since 1989."

The authors' call to action is appropriate and well written, with concrete suggestions for improvements.

STATISTICAL EDITOR COMMENTS:

Tables 1, 2, 3, 4: Since the total N = 47, (and fewer for row entries of Tables 2,3,4) should round the %s to nearest whole number, not to 0.1%.

Thank you for highlighting this error, which we have corrected throughout the manuscript revision.

Was the analysis of "preventable, not preventable or unable to determine" made with the reviewer's blinded to the race/ethnicity of the decreased?

Thank you for this important question. To limit bias, during meeting facilitation, review committee members were prompted to ascertain preventability of case prior to explicit discussion of demographic details including payer status and race. However, review committee members are not completely blinded as to race/ethnicity during review meetings, and this potential limitation has been highlighted in the revised discussion, lines 440-449:
"For example, review team members were not blinded to race or ethnicity of decedents during case review, though efforts were made to manage this potential bias (for example, race and ethnicity information is not shared during reviews until the end of presentation of the case narrative).

lines 185-187: Should include the data for the denominators for the non-Hispanic black and non-Hispanic white cohorts and then add CIs and test whether the rates were statistically different.

Thank you for this request. We have made the requested correction and described changes to the manuscript in detail above in response to Reviewer #3.

lines 163-165, 194-195: If Fisher's test was used, 19/32 vs 1/11 has p = .005, not .03 by Fisher's exact test.
lines 197-199: 2/4 vs 14/27 has p = 1.00 by Fisher's.

Thank you for this request for revision. The original p-value we included reflected the row x column results for all possible categories as opposed to a direct comparison between two values. We have now corrected the p-values to reflect the Fisher's tests above.

EDITOR COMMENTS:

1. Thank you for your submission to Obstetrics & Gynecology. In addition to the comments from the reviewers above, you are being sent a notated PDF that contains the Editor's specific comments. Please review and consider the comments in this file prior to submitting your revised manuscript. These comments should be included in your point-by-point response cover letter.

The notated PDF is uploaded to this submission's record in Editorial Manager. If you cannot locate the file, contact Randi Zung and she will send it by email - rzung@greenjournal.org.

- We no longer require that authors adhere to the Green Journal format with the first submission of their papers.
However, any revisions must do so. I strongly encourage you to read the instructions for authors (the general bits as well as those specific to the feature-type you are submitting). The instructions provide guidance regarding formatting, word and reference limits, authorship issues, and other things. Adherence to these requirements with your revision will avoid delays during the revision process, as well as avoid re-revisions on your part in order to comply with the formatting. For instance, we do not number our sections.

Thank you. We have reviewed the manuscript in detail to ensure that the formatting is in keeping with the updated instructions for authors and removed section numbering among other changes.

- This bears some comment in the discussion--If I'm reading this correctly, over 2/3 of "maternal deaths" were not considered by the review teams as potentially pregnancy-associated deaths. Presumably most of these were A. not actually pregnant or post delivery within 42 days so miscoded or B. Not pregnancy related—such as a MVA and the victim happened to be pregnant. Please provide, here in the results, a break down of how you got down to 59 from 187.

Thank you for prompting further clarification on this matter. We have now included a statement summarizing all available information shared with the study team by regional maternal child health coordinators based on Department of Health protocol regarding deaths that did not meet original criteria for pregnancy-related death occurring during or within 42 days of the end of a pregnancy, based on ICD-10 code. The original 187 cases identified represent a combination of deaths where there was no documentation of pregnancy outside of the death certificate check box, or the death occurred outside of the 42-day postpartum window. For the purpose of this paper, all deaths did not meet criteria for committee review were excluded. We did not have further information on excluded cases, as it was not part of routine Louisiana Department of Health protocol for nurse abstractors to document further information on excluded cases than what is listed below.

Year	*Identified cases*	*No evidence of pregnancy OR pregnancy ending more than 42 days before death*	*Confirmed pregnancy ending more than 42 days before death*	*"True" cases with pregnancy-related ICD-10 code*	*Confirmed pregnancy-related by Review team*	*Total births among LA residents*
2011	*6*	*3*	*0*	*3*	*2*	*61483*
2012	*20*	*10*	*3*	*7*	*7*	*62361*
2013	*39*	*29*	*3*	*7*	*7*	*62913*
2014	*35*	*26*	*1*	*8*	*8*	*64038*

2015	*39*	*26*	*0*	*13*	*9*	*64509*
2016	*48*	*26*	*1*	*21*	*14*	*63126*

We have added the statement below to the results section of the revised manuscript:
"Of 187 maternal deaths of Louisiana residents identified by ICD-10 cause of death as related to pregnancy, childbirth, or the puerperium, only 59 were verified upon committee review as potentially pregnancy-related deaths based on medical records. The remaining 128 deaths either had no documentation of pregnancy in the medical record, or the pregnancy ended more than 42 days prior to death. The maternal mortality review committee confirmed 47 of the 59 cases (80%) as true pregnancy-related deaths. Of the remaining 12 deaths, 11 were classified by the maternal mortality review committee as pregnancy-associated, but not pregnancy-related, and 1 death could not be classified as either pregnancy-related or pregnancy-associated by the committee based on the information available." (lines 255-263)

- Do you have data to tell us what the age distribution of pregnant women in Louisiana is? Is this age distribution of women who died different than the overall age distribution of pregnant women in your state?

Using vital records, we are able to confirm that the age distribution of women who died is different from the overall age distribution of pregnant women in Louisiana, as is reported in the publicly available report from the Louisiana Maternal Mortality Review Committee.

Maternal age	*Total Louisiana births 2011-16*	*% of all births*	*% Pregnancy-related deaths*	*p-value*
< 25	*143572*	*38*	*17*	*< 0.0001*
25-34	*196420*	*52*	*55*	
35+	*37295*	*10*	*28*	

We have added a statement on both age and payer distributions to the Results section of our revised manuscript to add this contextual information, pasted below.

- again, what is distribution of Medicaid payment for births in Louisiana. This sort of data in a vacuum is not informative. Similar throughout your paper.

Thank you for raising this issue. As the scope of our analysis is restricted to descriptive data issued by the Louisiana Maternal Mortality Review Committee on confirmed pregnancy-related deaths, this data was not included in the original manuscript. While we have shared information below regarding the distribution of births by payer in Louisiana during the study period, it is important to note that the source of this data is different for the general population than it is for individuals who experienced pregnancy-related deaths. Payer type for the general population is drawn from infant birth certificate. Payer type for for pregnancy-death cases is drawn from medical records made available to the Louisiana Pregnancy-Associated Mortality Review Committee during review meetings, with increased proportion of missing data from this source. We will defer to reviewer and editor's preference regarding whether further information should be shared in the manuscript.

Insurance Type	*Total Louisiana births 2011-16*	*% of all births*	*% Pregnancy-related deaths*	*p-value*
Medicaid	*238193*	*63*	*62*	*< 0.0001*
Private	*123865*	*33*	*17*	
Self	*4544*	*1*	*6*	
Unknown	*11828*	*3*	*15*	

However, we have included a statement in the discussion of the paper that provides a general comparison between these two proportions for contextualization of our results.
"Over half of the women who died were aged 25-34 years (55%, N=26) and about 28% (N=13) of maternal deaths occurred among women aged 35 or over (Table 1), compared to 52% and 10% respectively in the total birth population (data not shown). Nearly 70% were among non-Hispanic black women (N=32) compared to 37% in the total birth population (data not shown), and the majority of deaths (N=29, 62%) were among Medicaid-insured women compared to 63% in the total birth population (data not shown). (lines 264-286)."

- please be consistent w/ terminology. non-Hispanic white?

Thank you for this point; we have made the correction to consistent terminology throughout the manuscript revision, including line 297 where this comment was inserted.

- I don't understand sentence from 220-220. This of course does not include deaths from ectopics, miscarriages. Period (line 221) indicates a time frame such as the 42 days postpartum, while "labor and delivery" is a place. Based on data presented online 180-182, could you simplify this by saying something like " we found a striking disparity in preventable deaths when focusing on intrapartum and 42-days postpartum periods". Did you present data in results that show that these time periods, while they accounted for about 85% of deaths as I understand your data at 180 was particularly at higher risk for disparity? I just see that this is when most of the deaths occurred.

Thank you. We agree with the editor that this previous phrasing was not sufficiently clear. We have simplified this passage in the revised discussion as suggested:
"Our findings suggest important differences from nationally reported findings in our state. In contrast to the composite finding above in a study of pregnancy-related deaths occurring up to a year after pregnancy, we found a striking disparity in preventable death when focusing on pregnancy-related deaths occurring during pregnancy and up until 42 days postpartum in a single state over a six-year period." (lines 374-378)

- 44% of your deaths occurred at Level 1/2 hospitals. Where does 36% come from? Please provide this in results section.

In the revised manuscript, we have clarified that this "36%" mentioned in our discussion refers to qualitative findings regarding contributing factors to pregnancy-related death reported in the official report of the Louisiana Maternal Mortality Review, which is separate from our secondary analysis. We mention this statistic in keeping with author instructions on the discussion section, which state to authors, 'Your findings should be compared to previous studies with explanations in cases where they differ.' Please see below for our proposed revision:
"For example, Louisiana's recently released maternal mortality report summarizing 2011-16 pregnancy-related deaths in Louisiana reports the frequency at which certain contributing factors pre-defined in the Centers for Disease Control and Prevention's "Review to Action" guidelines were thought to be relevant to the outcome of a case by review team members. The "Failure to screen or inadequate assessment of risk" code—defined by the Centers for Disease Control and Prevention's Review to Action program as cases in which "factors placing the woman at risk for a poor clinical outcome [were] recognized, and the woman was not transferred or transported to a provider able to give a higher level of care"—was identified as the leading contributing factor to 2011-2016 pregnancy-related deaths in Louisiana, present in 36% of cases; provider, facility, and individual level contributing factors were the most frequently identified.[19] This finding is echoed by other state reviews, who have identified clinical readiness, standardized policies and procedures, adequate assessment and timing of treatment, and care

coordination as key opportunities to prevent pregnancy-related deaths due to hemorrhage, hypertension, and cardiovascular disease.
"However, the results of this quantitative secondary analysis examining facility level of care and preventability of death do not show a detectable relationship between occurrence of pregnancy-related death, racial inequity and the specific maternal level of care of the facility where a pregnancy-related death occurs." (lines 406-409)

- You studied deaths over a 6-year period. Please describe in the methods section when these were reviewed—they were all reviewed in 2017-18 – all at once using the most current CDC guidelines or yearly? If yearly, did the process change over the 6 years? If process changed, this may need to be part of limitation.

Thank you for this question. We have inserted the statement below to better answer this question in the methods section of the revised manuscript:
"All six years of pregnancy-related cases were reviewed during this eight-month period with a consistent review team, abstraction form and committee decisions process informed by guidelines from the Centers for Disease Control and Prevention." (lines 163-166)

We have also made the related clarification in the limitations portion of the revised discussion:
"The review team consisted of a small group of mostly clinicians, especially maternal fetal medicine specialists, which may introduce further bias into committee decisions." (line 447-449)

- is this "health care system-patient partnership? Respectful partnerships with patients"? "Patient partnership"
isn't very clear.
Thank you for this point. We have included the slight revision below to try and clarify this accepted term from the Institute of Healthcare Improvement, without distracting from the overall flow and purpose of the Discussion section:
"The collaborative's theory of change focuses on four key drivers deemed necessary to achieve both aims: 1) reliable clinical processes, 2) respectful patient partnership (supporting patient centered co-design of efforts with health system quality improvement teams with an emphasis on patients from historically marginalized backgrounds), 3) effective peer teamwork, and 4) engaged perinatal leadership." (lines 496-500)

2. Can you please tell us when you identified (and how) the deceased woman's race when the mortality reviews were being done? This question is raised due to the potential for bias if the reviewers knew the woman's race before assignment of preventability.

Thank you for this important question. We have clarified in the revised methods setion manuscript that race and ethnicity data was collected from the medical record, shared with committee members at the end of each case synopsis, and available on abstracted charts prior to review members proceeding through committee decisions:
"A case synopsis using abstracted medical records was shared with review members at each meeting, with sharing of demographic information including race, ethnicity, and insurance status at the end of each synopsis to mitigate bias as the team reviewed each case." (lines 202-205)

We have then revised the discussion section to include potential bias as a limitation of this study, and indeed all maternal mortality review process using the current CDC guidelines:

"For example, review team members were not blinded to race or ethnicity of decedents during case review, though efforts were made to manage this potential bias (for example, race and ethnicity

information is not shared during reviews until the end of review of the case narrative). The review team consisted of a small group of mostly clinicians, especially maternal fetal medicine specialists, which may introduce further bias into committee decisions." (lines 440-449)

3. 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.

We are happy to opt-in to this request to post this revision letter publicly.

4. As of December 17, 2018, Obstetrics & Gynecology has implemented an "electronic Copyright Transfer Agreement" (eCTA) and will no longer be collecting author agreement forms. 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.

Thank you—we have confirmed the status of all disclosures with our co-authors.

5. In order for an administrative database study to be considered for publication in Obstetrics & Gynecology, the database used must be shown to be reliable and validated. In your response, please tell us who entered the data and how the accuracy of the database was validated. This same information should be included in the Materials and Methods section of the manuscript.

Thank you for raising this important issue. We have included the information below in the Materials and Methods section of the revised manuscript:

"A senior epidemiologist entered data from Maternal Mortality Review Information Application Maternal Mortality Review Committee Decisions Forms into an Excel worksheet that was then important into SAS for analysis. After all data was entered, forms were reviewed by members of the Louisiana Department of Health epidemiology team to ensure accuracy of the database. Frequencies from SAS were cross-reference with Excel counts." (lines 223-228)

6. Please submit a completed STROBE checklist with your revision.

We have submitted a completed STROBE checklist with the revised manuscript.

Responsible reporting of research studies, which includes a complete, transparent, accurate and timely account of what was done and what was found during a research study, is an integral part of good research and publication practice and not an optional extra. Obstetrics & Gynecology supports initiatives aimed at improving the reporting of health research, and we ask authors to follow specific guidelines for reporting randomized controlled trials (ie, CONSORT), observational studies (ie, STROBE), meta-analyses and systematic reviews of randomized controlled trials (ie, PRISMA), harms in systematic

reviews (ie, PRISMA for harms), studies of diagnostic accuracy (ie, STARD), meta-analyses and systematic reviews of observational studies (ie, MOOSE), economic evaluations of health interventions (ie, CHEERS), quality improvement in health care studies (ie, SQUIRE 2.0), and studies reporting results of Internet e-surveys (CHERRIES). Include the appropriate checklist for your manuscript type upon submission. Please write or insert the page numbers where each item appears in the margin of the checklist. Further information and links to the checklists are available at http://ong.editorialmanager.com. In your cover letter, be sure to indicate that you have followed the CONSORT, MOOSE, PRISMA, PRISMA for harms, STARD, STROBE, CHEERS, SQUIRE 2.0, or CHERRIES guidelines, as appropriate.

7. 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 and gynecology data definitions at https://www.acog.org/About-ACOG/ACOG-Departments/Patient-Safety-and-Quality-Improvement/reVITALize. If use of the reVITALize definitions is problematic, please discuss this in your point-by-point response to this letter.

8. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Original Research reports should not exceed 22 typed, double-spaced pages (5,500 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.

We have confirmed that the revised manuscript is within the maximum word and page count and have included only 25 references.

9. 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).

We have acknowledged all financial support, manuscript assistance, and relevant presentations.

10. 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 limits for different article types

are as follows: Original Research articles, 300 words. Please provide a word count.

Thank you for this important reminder. We have carefully revised the abstract to include all changes made throughout the manuscript. The current word count of the Abstract is 274 words.

11. 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.

Thank you for this reminder. We have removed all abbreviations not on the approved list from the manuscript.

12. 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.

13. In your Abstract, manuscript Results sections, and tables, the preferred citation should be in terms of an effect size, such as odds ratio or relative risk or the mean difference of a variable between two groups, expressed with appropriate confidence intervals. When such syntax is used, the P value has only secondary importance and often can be omitted or noted as footnotes in a Table format. Putting the results in the form of an effect size makes the result of the statistical test more clinically relevant and gives better context than citing P values alone.

If appropriate, please include number needed to treat for benefits (NNTb) or harm (NNTh). When comparing two procedures, please express the outcome of the comparison in U.S. dollar amounts.

Please standardize the presentation of your data throughout the manuscript submission. For P values, do not exceed three decimal places (for example, "P = .001"). For percentages, do not exceed one decimal place (for example, 11.1%").

Thank you for highlighting the need for these revisions. We have standardized the presentation of data throughout the submission as requested, rounding all percentages to the nearest whole number given the small study sample. We have included confidence intervals throughout the manuscript where there is a comparison of ratios. We have reviewed the request for effect sizes with our advisors at the Centers for Disease Control and Prevention and respectfully believe that our reporting is in keeping with current convention around reporting of maternal mortality ratios, with additional simple descriptive analyses describing attributes of pregnancy-related death cases. As a descriptive study, there is not a definitive hypothesis being tested; rather our goal is to present most relevant aggregate findings of a multi-year case review of pregnancy-related deaths in one state. We hope that the reviewers will agree that this type of report does not lend itself to effect size reporting and have listed relevant citations below to support this approach:

Berg CJ, Harper MA, Atkinson SM, et al. Preventability of pregnancy-related deaths: Results of a state-wide review. *Obstet Gynecol*. 2005;106(6):1228-1234. *Mehta PK, Bachhuber MA, Hoffman R, Srinivas SK. Deaths from Unintentional Inj*

14. Please review the journal's Table Checklist to make sure that your tables conform to journal style. The Table Checklist is available online here: http://edmgr.ovid.com/ong/accounts/table_checklist.pdf.

Thank you. We have reviewed the checklist in preparation for submission of this revision and believe that our tables adequately conform to the journal style.

15. 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 via the Clinical Guidance & Publications page at https://www.acog.org/Clinical-Guidance-and-Publications/Search-Clinical-Guidance.

We have confirmed that all ACOG documents cited are up to date and have not been withdrawn.

16. 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/A48. The cost for publishing an article as open access can be found at http://edmgr.ovid.com/acd/accounts/ifauth.htm.

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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Thank you for your careful review of our manuscript. I have reviewed the Instructions for Authors provided. I affirm that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

Signed by: _____
Pooja K. Mehta, MD MS