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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)*
- Email correspondence between the editorial office and the authors*

*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.

Date:	Apr 19, 2019
То:	"Emily S Miller"
From:	"The Green Journal" em@greenjournal.org
Subject:	Your Submission ONG-19-314

RE: Manuscript Number ONG-19-314

Screening and treatment after implementation of a universal perinatal depression screening program

Dear Dr. Miller:

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 May 10, 2019, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1: This is a retrospective cohort (natural experiment) study looking at the effect of initiation of an institutional policy of universal perinatal depression screening. A single institution's patient from 2008-2015 served as the study population, a before and after cohort were analyzed with the implementation of a universal policy in 2009. The outcomes of interest were frequency of screening and the frequency for which care plans were initiated in women that screened positive for depression. The study found that the frequency of completion of screening was significantly increased after implementation of the policy. The authors also found that care plans were much more frequently initiated after the policy and provider educational programs. They concluded that implementation of an institutional policy of universal depression screening was associated with improvement in depression screening and care. Ways in which this manuscript could be improved include:

1. Lines 80-82: What search terms di you exhaust to make sure this was the case? I would elaborate.

2. Line 131: Do you mean patient with missing data were removed from analysis? I would rewrite this sentence for clarity.

3. Lines 166-167: Why did the cohort differ in demographics by so much? Was there a change in patient population or other policy changes during this time?

4. Lines 214-215: One limitation also is a university center with lots of resources versus perhaps community based or rural program with less resources. I would add some discuss about those limitation as well.

5. Lines 230-232: Any plans to investigate this further? Obviously, uptake on behavioral health referrals is another key variable to treatment of depression.

6. Lines 242-243: How does your study differ? I would point out the similarities and differences.

Reviewer #2: Review of ONG-19-314

Obstetrics and Gynecology

"Screening and treatment after implementation of a universal perinatal depression screening program" This is a well-written manuscript testing the association between the implementation of a policy requiring universal screening for depression perinatally and the frequency of subsequent screening and referral for treatment. The topic is an important one, particularly in light of the recommendations of the American College of Obstetricians and Gynecologists that women be screened once perinatally.

There are a few questions related to the method and analyses that require clarification. The use of the PHQ-9 could be seen as a weakness of the study, as it includes items related to fatigue and anxiety which may be typical post-natal sequelae. The literature suggests that it may not be as psychometrically sensitive as the Edinburgh Postnatal Depression Scale, although some have reported reasonable validity in pregnant women (Sidebottom, 2012). The authors should probably acknowledge this issue in the discussion. I very much appreciated the power analyses, and they are a strength of this section.

As the authors point out, the cohort that constitutes the "pre policy" control looks quite different from the post-policy cohort (see Table 1). The two groups differ on a variety of dimensions, including race/ethnicity, use of public insurance, and parity. Do the authors have any explanation for why the two cohorts are so different? The concern is that variables like race/ethnicity may be associated with differences in mental health and well-being and access to care, and may confound the data. Were variables like race/ethnicity controlled for in the regressions that produced the odds ratio on p. 11? (Please delete the "a" before the OR). A list of the variables tested in the model would be helpful-they could be included in a more complete table summarizing the regression model predicting post-partum outcomes. The low frequency of postpartum depression could also be related to the demographics of the sample. In general, the authors need to provide more information about the differences between the cohorts and how they might impact screening and/or referrals.

Figure 2 is not referenced in the text and requires additional explanation or context.

If the authors can address these issues, the paper makes a contribution to our understanding of the ways in which policy changes may impact the frequency of screening and treatment referrals.

Reviewer #3: Thank you for the opportunity to review "Screening and treatment after implementation of a universal perinatal depression screening program." Your paper highlights the difference a well thought out implementation can make. I think this article would encourage readers to implement their own systems.

STATISTICAL EDITOR'S COMMENTS:

1. lines 146-147 and 194-195: The p-value of .066 does not meet the defined threshold and therefore there is no statistical basis for stating that "these changes were sustained over time."

2. lines 45-46, 177: Should have more elaboration of the results of the logistic regression. A Table should be included showing not only the relevant aORs, but the crude ORs for comparison and a footnote citing all the variables retained in the multivariable regression model.

3. lines 178-180 and Fig 1: The stats test used evaluated the variability of all 5 years vs random, it was not a test of "continuing to improve". That statement should be retracted, or evidence included to show that the yearly numerical changes were statistically significant.

4. Table 1: Need to enumerate any missing data.

5. Table 2 and lines 190-192: Should include not only the overall test for difference in these distributions; the individual row components should be tested also.

6. Figs 1 and 2: Should include as supplemental material, the numbers associated with the histograms in these figures. Would be informative for the reader to include the pre-policy period, so as to illustrate the change in proportions coincident with the policy implementation.

EDITORIAL OFFICE COMMENTS:

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, as well as subsequent author queries. 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:
 OPT-IN: Yes, please publish my response letter and subsequent email correspondence related to author queries.

2. OPT-OUT: No, please do not publish my response letter and subsequent email correspondence related to author queries.

2. 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.

Any author agreement forms previously submitted will be superseded by the eCTA. During the resubmission process, you are welcome to remove these PDFs from EM. However, if you prefer, we can remove them for you after submission.

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 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.

4. 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.

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. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

* * *

If you choose to revise your manuscript, please submit your revision via Editorial Manager for Obstetrics & Gynecology at http://ong.editorialmanager.com. It is essential that your cover letter list point-by-point the changes made in response to each criticism. Also, please save and submit your manuscript in a word processing format such as Microsoft Word.

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 May 10, 2019, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

The Editors of Obstetrics & Gynecology

2017 IMPACT FACTOR: 4.982 2017 IMPACT FACTOR RANKING: 5th 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 editors of Obstetrics & Gynecology,

Thank you for the opportunity to revise our manuscript. We feel the submission has been significant strengthened by the thoughtful comments of the reviewers and the opportunity to make revisions in response. Below are point by point responses to each of the suggestions.

Thank you for your careful consideration of our work. Warmly, Emily S Miller, MD MPH

REVIEWER COMMENTS:

Reviewer #1: This is a retrospective cohort (natural experiment) study looking at the effect of initiation of an institutional policy of universal perinatal depression screening. A single institution's patient from 2008-2015 served as the study population, a before and after cohort were analyzed with the implementation of a universal policy in 2009. The outcomes of interest were frequency of screening and the frequency for which care plans were initiated in women that screened positive for depression. The study found that the frequency of completion of screening was significantly increased after implementation of the policy. The authors also found that care plans were much more frequently initiated after the policy and provider educational programs. They concluded that implementation of an institutional policy of universal depression screening was associated with improvement in depression screening and care. Ways in which this manuscript could be improved include:

1. Lines 80-82: What search terms did you exhaust to make sure this was the case? I would elaborate. The sentence has been reworded to better express the controversy in the literature surrounding associations between screening policies and health outcomes and references have been added to support the controversy.

2. Line 131: Do you mean patient with missing data were removed from analysis? I would rewrite this sentence for clarity.

The sentence has been clarified to express that no imputation was done for analysis.

3. Lines 166-167: Why did the cohort differ in demographics by so much? Was there a change in patient population or other policy changes during this time?

Review of policy and care changes surrounding implementation of this screening program demonstrated a change in the electronic medical record system used by several of the included clinics. While all medical records (in various EMRs) were abstracted, changes in the EMR itself could represent an unmeasured confounder that contributed to these differences. This was added to the limitations

4. Lines 214-215: One limitation also is a university center with lots of resources versus perhaps community based or rural program with less resources. I would add some discuss about those limitation as well.

This specific limitation of external generalizability was added to the limitations section.

5. Lines 230-232: Any plans to investigate this further? Obviously, uptake on behavioral health referrals is another key variable to treatment of depression.

Due to limitations of our electronic medical record (no systematic recording of successful linkage to referrals outside of our university system, which is commonplace in mental health), we are unable to investigate this further. This specific limitation, and thus our inability to investigate further, was described briefly.

6. Lines 242-243: How does your study differ? I would point out the similarities and differences.

Collaborative care is a health systems approach to mental health care delivery that requires resources well beyond this screening policy implementation. These differences were described.

Reviewer #2: Review of ONG-19-314

This is a well-written manuscript testing the association between the implementation of a policy requiring universal screening for depression perinatally and the frequency of subsequent screening and referral for treatment. The topic is an important one, particularly in light of the recommendations

of the American College of Obstetricians and Gynecologists that women be screened once perinatally. There are a few questions related to the method and analyses that require clarification.

1. The use of the PHQ-9 could be seen as a weakness of the study, as it includes items related to fatigue and anxiety which may be typical post-natal sequelae. The literature suggests that it may not be as psychometrically sensitive as the Edinburgh Postnatal Depression Scale, although some have reported reasonable validity in pregnant women (Sidebottom, 2012). The authors should probably acknowledge this issue in the discussion.

We respectfully disagree and think the use of the PHQ9 is appropriate. The ACOG Committee Opinion on this topic describes similar sensitivities between the EPDS and PHQ-9 and this document as well as the AIM Bundle on Anxiety and Depression endorse use of either PHQ9 or EPDS as a routine perinatal depressions screener.

2. I very much appreciated the power analyses, and they are a strength of this section. No changes requested.

3. As the authors point out, the cohort that constitutes the "pre policy" control looks quite different from the post-policy cohort (see Table 1). The two groups differ on a variety of dimensions, including race/ethnicity, use of public insurance, and parity. Do the authors have any explanation for why the two cohorts are so different?

Review of policy and care changes surrounding implementation of this screening program demonstrated a change in the electronic medical record system used by several of the included clinics. While all medical records (in various EMRs) were abstracted, changes in the EMR itself could represent an unmeasured confounder, highlighting the importance of controlling for the observed differences in patient sociodemographics. This was added to the limitations.

4. The concern is that variables like race/ethnicity may be associated with differences in mental health and well-being and access to care, and may confound the data. Were variables like race/ethnicity controlled for in the regressions that produced the odds ratio on p. 11? (Please delete the "a" before the OR). A list of the variables tested in the model would be helpful-they could be included in a more complete table summarizing the regression model predicting post-partum outcomes. The low frequency of postpartum depression could also be related to the demographics of the sample. In general, the authors need to provide more information about the differences between the cohorts and how they might impact screening and/or referrals.

We agree that these differences in baseline characteristics may be associated with differences in depression screening or treatment. These were adjusted for in multivariable analyses as per the description in the methods. To ensure clarity, the specific confounders included in the multivariable analysis were listed in the results section and a table was generated (Table 2).

7. Figure 2 is not referenced in the text and requires additional explanation or context.

Figure 2 is referenced in the discussion. The text was moved to the results and the description enhanced for clarity.

If the authors can address these issues, the paper makes a contribution to our understanding of the ways in which policy changes may impact the frequency of screening and treatment referrals.

Reviewer #3: Thank you for the opportunity to review "Screening and treatment after implementation of a universal perinatal depression screening program." Your paper highlights the difference a well thought out implementation can make. I think this article would encourage readers to implement their own systems.

STATISTICAL EDITOR'S COMMENTS:

1. lines 146-147 and 194-195: The p-value of .066 does not meet the defined threshold and therefore there is no statistical basis for stating that "these changes were sustained over time."

We agree that the test of trend was non-significant. This only evaluates the "post implementation" frequencies (as noted in the methods), meaning that there was no change over time in the frequencies after implementation of the policy. To enhance clarity, the sentence has been reworded.

2. lines 45-46, 177: Should have more elaboration of the results of the logistic regression. A Table should be included showing not only the relevant aORs, but the crude ORs for comparison and a footnote citing all the variables retained in the multivariable regression model.

A table was generated depicting the crude ORs as well as relevant aORs (Table 2) with the variables retained in the model listed.

3. lines 178-180 and Fig 1: The stats test used evaluated the variability of all 5 years vs random, it was not a test of "continuing to improve". That statement should be retracted, or evidence included to show that the yearly numerical changes were statistically significant.

We have modified the statement to more accurately describe the significant finding for this test of trend by not describing the findings as "continued improvement". Specifically, we have described that there is improvement post-policy for both antenatal screens (Likes 180-183), which is supported by a significant test of trend alongside visual depiction of the data, but the claim of "continuing to improve" was omitted.

4. Table 1: Need to enumerate any missing data.

The missing data were enumerated in the table.

5. Table 2 and lines 190-192: Should include not only the overall test for difference in these distributions; the individual row components should be tested also.

The individual row components were analyzed as suggested by this reviewer and presented in Table 2.

6. Figs 1 and 2: Should include as supplemental material, the numbers associated with the histograms in these figures. Would be informative for the reader to include the pre-policy period, so as to illustrate the change in proportions coincident with the policy implementation.

Two supplemental tables were created to enumerate the graphs presented in Figures 1 and 2. Each of these includes data from the pre-policy period to enable comparison of the specific point estimates.

Daniel Mosier

From:	Emily Miller
Sent:	Tuesday, May 21, 2019 8:48 AM
То:	Daniel Mosier
Subject:	Re: Manuscript Revisions: ONG-19-314R1
Attachments:	19-314R1 ms (5-20-19v4) esm.docx

Hi Daniel,

The table numbers are included correctly. In this version, one of the prior questions (regarding derivation of the number 400,000) became more clear. I have revised this language to better address the prior lack of clarity (in track changes).

Thanks, Emily

On Mon, May 20, 2019 at 2:40 PM Daniel Mosier <<u>dmosier@greenjournal.org</u>> wrote: Dr. Miller,

Thank you for revising your manuscript in a timely manner. The Journal's Manuscript Editor has one additional query for you and your co-authors:

1. Your supplemental files have been incorporated into the numbering with the other tables. Please be sure the in-text table citations match the tables at the end of the manuscript.

When revising, use the attached version of the manuscript. Leave the track changes on, and do not use the "Accept all Changes" function prior to re-submission.

Please let me know if you have any questions or concerns.

Sincerely,

-Daniel Mosier

From: Emily Miller Sent: Friday, May 17, 2019 10:32:49 AM To: Daniel Mosier Subject: Re: Manuscript Revisions: ONG-19-314R1 On May 16, 2019, at 10:57 AM, Daniel Mosier <<u>dmosier@greenjournal.org</u>> wrote:

Dear Dr. Miller,

Thank you for submitting your revised manuscript. It has been reviewed by the editor, and there are a few issues that must be addressed before we can consider your manuscript further:

1. Please note the minor edits and deletions throughout. Please let us know if you disagree with any of these changes.

These are fine. Thanks for the opportunity to review

2. LINE 31: Please be sure this is stated in the body of your paper, tables, or figures. Statements and data that appear in the Abstract must also appear in the body text for consistency.

This has been added to the methods

3. LINE 96: Who owns/created this document? Please provide written permission from the owner to include this document in your article (online use only). Also, are you able to provide a Word version of the file?

Jacqueline Gollan, a co-author, created this document. If she is an author, does it require her written permission or can that be assumed as a part of authorship? Happy to reach out for formalized permission if required.

4. LINE 206: The derivation of this number is not clear

I assume this refers to the screen positive at both time points — I have clarified the language but let me know if this remains unclear.

5. LINE 213: Is this what you meant?

I don't see any tracked changes around this line, but this area reads clearly and accurately.

6. LINE 310: Please note the edit to reference 13. Please review the updated reference to be sure it supports what you are saying – available at https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions-List

Thank you for this update. The quote included still remains in the updated CO

When revising, use the attached version of the manuscript. Leave the track changes on, and do not use the "Accept all Changes"

Please let me know if you have any questions. Your prompt response to these queries will be appreciated; please respond no later than COB on**Monday, May 20th.**

Sincerely, -Daniel Mosier

Daniel Mosier Editorial Assistant Obstetrics & Gynecology The American College of Obstetricians and Gynecologists 409 12th Street, SW Washington, DC 20024 Tel: 202-314-2342 Fax: 202-479-0830 E-mail: <u>dmosier@greenjournal.org</u> Web: <u>http://www.greenjournal.org</u>

From:	Denise Shields
To:	
Subject:	RE: figures in your Green Journal manuscript (18-314R1)
Date:	Wednesday, May 15, 2019 3:40:00 PM

Okay, thank you. It's journal style to close up hyphens with "pre-" and "post-."

From: Emily Stinnett Miller

Sent: Wednesday, May 15, 2019 3:31 PMTo: Denise Shields <DShields@greenjournal.org>Subject: Re: figures in your Green Journal manuscript (18-314R1)

Hi Denise,

Attached are some changes to the legend as I think there was a duplication in the description.

Also, I don't think postpolicy is one word (it is either two separate words or hyphenated). I have changed it to be hyphenated - but whatever is decided needs to be reflected in Figure 1.

Thanks,

Emily

Emily S Miller, MD MPH Assistant Professor, Dept of Obstetrics & Gynecology Division of Maternal Fetal Medicine Northwestern University

From: Denise Shields <<u>DShields@greenjournal.org</u>>
Sent: Wednesday, May 15, 2019 1:14 PM
To: Emily Stinnett Miller
Subject: figures in your Green Journal manuscript (18-314R1)

Re: "Screening and Treatment After Implementation of a Universal Perinatal Depression Screening Program"

Dear Dr. Miller,

The figures in your manuscript have been edited and are attached for your review. Please review the

attachments CAREFULLY for any mistakes.

PLEASE NOTE: Any changes to the figures must be made now. Changes made at later stages are expensive and time-consuming and may result in the delay of your article's publication.

To avoid a delay, I would appreciate a reply no later than Friday, 5/17. Thank you for your help.

Best, Denise

Denise Shields Senior Manuscript Editor *Obstetrics & Gynecology* www.greenjournal.org Find us social media: Twitter (https://twitter.com/greenjrnl) Facebook (https://www.facebook.com/greenjournal/) Instagram (https://www.instagram.com/greenjrnl/) LinkedIn (https://www.linkedin.com/groups/4058408)