

NOTICE: This document contains correspondence generated during peer review and subsequent revisions but before transmittal to production for composition and copyediting:

- 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:	Dec 06, 2018
То:	"Elizabeth Janiak"
From:	"The Green Journal" em@greenjournal.org
Subject:	Your Submission ONG-18-2097

RE: Manuscript Number ONG-18-2097

Impact of Massachusetts' parental involvement law on procedural timing among adolescents seeking abortion

Dear Dr. Janiak:

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 Dec 27, 2018, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1: The authors present a retrospective review of the impact of parental consent laws on the time to abortion and the risks for using judicial circumvention in this patient population. While I appreciate the work here, the main issue I have with this study is that it does not provide any new information than is already known. The risk factors described by the authors for having judicial bypass are the same for inability to access contraceptive care and known to the healthcare system. Specific concerns in this work include:

1) The authors have accessed the Planned Parenthood database to assess their outcome. While a large majority of terminations are likely done through PP, the authors miss the adolescent abortions that are happening outside this system, which likely represent a non-insignificant amount. Can the authors access this data for balance?

2) Historically, PP users tend to be from lower socioeconomic and minority backgrounds. As a result many of the associations you find in your univariate model support this. However, this seems to be an enriched population which is already driving your statistics. This is why using data from outside of PP would be a better argument.

3) Line 189. The mean difference in days till abortion was 5 days in the judicial bypass group. While this is statistically significant, is this really clinically significant? While are higher gestational ages this may be true, but since most terminations, including in your data set occur at <90 days gestation, what is the real clinical difference here?

4) I think the last paragraph should be toned down a bit- the work should be reflective of the data that was abstraction and conclusions drawn rather than a more expansive commentary on the abortion debate.

Reviewer #2: Well done study that adds to the literature on abortion restrictions (specifically parental consent) and their impact on patients. Would recommend consideration or clarification of the following:

Introduction:

- General: Consider more detailed explanation of Mass parental consent law. Only parent or legal guardian? Family member over a certain age? Must be in-person?

- General: Consider description of Mass. abortion-based laws in general. This is included in the discussion (Medicaid coverage, no waiting period), but I was left wondering what other restrictions were in place until reading in discussion.

Materials and methods:

- Line 84: Is the care navigation program (connecting minor to lawyer) felt to be a significant component to delay, or more from scheduling judicial hearing, etc? Perhaps quick explanation of process in Mass. would be helpful, here or in discussion.

- Line 84: Are any minors already plugged into the judicial bypass system BEFORE contacting PPLM?

- Line 125: Are any procedures performed same day as first contact (for bypass or parental consent)? (Consider including range as well as mean(SD) included in table)

- Line 151: Do all patients report an insurance type? Are uninsured or those that don't report an insurance included in "Not Medicaid?" I struggle with the metric of Medicaid being used as the sole proxy for lower SES, especially for minors (likely to be on parents' insurance and may not choose to use), and given unclear if uninsured are included. Also, I'm unclear if Medicaid would help with payment for these procedures (as above - clarification of Medicaid coverage in Mass. would be helpful), because if so, having Medicaid may actually facilitate access over an uninsured or a minor choosing not to report/use their parents' insurance.

- Line 157: Was there a difference between in consent type in those missing patient-reported GA at first phone call?

Results:

- Line 178: "Judicial bypass abortions were more likely to occur..." The numbers included are comparing racial/ethnic minorities vs non-Hispanic white in the judicial bypass group. The same would be true if comparing racial/ethnic minorities vs non-Hispanic white in the parental consent group, but not to the same degree. Would consider revising wording to emphasize disproportionately more likely to seek judicial bypass than parental consent (as you do in later parts of the paper) rather than simply "more likely to occur." (Lines 180-183 appropriately compare numbers between judicial bypass and parental consent.)

- Line 210: Numbers here for 84-day 95% CI do not correspond to Table 4 (in text, CI 0.93-2.16; in table, CI 0.83-2.16).

Discussion:

- Line 217: As mentioned above, is qualifying for Medicaid an adequate proxy for low SES in this population? (Medicaid coverage of procedure? Uninsured included in "non-Medicaid"? Minors using parental insurance?) Consider discussing.
 - Line 218: Would remove "Perhaps unsurprisingly"

- Line 219: "...higher overall fertility..." Parity rather than fertility?

- Line 276: Were judicial bypasses ever denied?

- General: Large standard deviations for both parental consent and judicial bypass relative to mean. Implications to interpretation of results?

Reviewer #3: I thank the authors for a well-written manuscript that covers an important topic, specifically, adolescents and their capacity to seek abortion and obtain them. I have a philosophical concern about this paper that I trust the authors have considered, but am raising it here for transparency. Couldn't these findings be used to justify mandatory parental notification for expediency? What are the alternative considerations of their use here? I also worry about public insurance as a proxy for poverty, given this population is likely financially constrained by virtue of being adolescents. I know this strategy is employed by many studies for adults, I worry about its use here. Other minor comments:

1. Page 12: I would caution the authors use of our cohort. These data belong to the patients from whom they were collected.

2. Page 12: I would caution the authors to use Black race as a risk factor for anything.

3. Page 13: Use of she in line 268 is purposive in the hypothetical?

Tables

Table 1: I was surprised by the distance traveled and perhaps I missed a comment about this in the manuscript? It is a power indicator of access...

Table 2: Is surgical the correct term or can aspiration apply here?

Figures

Figure 1: would benefit from different color contrasts. Hard to see the judicial bypass within the parental consent histogram.

Figure 2: Much easier to see/interpret the findings.

Reviewer #4: Excellent manuscript addressing the real world, individual impact of parental consent laws. The authors chose an appropriate design type.

A few thoughts for revision:

- Methods:

Line 96 describes that participants were identified via scheduling and billing. Could you elaborate more on the methods of identifying adolescents meeting inclusion criteria? Were all charts reviewed based on age criteria? Were charts reviewed by more than one reviewer? Were there any discrepancies between billing and scheduling data?

Line 134 I am assuming this date cut off was due to the changes in FDA labeling that occurred March 31st 2016 - is 2015 a typographical error? I think it is worth explaining this date cut off within the methods section.

- Results:

Since higher gestational age at first contact also meant longer delays, could you provide more information about the number of patients that did not obtain same day procedures?

STATISTICAL EDITOR COMMENTS:

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

Table 2: Need units for age

Table 3: Need CIs for crude ORs

Table 4: There are 8 adjustors in the multivariable model, so the counts of adverse outcomes for the 84 day and the 98 day thresholds are insufficient to allow adjustment for so many variables. So, cannot conclude whether those adjusted models would be significant.

Realizing that it would limit the sample sizes, are there sufficient cases in the parental consent cohort to allow matching in the judicial bypass group, at least for age, race, insurance and distance to clinic to corroborate the multivariable model results?

Need legends for the figures. Suggest that Fig 2 is more informative than Figure 1

How do the time differences from first call to schedule vs day the abortion care was received compare to those among women \geq 18 years old and are the same factors (insurance, race, distance to clinic etc) also associated with delay times?

EDITOR COMMENTS:

1. Thank you for your submission. You will receive my own comments, to which you you need to respond to as well. My main concern that you need to address is the amount of "spin" in your paper. I've indicated places where I think, as does reviewer 1, that your discussion extends well beyond your data. You may wish to substitute some data about the amount and kind of increased risks women face as they move from medical abortion, to early 2nd trimester, to late 2nd trimester procedures to drive home with data why this is important. There is some pertinent data you don't discuss--it looks like 14 and 15 year olds mostly have parental consent and 16 and 17 year olds mostly don't. You don't mention that. As well, it looks like there is no real affect of distance on delay. Should be commented upon.

2. 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.

- In the abstract, please provide absolute numbers as well as which ever effect size you are reporting + Confidence intervals. P values may be omitted for space concerns. By absolute values, I mean something like: "xx (outcome in exposed)/yy(outcome in unexposed) (zz%) (Effect size= ; 95% CI=.) An example might be: Outcome 1 was more common in the exposed than the unexposed 60%/20% (Effect size=3;95% CI 2.6-3.4)."

- is there a verb missing here? Or did you mean had parental consent or (had) judicial bypass? Do you have

bypass or do you obtain it or use it? I'm just unfamiliar with the proper terminology and ifs correct as written don't change it.

- This is awkward. Perhaps you could write: "Seventy-seven percent (1559.2026) minors had parental consent. Compared to these, these, the 467 who required judicial bypass were more likely identify as a racial or ethnic minority, have low socioeconomic states (based on Medicaid insurance) and have a prior birth or abortion."

- do you HAVE data to tell us what % of abortions done in the state of Massachusetts are done by PP?

- The Journal style doesn't not use the virgule (/) except in numeric expressions. Please edit here and in all instances.
- How is this group different from those in foster care or incarcerated?
- of whom

- do you have any data to say why the minor continued the pregnancy? Just change her mind, barriers of the judicial bypass system?

- it seems as though the processes described 116-119 and from 119-122 are essentially the same. Could you consolidate these?

- Do you have to have either consent or documented bypass agreement to initiate cervical dilation? If so, it seems that the time of initiation should be the designated time.

- For minors not requiring judicial bypass, how much delay is expected from point of first contact to time of initiation of procedure? The comment above and the one before are made to make sure you are comparing apples to oranges and actually counting the delay between initiation of contact and procedure.

- should you count on the first of multiple abortions to the same minor in the analysis? (devils advocate here). Someone who has maneuvered the judicial bypass system in the past may be more efficient at in the 2nd time, or the judge may be less willing to grant it-or a variety of other issues that may make the 2nd event non-independent on the first. Could you at least provide a subanalysis of those for whom this is the first abortion?

- For data presented in the text, please provide the raw numbers as well as data such as percentages, effect size (OR, RR, etc) as appropriate and 95% CI's.

- I know your unit of interest is the abortion, but I would prefer you refer to something like "Minors who required judicial bypass to obtain an abortion". The other just seems awkward. An alternative might be "Abortions for which judicial bypass was obtained" or something like that.

- to my point above, the abortion doesn't have insurance, prior births, or prior abortions, as written her on line 180-2.

- "A significant delay in time persisted when adjusting for demographic variables"

- Are the delays for minors and needing judicial bypass w/ prior births or abortions JUST 2.34 and 1.85 days longer than comparison groups not requiring judicial consent or is this in addition to the 5+ days above.

- We do no allow authors to describe variables or outcomes in terms that imply a difference (such us of the terms "trend" or "tendency" or "marginally different") unless there is a statistical difference. Please edit here and throughout.

- what do you mean by "perhaps unsurprisingly....higher fertility"? I suspect that you mean no disrespect here, but it could certainly be read as such. Perhaps you could just leave off "Perhaps unsurprisingly". Maybe the issue is that girls from white families of means are more able to get parental consent or contraception, not that minority poor minors are more confident.

- please include in the methods section what variable you used for "difficulty paying".

- you've said more broadly ethnic and racially minorities before. Is it s just Black vs white?

- The emotional impact was not a focus of your study so is not a limitation of your study. You can comment separately that other studies would need to be done to address this issue, but its not a limitation. It was not a question.

- This is a significantly different variable you don't address in the paper and it should be. The Youngest minors mostly had parental consent.

- This should be called "# of prior abortions" or you could leave the title and change the name of the outcomes

to Yes or No.

- please provide both unadjusted and adjusted data

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, 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:

1. 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.

4. Author Agreement Forms: Please note the following issues with your forms. Updated or corrected forms should be submitted with the revision.

Nicole Tantoco, MD, MPH - Did not draft the work.

Jamie Sabino, JD - Did not include a conflict of interest disclosure.

Each author on this manuscript must submit a completed copy of our revised author agreement form (updated in the January 2018 issue). Please note:

a) Any material included in your submission that is not original or that you are not able to transfer copyright for must be listed under I.B on the first page of the author agreement form.

b) All authors must disclose any financial involvement that could represent potential conflicts of interest in an attachment to the author agreement form.

c) All authors must indicate their contributions to the submission by checking the applicable boxes on the author agreement form.

d) The role of authorship in Obstetrics & Gynecology is reserved for those individuals who meet the criteria recommended by the International Committee of Medical Journal Editors (ICMJE; http://www.icmje.org):

* Substantial contributions to the conception or design of the work;

OR

the acquisition, analysis, or interpretation of data for the work;

AND

* Drafting the work or revising it critically for important intellectual content;

AND

* Final approval of the version to be published;

AND

* Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

The author agreement form is available online at http://edmgr.ovid.com/ong/accounts/agreementform.pdf. Signed forms should be scanned and uploaded into Editorial Manager with your other manuscript files. Any forms collected after your revision is submitted may be e-mailed to obgyn@greenjournal.org.

5. Our journal requires that all evidence-based research submissions be accompanied by a transparency declaration statement from the manuscript's lead author. The statement is as follows: "The lead author* affirms 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." *The manuscript's guarantor.

If you are the lead author, please include this statement in your cover letter. If the lead author is a different person, please ask him/her to submit the signed transparency declaration to you. This document may be uploaded with your submission in Editorial Manager.

6. 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.

7. All studies should follow the principles set forth in the Helsinki Declaration of 1975, as revised in 2013, and manuscripts should be approved by the necessary authority before submission. Applicable original research studies should be reviewed by an institutional review board (IRB) or ethics committee. This review should be documented in your cover letter as well

in the Materials and Methods section, with an explanation if the study was considered exempt. If your research is based on a publicly available data set approved by your IRB for exemption, please provide documentation of this in your cover letter by submitting the URL of the IRB web site outlining the exempt data sets or a letter from a representative of the IRB. In addition, insert a sentence in the Materials and Methods section stating that the study was approved or exempt from approval. In all cases, the complete name of the IRB should be provided in the manuscript.

8. 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), and quality improvement in health care (ie, SQUIRE 2.0). 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.

Please submit a completed STROBE checklist with your revision.

9. 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 will be transitioning as much as possible to use of the reVITALize definitions, and we encourage authors to familiarize themselves with them. The obstetric data definitions are available at http://links.lww.com/AOG/A515, and the gynecology data definitions are available at http://links.lww.com/AOG/A935.

10. 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 appendixes).

Please limit your Introduction to 250 words and your Discussion to 750 words.

11. Title: Please remove the word "impact of" from your title.

12. Specific rules govern the use of acknowledgments in the journal. Please edit your acknowledgments or provide more information in accordance with 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 signature on the journal's author agreement 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).

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

14. 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 word. Please provide a word count.

15. 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.

16. 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.

17. 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.

18. Figure 1 and 2 may be resubmitted as-is.

19. 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, that each author has given approval to the final form of the revision, and that the agreement form signed by each author and submitted with the initial version remains valid.

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 Dec 27, 2018, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

Nancy C. Chescheir, MD Editor-in-Chief

2017 IMPACT FACTOR: 4.982 2017 IMPACT FACTOR RANKING: 5th out of 82 ob/gyn journals

In compliance with data protection regulations, please contact the publication office if you would like to have your personal information removed from the database.

RE: Manuscript Number ONG-18-2097

Dear Dr. Chescheir:

Thank you for inviting us to revise our manuscript for publication consideration in *Obstetrics and Gynecology*. We deeply appreciate the thorough comments from you and the reviewers. Below, we include a point-by-point response to each comment, using consecutive numbering of our responses for ease of reading. All line numbers quoted in our response refer to the clean version of the resubmitted manuscript.

Additionally, please note the following transparency statement: I, Elizabeth Janiak, in my role as the manuscript's guarantor, 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.

Thank you for your time and consideration.

Sincerely, Elizabeth Janiak, ScD on behalf of all coauthors

REVIEWER COMMENTS:

Reviewer #1: The authors present a retrospective review of the impact of parental consent laws on the time to abortion and the risks for using judicial circumvention in this patient population. While I appreciate the work here, the main issue I have with this study is that it does not provide any new information than is already known. The risk factors described by the authors for having judicial bypass are the same for inability to access contraceptive care and known to the healthcare system.

1. Thank you for this comment. We agree that the demographic factors for which we identify an association with increased likelihood of accessing judicial bypass are known to be correlated with poor access to health care in general. However, the fact that for example poverty may make it difficult to access contraception only increases the risk that a person living in poverty may accidentally become pregnant and require an abortion. It does not, in and of itself, indicate that person is less likely to be able to obtain parental consent for that abortion. An analysis of demographic differences between minors with parental consent and judicial bypass has never been performed before for the state of Massachusetts, nor to our knowledge have differences by race/ethnicity been reported for any other state except Arkansas¹ (that study was not able to analyze socioeconomic status, distance to clinic, or many other demographics we examine—but did find more Hispanic minors use bypass vs. non-Hispanic white minors in that state). Due to a lack of individual-level data, many of the most rigorous previously published studies on judicial bypass do not examine or report on demographic differences between the judicial bypass, as well as how time to abortion differs between minors with judicial bypass and with parental consent.

¹Altindag, O., & Joyce, T. (2017). Judicial bypass for minors seeking abortions in Arkansas versus other states. *American Journal of Public Health*, *107*(8); 1266-1271.

Specific concerns in this work include:

The authors have accessed the Planned Parenthood database to assess their outcome. While a large majority of terminations are likely done through PP, the authors miss the adolescent abortions that are happening outside this

system, which likely represent a non-insignificant amount. Can the authors access this data for balance?

2. Thank you for this point. While there is no practicable way to obtain access to all patient records at each of the 43 facilities known to provide abortions in Massachusetts¹, we do have access to state Department of Public Health data that provides a full count of abortions in the state among this age cohort. We did note the existence of these data in our original submission, and have further clarified the language of this passage (lines 123-127 of the revised manuscript):

We obtained public records from the Massachusetts Department of Public Health Registry of Vital Records and Statistics, including total abortions provided by patient age, for the study period. Based on these records, we calculate the PPLM cohort examined here includes 60% of all abortions provided to minors in Massachusetts over the study period.¹⁷⁻²²

¹ Jones, Jerman 2017, Perspect Sex Reprod Health "Abortion Incidence and Access to Services in the United States, 2014." Page 7. Accessible at: https://www.guttmacher.org/sites/default/files/article_files/abortion-incidence-us.pdf

Historically, PP users tend to be from lower socioeconomic and minority backgrounds. As a result many of the associations you find in your univariate model support this. However, this seems to be an enriched population which is already driving your statistics. This is why using data from outside of PP would be a better argument.

3. We are not certain whether this observation about Planned Parenthood patient demographics is true of gynecology patients generally, but we do not believe it to be true of abortion patients in Massachusetts. Sixty-three percent of our cohort had Medicaid insurance, indicating their household income is no higher than 138% federal poverty level, or FPL (according to 2018 Massachusetts Medicaid guidelines for individuals under age 21).¹ According to the Guttmacher Institute's Abortion Patient Survey data, 49% of all patients who received abortions in 2014 had incomes below 100% FPL and an additional 26% had incomes of 100-199% FPL.² Though we do not have income data for the cohort examined here, these percentages indicate that the level of poverty among minors seeking abortion at Planned Parenthood League of Massachusetts is likely roughly comparable to the level of poverty among US abortion patients overall. The Massachusetts Department of Public Health data collected by the state does not include income data or insurance type, but does include race. In 2015, 16% of abortion patients in Massachusetts identified as Black, compared to 12% in our cohort.³

While we do not believe this cohort constitutes a disproportionately low-income abortion patient population, we do acknowledge the limitation of not having data specifically from private doctors' offices or from hospitals in our analysis. As we acknowledge in our limitations paragraph within the Discussion (lines 276-280 of the revised manuscript):

First, the study cohort represents approximately two-thirds of minors who obtained abortions in Massachusetts over the study period. It is possible that the one third of minors who did not seek abortion at PPLM differ from those who did, and in particular that they received abortion care at hospitals or private doctors' offices, which could be associated with greater disease burden or higher overall socioeconomic status.

However, we do not believe having fewer high-SES patients in the cohort could affect the *difference* in days from request of abortion until care received between patients with judicial bypass and those with parental consent. We therefore believe the manuscript adequately addresses potential bias and limitations in the sample and the analytic techniques selected.

 ¹ Mass Legal Services [Internet]. MassHealth Income Guidelines 2017 & 2018. Updated February 22 2018. Accessed 11 December 2018. Accessible at: <u>https://www.masslegalservices.org/system/files/library/2017-</u>
 <u>18% 20Open% 20Enrollment% 20FPL% 20% 20MassHealth% 20and% 20Connector% 20Income% 20Chart-MLR10-25-17_0.pdf</u>
 ²Jerman J, Jones RK. Characteristics of U.S. Abortion Patients in 2014 and Changes since 2008. Updated May 2016. Accessed 11 December 2018. Accessible at: https://www.guttmacher.org/report/characteristics-us-abortion-patients-2014
 ³ Massachusetts Department of Public Health, Registry of Vital Records and Statistics. Abortion Tables, 2015. Boston, MA: 2016.

Line 189. The mean difference in days till abortion was 5 days in the judicial bypass group. While this is statistically significant, is this really clinically significant? While are higher gestational ages this may be true, but since most terminations, including in your data set occur at <90 days gestation, what is the real clinical difference here?

4. To further illustrate the differences in delay between consent types, we have added a categorical representation of delay to Table 1 and discussion of this finding in the manuscript; we have also added unadjusted total delay in each group to the abstract, per the Editor's feedback below. Additionally, we have added several sentences and additional citations describing in more depth why advances in gestational age increase medical risks, particularly for younger patients. We have also added more data on the fact that many patients strongly prefer medication abortion, and thus, losing this option could be distressing to some patients—though not to all patients. Lastly, we have clarified that timeliness of abortion is agreed upon by experts as a core aspect of quality care.

We have added the following sentence to the Introduction (lines 64-66) to further demonstrate that timeliness of care has been defined by an independent panel of national experts as a core component of quality for this service:

The 2018 National Academies of Sciences, Engineering and Mathematics report, *The Safety and Quality of Abortion Care in the United States*, named timeliness as one of six key components of quality abortion care.⁷

Lines 211-220 of the Results now read:

The overall greater amount of delay in the judicial bypass group is also evident when examined categorically: while 47% of minors obtaining abortion with parental consent accessed care within 6 days, only 8% of those with judicial bypass did so; conversely, 7% of the parental consent group was delayed 21 days or more, vs. 19% of the bypass group (p<0.001, Table 1). Relatedly, abortion procedures requiring two visits in order to achieve adequate cervical dilation ("two-day procedures") were more common following judicial bypass, though this difference was not statistically significant. In the parental consent group, 1,450 (93.0%) procedures were one-day and 109 (7.0%) were two-day, vs. 424 (90.8%) one-day and 43 (9.2%) two-day in the bypass group (p=0.11).

Lines 261-274 of the Discussion now read:

In both raw and adjusted analyses, minors who sought judicial bypass experienced statistically and clinically significant delays. While the risk of death from abortion is low in absolute terms (0.6 per 100,000 abortions), mortality increases exponentially by 38% with each week additional gestation.^{33,34} Additionally, procedures at later gestational ages require additional cervical priming, increasing time spent at the clinic, patient discomfort, and for some patients, financial burden. Because young age is an independent risk factor for difficult dilation and for cervical laceration, advancing gestational age increases the risk for procedural complications among minors in

particular.³⁵ Thus, the time required to comply with the judicial bypass process may increase the risks of medical complications for some minors in Massachusetts. Additionally, clinical management options change as gestational age at time of abortion advances. Within our cohort, minors who received judicial bypass were significantly more likely to lose the option of a medication abortion as they waited for their abortion care, compared to those with parental consent. Prior literature has demonstrated that some patients have strong preferences for medication abortion.^{36,37}

I think the last paragraph should be toned down a bit- the work should be reflective of the data that was abstraction and conclusions drawn rather than a more expansive commentary on the abortion debate.

5. Thank you for this feedback—we in no way intended to overreach here. We have changed the paragraph to now read (lines 306-313):

Massachusetts' parental involvement law for abortion results in significant delays, thereby potentially increasing medical risks and constraining the clinical options available to patients. Because racial and ethnic minority youth, as well as those of lower socioeconomic status, are overrepresented in the judicial bypass group, the law may accordingly worsen reproductive health inequities among these populations. The full impact of parental involvement requirements has not yet been documented in most US states with such laws. Future research should describe both the population-level effects of these policies, as well as any disparate impact on subpopulations of vulnerable youth.

<u>Reviewer #2:</u> Well done study that adds to the literature on abortion restrictions (specifically parental consent) and their impact on patients. Would recommend consideration or clarification of the following:

Introduction:

- General: Consider more detailed explanation of Mass parental consent law. Only parent or legal guardian? Family member over a certain age? Must be in-person?

- General: Consider description of Mass. abortion-based laws in general. This is included in the discussion (Medicaid coverage, no waiting period), but I was left wondering what other restrictions were in place until reading in discussion.

6. We have added some of the requested information to Materials and Methods because the journal's preference for brevity in the introduction precludes adding additional information to that section. We have added the following—lines 85-93 of revised manuscript:

Massachusetts law requires the consent of one parent or legal guardian for all never-married legal minors prior to obtaining abortion. No other adults are permitted to provide consent. The statute itself does not elucidate how consent may be given.¹⁶ The standard procedure at the PPLM clinics in this study is for the minor patient and the accompanying parent to both sign a form signifying informed consent (for the parent) and assent (for the minor) in person on the day of the abortion procedure. The state of Massachusetts does not have any other major abortion restrictions, including no mandatory waiting period prior to abortion. MassHealth, the state Medicaid program, routinely reimburses abortion care.

Materials and methods:

- Line 84: Is the care navigation program (connecting minor to lawyer) felt to be a significant component to delay, or more from scheduling judicial hearing, etc? Perhaps quick explanation of process in Mass. would be helpful, here or in discussion.

7. Thank you for this question. There is no indication that the care navigators add any delay to the process for minors, and we are very glad to have had the opportunity to make sure this is clear in the manuscript,

based on your question. We have added the following to the manuscript, lines 99-100: Within one business day, the care navigators obtain all necessary information and assign legal counsel.

- Line 84: Are any minors already plugged into the judicial bypass system BEFORE contacting PPLM?

8. Though it would not be impossible for a minor to independently access an attorney, we are not aware of this happening with any frequency nor do we believe it happened for anyone in our cohort. The system in place at PPLM today has existed since the law took effect in 1981 and is further documented in Shoshanna Ehrlich's book *Who Decides?* (citation 6 in the manuscript). We are aware that in some other states, such as Texas, judicial bypass referral hotlines exist entirely separately from clinics. However, in Massachusetts, the referral mechanism is a program of PPLM.

- Line 125: Are any procedures performed same day as first contact (for bypass or parental consent)? (Consider including range as well as mean(SD) included in table)

9. Thank you for this comment, and we agree this will add context to our setting. There were 8 (<1%) minors who had same-day abortions, e.g. a delay of 0 days. We have included the range for "Delay in time to abortion" in the revised Table 1.

- Line 151: Do all patients report an insurance type? Are uninsured or those that don't report an insurance included in "Not Medicaid?" I struggle with the metric of Medicaid being used as the sole proxy for lower SES, especially for minors (likely to be on parents' insurance and may not choose to use), and given unclear if uninsured are included. Also, I'm unclear if Medicaid would help with payment for these procedures (as above - clarification of Medicaid coverage in Mass. would be helpful), because if so, having Medicaid may actually facilitate access over an uninsured or a minor choosing not to report/use their parents' insurance.

10. We agree with all of the points raised regarding whether minors choose to use insurance or not, which is why we considered Medicaid insurance as a proxy for SES and not to account for how the minor paid for the abortion specifically. Thank you for pointing out this was not clear in the manuscript. We have clarified in materials and methods, lines167-171 of the revised manuscript:

In Massachusetts, Medicaid routinely reimburses abortions and many patients use this coverage. However, because we considered Medicaid a proxy for socioeconomic status, we coded any patient recorded as having Medicaid anywhere within the electronic medical record (EMR) within 60 days of the abortion as Medicaid-insured, irrespective of abortion payment type.

- Line 157: Was there a difference between in consent type in those missing patient-reported GA at first phone call?

11. This is an excellent question and we realize based on your question that we did not originally report missingness in Table 1 because we expressed self-reported GA only as a mean within each group. There was no statistically significant difference in missingness by consent type (17% in parental consent; 19% in judicial bypass). We have added this information in Table 1.

Results:

- Line 178: "Judicial bypass abortions were more likely to occur..." The numbers included are comparing racial/ethnic minorities vs non-Hispanic white in the judicial bypass group. The same would be true if comparing racial/ethnic minorities vs non-Hispanic white in the parental consent group, but not to the same degree. Would consider revising wording to emphasize disproportionately more likely to seek judicial bypass than parental consent (as you do in later parts of the paper) rather than simply "more likely to occur." (Lines 180-183 appropriately compare numbers between judicial bypass and parental consent.)

12. We thank the reviewer for catching this discrepancy and have adjusted our wording and numbers accordingly in Lines 197-199 of the revised manuscript to:

The parental consent group disproportionately identified as non-Hispanic white compared to the judicial bypass group (611, 39% of parental consent versus 74, 16% of judicial bypass were non-Hispanic white).

- Line 210: Numbers here for 84-day 95% CI do not correspond to Table 4 (in text, CI 0.93-2.16; in table, CI 0.83-2.16).

13. Thank you for catching this mistake. We have updated the CI in the main text to match the correct value in the Table.

Discussion:

- Line 217: As mentioned above, is qualifying for Medicaid an adequate proxy for low SES in this population? (Medicaid coverage of procedure? Uninsured included in "non-Medicaid"? Minors using parental insurance?) Consider discussing.

14. Thank you for this suggestion. This is certainly a valid point and we have added a note of this limitation to lines 286-288 of the revised manuscript: "Additionally, our proxy variable for socioeconomic status is imperfect. While we are certain that every person with Medicaid is low-income, it is also possible that some individuals who are uninsured or have private insurance are also low-income."

- Line 218: Would remove "Perhaps unsurprisingly"

15. We have deleted this from the revised manuscript as requested.

- Line 219: "...higher overall fertility..." Parity rather than fertility?

16. Since this sentence refers to both births and abortions, we have deleted "fertility" and simplified as follows (line 249-250 in the revised manuscript): "Adolescents who sought judicial bypass were also more likely to have prior births and abortions."

- Line 276: Were judicial bypasses ever denied?

17. Thank you for this question. There were no denials documented in our cohort. We are aware that denials have occurred in multiple states, though as we note an accurate national estimate does not exist. Due to length constraints for the Discussion section, it is not possible to describe patterns, frequency, or implications of denials further in the manuscript, but we do think it is important to note that this could be a complicating factor for minors in other states—and thus is one of many important reasons we suspect the magnitude of delay associated with the bypass process varies greatly between states as noted in the paragraph spanning lines 292-304 of the revised manuscript.

- General: Large standard deviations for both parental consent and judicial bypass relative to mean. Implications to interpretation of results?

18. The large standard deviations relative to the mean indicate that there is variability in the delay in time to abortion in both parental and judicial bypass groups. The variability is taken into account in our two sample tests in Table 1 in addition to the confidence intervals and p-values given for the regression models. As is generally the case, larger variation will result in larger confidence intervals and p-values; however, as noted, this variation is appropriately accounted for in our analyses so that this does not affect the interpretation of our results.

Reviewer #3: I thank the authors for a well-written manuscript that covers an important topic, specifically, adolescents and their capacity to seek abortion and obtain them. I have a philosophical concern about this paper that I trust the authors have considered, but am raising it here for transparency. Couldn't these findings be used to justify mandatory parental notification for expediency? What are the alternative considerations of their use here?

19. Thank you for your kind comments. Because parental involvement laws are very common nationwide, and because legislators actively pursue new laws related to parental involvement frequently, we anticipate that knowing that judicial bypass even within a well-functioning system is in fact associated with delay will be of interest to many advocates and clinicians. We choose not to speculate about precisely how the results could be used, and seek to publish this rigorously designed study as we think the lay public and scientific communities will both benefit from more information about these little-studied laws. Of note, a nearly 40-year-old legal precedent has made it clear that parental consent cannot be absolutely required, without an option for judicial bypass, according to the US Constitution (see lines 54-58).

I also worry about public insurance as a proxy for poverty, given this population is likely financially constrained by virtue of being adolescents. I know this strategy is employed by many studies for adults, I worry about its use here.

20. This is an important point and similar to some useful feedback from Reviewer 2 above. Please see our responses in points 10 and 14 above.

Other minor comments:

1. Page 12: I would caution the authors use of our cohort. These data belong to the patients from whom they were collected.

21. We have deleted this word.

- 2. Page 12: I would caution the authors to use Black race as a risk factor for anything.
 - 22. We agree this sentence is not well phrased, and we also must shorten it due to length constraints. The revised sentence can be found in response to point 4 above, or lines 270-274 of the revised manuscript.
- 3. Page 13: Use of she in line 268 is purposive in the hypothetical?
 - 23. Thank you for pointing this out. We did use "she" accidentally— any young person who is pregnant must receive parental consent or judicial bypass for an abortion in any state with such a law, regardless of whether they are cisgender female, gender nonconforming, or transmasculine. However, we also deleted this sentence completely due to space constraints.

Tables

Table 1: I was surprised by the distance traveled and perhaps I missed a comment about this in the manuscript? It is a power indicator of access...

24. We have added the following lines to the Discussion (lines 256-259)

We did not find any difference in delay related to residential distance to the clinic. All three PPLM clinics that provide abortion care are in major cities located near highways and accessible via bus and rail. Distance may affect time to abortion in larger states with less transit infrastructure.

Table 2: Is surgical the correct term or can aspiration apply here?

25. Both "surgical" and "aspiration" abortions would be appropriate here. We have changed this to "aspiration" where indicated in Table 4.

Figures

Figure 1: would benefit from different color contrasts. Hard to see the judicial bypass within the parental consent histogram.

Please note that per the Editor we are continuing to include Figure 1 as is within the resubmission. At the helpful suggestion of Reviewer 4, we have also added a legend to Figure 1, which we hope will assist with interpretability.

Figure 2: Much easier to see/interpret the findings.

<u>Reviewer</u> #4: Excellent manuscript addressing the real world, individual impact of parental consent laws. The authors chose an appropriate design type.

Thank you.

A few thoughts for revision:

- Methods:

Line 96 describes that participants were identified via scheduling and billing. Could you elaborate more on the methods of identifying adolescents meeting inclusion criteria? Were all charts reviewed based on age criteria? Were charts reviewed by more than one reviewer? Were there any discrepancies between billing and scheduling data?

26. Yes, records for all minors who requested abortion care over the study period were examined. All data were entered twice and manually reviewed if any discrepancies were found. Because not every patient who initially attempted to schedule an abortion ultimately received one (see lines 118-121 of the revised manuscript), there are some people scheduled for an abortion with no corresponding billing code. The description of data abstraction can be found on lines 129-139 of the revised manuscript:

All data were dual-entered. Data from the electronic medical record (EMR) were exported by a computer programmer using a SQL query from the NextGen EMR that was in use at PPLM from September 2010 through June 2016. Every variable was also manually abstracted by a research assistant, and the manually entered dataset was compared to the SQL-exported dataset to check for discrepancies using a merging function in a Research Electronic Data Capture (REDCap) database hosted by Partners Healthcare.²³ Additionally, all variables from the judicial bypass care navigation team's paper records and electronic referral database were manually abstracted and dual-entered independently by two research assistants and merged in REDCap to check for discrepancies. All discrepancies were reviewed by investigators and reconciled through manual record review. All study procedures were approved by the Partners Human Research Committee (IRB).

Line 134 I am assuming this date cut off was due to the changes in FDA labeling that occurred March 31st 2016 - is 2015 a typographical error? I think it is worth explaining this date cut off within the methods section.

27. The source clinics for this cohort adopted the evidence-based protocol in 2015. The evidence of efficacy to the later gestational age cutoff was actually published in 2012¹; however the FDA label change took many years to catch up with the evidence base. To clarify, we have added the following phrase to lines 151-152 of the revised manuscript: "on or after April 1, 2015 in accordance with a change in clinical protocol by PPLM."

¹Winikoff B, Dzuba IG, Chong E, Goldberg AB, Licthenberg S, et al. Extending Outpatient Medical Abortion Services Through 70 Days of Gestational Age. Obstet Gynecol 2012.

- Results:

Since higher gestational age at first contact also meant longer delays, could you provide more information about the number of patients that did not obtain same day procedures?

28. We agree this point adds richness to the data. We have added the following to the results section (lines 213-218:

Relatedly, abortion procedures requiring two visits in order to achieve adequate cervical dilation ("two-day procedures") were more common following judicial bypass, though this difference was not statistically significant. In the parental consent group, 1,450 (93.0%) procedures were one-day and 109 (7.0%) were two-day, vs. 424 (90.8%) one-day and 43 (9.2%) two-day in the bypass group (P=0.11).

STATISTICAL EDITOR COMMENTS:

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

Table 2: Need units for ageTable 3: Need CIs for crude ORs

29. Thank you for these important notes. We have made the required additions.

Table 4: There are 8 adjustors in the multivariable model, so the counts of adverse outcomes for the 84 day and the 98 day thresholds are insufficient to allow adjustment for so many variables. So, cannot conclude whether those adjusted models would be significant.

30. We understand the editor's comment to reference a common approach to logistic regression model sample size calculations, according to which 10 events per predictor variable is required. By this rule, our 84-day and 98-day threshold sample sizes would be insufficiently large to control for all of the covariates in the models. However, recent literature has used large simulation studies to conclude that coverage and bias are typically within acceptable levels given as few as 5-8 events per variable.¹ Prior to building our regression model, we confirmed there were at least 5 events for each categorical variable included in the analysis for all three cutpoints. To clarify this for future readers, we have added the following sentence to lines 188-190 of the revised methods section:

Prior to building the logistic regression models, we confirmed there were at least 5 events for each categorical variable included in the analysis for all three cutpoints.²⁴

¹Vitinghoff E, McCulloch CE. Relaxing the rule of ten events per variable in logistic and Cox regression. Am J Epidemiol. 2007;165(6):710-8.

Realizing that it would limit the sample sizes, are there sufficient cases in the parental consent cohort to allow matching in the judicial bypass group, at least for age, race, insurance and distance to clinic to corroborate the multivariable model results?

31. Thank you for this creative suggestion. Given our response to the comment above, we do not believe an alternative technique for this analysis is necessary. We are also concerned this would produce an inelegant narrative and potentially confuse readers. In particular, a matched analysis would target a different parameter of interest than the multivariable logistic regression, namely the sample average treatment effect, instead of the population average treatment effect. We also do not believe that accounting for the clustering of abortions will be handled elegantly with a matching approach. For these reasons, we feel this additional analysis would hamper interpretability of our study results. To explore the sample size issue specifically, we did perform exact matching on the suggested variables and found that for each model about 200 persons are not matched, which drops the number of cases by about 9% in each

model¹ Given our substantive concerns with this approach, we have not performed an additional analysis using matching.

¹Ho DE, Imai K, King G, Stuart EA. MatchIt: Nonparametric Preprocessing for Parametric Causal Inference. Journal of Statistical Software, Vol. 42, No. 8, pp. 1-28. URL <u>http://www.jstatsoft.org/v42/i08/</u>

Need legends for the figures. Suggest that Fig 2 is more informative than Figure 1

32. Thank you for this important suggestion. We have added a legend to Figure 1. Please note that per the Editor we are continuing to include Figure 1 in the resubmission. We also think Figure 1 is helpful for visualizing the distribution of the primary outcome, which was an important concern of reviewer 2; thus, we do think Figure 1 adds value.

How do the time differences from first call to schedule vs day the abortion care was received compare to those among women ≥ 18 years old and are the same factors (insurance, race, distance to clinic etc) also associated with delay times?

33. We do not have data for adult patients as this study was designed specifically to look at abortion among minors. However, in the manuscript we do cite four previously published papers that found delay to care is more common among women of color, those who have difficulty paying, or who have to travel long distances for care (see citations 24-27 in the revised manuscript).

EDITOR COMMENTS:

1. Thank you for your submission. You will receive my own comments, to which you you need to respond to as well. My main concern that you need to address is the amount of "spin" in your paper. I've indicated places where I think, as does reviewer 1, that your discussion extends well beyond your data. You may wish to substitute some data about the amount and kind of increased risks women face as they move from medical abortion, to early 2nd trimester, to late 2nd trimester procedures to drive home with data why this is important. There is some pertinent data you don't discuss--it looks like 14 and 15 year olds mostly have parental consent and 16 and 17 year olds mostly don't. You don't mention that. As well, it looks like there is no real affect of distance on delay. Should be commented upon.

34. Thank you for your feedback. As you point out, this comment echoes some feedback from Reviewer 1. Accordingly, please see our response to points 4 and 5 above. Additionally, we added the following to lines 202-204 of the revised results section:

In addition, older teens accounted for more abortions in the judicial bypass group (87% 16 or 17 years old vs. 78% in the parental consent group P < 0.001).

We also added a comment on distance not being significantly associated with delay, as detailed in response to point 24 above.

- In the abstract, please provide absolute numbers as well as which ever effect size you are reporting + Confidence intervals. P values may be omitted for space concerns. By absolute values, I mean something like: "xx (outcome in exposed)/yy(outcome in unexposed) (zz%) (Effect size= ; 95% CI=.) An example might be: Outcome 1 was more common in the exposed than the unexposed 60%/20% (Effect size=3;95% CI 2.6-3.4)."

35. We have removed several unnecessary p-values. In addition, we added the unadjusted mean delay for each group. Lines 41-45 of the abstract now read:

Minors with parental consent received their abortion a mean of 8.62 days after initial contact, compared to 14.77 days for teens with judicial bypass, for an unadjusted difference of 6.12 days. In multivariable linear regression modeling adjusting for demographic differences between groups, this difference persisted: minors who obtained abortions following judicial bypass had 5.24 days greater delay compared to those with parental consent (95% CI 4.29-6.20).

- is there a verb missing here? Or did you mean had parental consent or (had) judicial bypass? Do you have bypass or do you obtain it or use it? I'm just unfamiliar with the proper terminology and ifs correct as written don't change it.

- This is awkward. Perhaps you could write: "Seventy-seven percent (1559.2026) minors had parental consent. Compared to these, these, the 467 who required judicial bypass were more likely identify as a racial or ethnic minority, have low socioeconomic states (based on Medicaid insurance) and have a prior birth or abortion."

36. To address both of these points in tandem, we have rewritten the first two sentences of the results section of the abstract as follows (lines 37-41 of the revised manuscript):

In the study population, 1,559 (77%) abortions were obtained with parental consent and 467 (23%) using judicial bypass. Abortions following judicial bypass were more common among minors identifying as Hispanic, non-Hispanic Black, or Other race, those of low socioeconomic status (as indicated by having Medicaid insurance) and those with a prior birth or prior abortion (all P < 0.05).

- do you HAVE data to tell us what % of abortions done in the state of Massachusetts are done by PP?

37. Yes, we do have these data. Planned Parenthood League of Massachusetts provided between 57% and 62% of all abortions in the state of Massachusetts annually over the study period, with slight fluctuations by year; the next-largest provider delivered 10-13%. In lines 123-127 of the revised manuscript, we cite state department of public health statistics that we used to generate our estimate that 60% of all abortions specifically provided to minors during the study period were at PPLM. We have also added these same references to lines 94-96 of revised manuscript, but do not feel it is feasible to add any more detail to the text due to space concerns:

In addition to being Massachusetts' largest abortion provider, PPLM hosts a statewide care navigation program that connects minors seeking judicial bypass with *pro bono* legal counsel.¹⁷⁻²²

- The Journal style doesn't not use the virgule (/) except in numeric expressions. Please edit here and in all instances.

38. Thank you, we have removed all instances of this formatting.

- How is this group different from those in foster care or incarcerated?

- 39. It does not differ, but was a blanket term intended to capture both of these groups. To avoid confusion, we have revised this sentence to again specifically say "foster care or incarcerated (line 102 of the revised manuscript).
- of whom
 - 40. This change was made

- do you have any data to say why the minor continued the pregnancy? Just change her mind, barriers of the judicial bypass system?

41. We do not have these data, as reasons for continuing are not documented in a standard fashion in the EMR, nor is planned consent type for the desired abortion necessarily documented because an abortion did not occur.

- it seems as though the processes described 116-119 and from 119-122 are essentially the same. Could you consolidate these?

42. This paragraph was revised in response to point 26 from reviewer 4 above. We believe the new text should be substantially clearer.

Do you have to have either consent or documented bypass agreement to initiate cervical dilation? If so, it seems that the time of initiation should be the designated time.

43. Yes, consent is required to initiate cervical dilation as this is the first step in the abortion procedure for these patients. We have clarified this in our manuscript to be clear we considered the day of dilation and not of uterine evacuation the day abortion (line 145 of the revised manuscript).

- For minors not requiring judicial bypass, how much delay is expected from point of first contact to time of initiation of procedure? The comment above and the one before are made to make sure you are comparing apples to oranges and actually counting the delay between initiation of contact and procedure.

44. We interpret this comment as asking: What is the typical time from first scheduling call to abortion procedure for a typical patient with no or minimal barriers to abortion? In a 2004 national survey of patients regarding timing of steps in obtaining an abortion, Finer and colleagues found an average 10-day time lapse from first scheduling attempt to abortion procedure. We have added this reference (ref 32) to line 255 of the revised manuscript. In our study, we found that the mean time from the point of first contact to the time of initiation of procedure was 8 days for teens with parental consent. In contrast, the mean time from the point of first contact to the time of initiation of procedure was 14 days for teens with judicial bypass. As we note in our Discussion, however, the amount of delay associated specifically with judicial bypass may well be greater in other states. Similarly, the overall wait for abortions may also be greater in other states or at other clinical organizations.

- should you count on the first of multiple abortions to the same minor in the analysis? (devils advocate here). Someone who has maneuvered the judicial bypass system in the past may be more efficient at in the 2nd time, or the judge may be less willing to grant it--or a variety of other issues that may make the 2nd event non-independent on the first. Could you at least provide a sub-analysis of those for whom this is the first abortion?

45. We agree with both of these points and currently address both in our analytic methods, which we note in the manuscript. First, we include "had past abortion" as a variable in our analysis to adjust for confounding; that is, minors with prior abortions may be more efficient at navigating the system (as the Editor notes) and may be more likely to seek judicial bypass. Second, to address the non-independence of the two (or three) abortions per minor, we used generalized estimating equations (GEE) which adjusts for the correlation between multiple abortions for each minor. We detail this method in our paper (lines 185-188). As we have addressed both of these issues, we do not believe it is necessary to provide a sub-analysis. Such an analysis would achieve a different research objective than our study: it would estimate the difference in delay to care according to consent type only among minors seeking their first lifetime abortion, instead of generating this estimate for minors generally.

- For data presented in the text, please provide the raw numbers as well as data such as percentages, effect size (OR, RR, etc) as appropriate and 95% CI's.

46. Thank you. We have made these changes on the following lines: 198, 199, 201, 202, 203, 204, 233, 235.

- I know your unit of interest is the abortion, but I would prefer you refer to something like "Minors who required judicial bypass to obtain an abortion". The other just seems awkward. An alternative might be "Abortions for which judicial bypass was obtained" or something like that.

- to my point above, the abortion doesn't have insurance, prior births, or prior abortions, as written her on line 180-2.

47. Thank you. We have significantly reworked this paragraph to read less awkwardly, and have take similar care in crafting the new sentences in the second paragraph of the results section. This passage now reads (lines 194-204 of revised manuscript):

There were 1,559 (77%) abortions provided with parental consent and 467 (23%) abortions following judicial bypass. Of these, 97% (n=1,964) of abortions occurred at PPLM and 3% (n=62) were referred to other providers. We found significant differences (P < 0.05) by consent type for all demographic and social characteristics (Table 1). The parental consent group disproportionately identified as non-Hispanic white compared to the judicial bypass group (611, 39% of parental consent versus 74, 16% of judicial bypass were non-Hispanic white). Additionally, abortions following judicial bypass were more prevalent among minors with insurance provided by Medicaid (348, 75% vs. 925, 59%, P < 0.001), with a prior birth (46, 10% vs. 97, 6%, P=0.006), and with a prior abortion (56, 12% vs. 136, 9%, P=0.034). In addition, older teens accounted for more abortions in the judicial bypass group (406, 87% 16 or 17 years old vs. 1,218, 78% in the parental consent group P < 0.001).

- "A significant delay in time persisted when adjusting for demographic variables"

48. We have revised this sentence in accordance with this feedback (lines 220-221 of the revised manuscript):

A significant difference in mean delay persisted when adjusting for demographic factors (adjusted difference in means 5.24 days, 95% CI 4.29-6.20, P < 0.001, Table 2).

- Are the delays for minors and needing judicial bypass w/ prior births or abortions JUST 2.34 and 1.85 days longer than comparison groups not requiring judicial consent or is this in addition to the 5+ days above.

49. It is in addition to the 5+ days. The prior births variable result in the multivariable model can be interpreted as follows: minors with prior births have an estimated mean delay of 2.34 days more than minors without a prior birth, holding all other variables constant (i.e. holding consent type constant). That is, this effect is purely the delay associated with the prior births variable for either consent type and all other variables; we do not allow this effect to differ by consent type. If one wanted the estimated mean delay for minors who had judicial bypass and experienced a prior birth, then you could add these effects together (as the Editor notes in the second part of the sentence), though you would also have to specify values for all other variables (age category, prior abortion status, etc.).

- We do no allow authors to describe variables or outcomes in terms that imply a difference (such us of the terms "trend" or "tendency" or "marginally different") unless there is a statistical difference. Please edit here and throughout.

50. Figure 2 presents the same data as Table 4, but in graphical form. These differences are statistically significant as listed in Table 4. To ensure that future readers do not think Figure 2 presents new data, we have slightly modified the sentence to include the word "additional" (lines 237-239 of the revised manuscript): Figure 2 provides an additional illustration for this finding as the proportion of judicial bypass abortions passing any of the three thresholds is larger than that among parental consent abortions.

- what do you mean by "perhaps unsurprisingly....higher fertility"? I suspect that you mean no disrespect here, but it could certainly be read as such. Perhaps you could just leave off "Perhaps unsurprisingly". Maybe the issue is that girls from white families of means are more able to get parental consent or contraception, not that minority poor minors are more confident.

- 51. We have deleted this phrase, which was also suggested by one of the Reviewers. Of note, we did not state nor would we ever imply that confidence in navigating judicial bypass varies with race or socioeconomic status. This sentence referred only to parity and prior abortions, and we do think it is logical that minors with prior pregnancies could feel more confident in navigating the system due to those previous experiences (as the Editor's own comment addressed in point 45 above points out). We regret that the placement of this sentence created a misperception in that regard.
 - please include in the methods section what variable you used for "difficulty paying".
 - you've said more broadly ethnic and racially minorities before. Is it s just Black vs white?
- 52. In our zeal to precisely reflect the findings from some prior published literature, we made this sentence unnecessarily confusing. The revised sentence no longer references race or difficulty paying specifically, as cuts were made for the sake of length.

- The emotional impact was not a focus of your study so is not a limitation of your study. You can comment separately that other studies would need to be done to address this issue, but its not a limitation. It was not a question.

53. Thank you for pointing this out. For the sake of brevity we have deleted this point completely.

- This is a significantly different variable you don't address in the paper and it should be. The Youngest minors mostly had parental consent.

54. Please see the response to point 34 above.

- This should be called "# of prior abortions" or you could leave the title and change the name of the outcomes to Yes or No.

55. We have changed this category name in Table 2 to "number of prior abortions" as requested.

- please provide both unadjusted and adjusted data
- 56. We have added unadjusted results to Table 2 by presenting the univariable model estimates for all variables. We were unsure if this is precisely what the editor wanted here. We are happy to keep the table as submitted with the revision. If, on the other hand, the editor was only asking for the unadjusted estimate for the primary predictor of interest—consent type—we could add this in a separate table. We do not think there is only one correct way to proceed here and are happy to defer to the editor's judgment regarding whether and how to present these data.

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, 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:

1. 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.

57. Our reply: 1. OPT-IN: Yes, please publish my response letter and subsequent email correspondence related to author queries.

4. Author Agreement Forms: Please note the following issues with your forms. Updated or corrected forms should be submitted with the revision.

Nicole Tantoco, MD, MPH - Did not draft the work.

Jamie Sabino, JD - Did not include a conflict of interest disclosure.

58. Thank you for pointing out these errors. We have uploaded corrected versions of these forms.

5. Our journal requires that all evidence-based research submissions be accompanied by a transparency declaration statement from the manuscript's lead author. The statement is as follows: "The lead author* affirms 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." *The manuscript's guarantor.

If you are the lead author, please include this statement in your cover letter. If the lead author is a different person, please ask him/her to submit the signed transparency declaration to you. This document may be uploaded with your submission in Editorial Manager.

59. Please see the transparency statement at the beginning of this response.

6. 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.

60. Please see the response to point 26 above.

7. All studies should follow the principles set forth in the Helsinki Declaration of 1975, as revised in 2013, and manuscripts should be approved by the necessary authority before submission. Applicable original research studies should be reviewed by an institutional review board (IRB) or ethics committee. This review should be documented in your cover letter as well in the Materials and Methods section, with an explanation if the study was considered exempt. If your research is based on a publicly available data set approved by your IRB for exemption, please provide documentation of this in your cover letter by submitting the URL of the IRB web site outlining the exempt data sets or a letter from a representative of the IRB. In addition, insert a sentence in the

Materials and Methods section stating that the study was approved or exempt from approval. In all cases, the complete name of the IRB should be provided in the manuscript.

61. We did provide the complete name of the IRB in the manuscript, but we realized that perhaps it was not clear because this body does not go by the title "Institutional Review Board" at our institution. So, we have further clarified by adding "(IRB)" at the end of the sentence (line 139 in the revised manuscript): "All study procedures were approved by the Partners Human Research Committee (IRB)."

8. 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), and quality improvement in health care (ie, SQUIRE 2.0). 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.

Please submit a completed STROBE checklist with your revision.

62. Please see the STROBE checklist attachment uploaded with the resubmission

9. 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 will be transitioning as much as possible to use of the reVITALize definitions, and we encourage authors to familiarize themselves with them. The obstetric data definitions are available at http://links.lww.com/AOG/A515, and the gynecology data definitions are available at http://links.lww.com/AOG/A515.

10. 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 appendixes). Please limit your Introduction to 250 words and your Discussion to 750 words.

63. Length of the paper is as follows:Body: 3,283 wordsIntroduction: 333 wordsDiscussion: 851 (of which 207 were added in response to reviewers' and editors' requests)Pages: 21 inclusive of tables and figure legends

If it is necessary to cut the Discussion further, we would nominate the following sentences for deletion:

We did not find any difference in delay related to residential distance to the clinic. All three PPLM clinics that provide abortion care are in major cities located near highways and accessible via bus and rail. Distance may affect time to abortion in larger states with less transit infrastructure.

Additionally, procedures at later gestational ages require additional cervical priming, increasing time spent at the clinic, patient discomfort, and for some patients, financial burden.

- 11. Title: Please remove the word "impact of" from your title.
 - 64. We have made this change, and added a description of the study design (retrospective cohort) per STROBE guidelines.

12. Specific rules govern the use of acknowledgments in the journal. Please edit your acknowledgments or provide more information in accordance with the following guidelines:

* All financial support of the study must be acknowledged.

65. We affirm all funding sources are acknowledged. We did realize that a grant number associated with the funding for this study was not in the original submission, so we have added that to line 318 of the revised manuscript:

This study was funded by the Society of Family Planning (SFP) Research Fund (grant number SFPRF10-1).

* 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 signature on the journal's author agreement form verifies that permission has been obtained from all named persons.

66. We have named all individuals beyond the authors who assisted with this study in the Acknowledgements.

* 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).

- 67. We provided this information with the original submission, and it remains, on lines 17-18 of the revised manuscript.
 - 13. Provide a short title of no more than 45 characters, including spaces, for use as a running foot.
- **68.** We have provided the following running foot immediately under the précis on the title page, line 27 of the revised manuscript (44 characters including spaces): Massachusetts' abortion parental consent law

14. 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 word. Please provide a word count.

69. We have carefully reviewed the abstract and, while we did not change any results reported, we did revise some phrasing per feedback above pointing out the grammatical awkwardness of using abortions, instead of minors, as the subjects of some sentences. The abstract is 276 words long.

15. Only standard abbreviations and acronyms are allowed. A selected list is available online at <u>http://edmgr.ovid.com/ong/accounts/abbreviations.pdf</u>. 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.

70. Thank you. We have double-checked and can affirm that all abbreviations used are standard except for "PPLM" standing for "Planned Parenthood League of Massachusetts." Since we do spell this out at first use, and since use of the abbreviation substantially improves ease of reading, it is our impression this acronym complies with style guidance as expressed in the author instructions. If we are incorrect, we defer to the staff to request we spell this out at each mention or to, in turn, spell out the words at the copy-editing stage if this paper is accepted.

16. 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.

71. Thank you. We have removed the virgule symbol.

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

72. We have done so, and accordingly made several formatting changes to the Tables.

18. Figure 1 and 2 may be resubmitted as-is.

Randi Zung

From:	Janiak, Elizabeth
Sent:	Monday, January 28, 2019 9:48 AM
То:	Randi Zung
Subject:	Re: Your Revised Manuscript 18-2097R1
Attachments:	18-2097R1 ms (1-24-19v4) EJ edits 0128.docx

Dear Randi,

please see an updated manuscript attached, with the following changes:

- 1. line 147 changed "seeking" to "utilized"
- 2. all table titles, as well as precis, changed "seeking" to "undergoing"
- 3. deleted the words "seeking care" from line 62 in abstract

The word "seeking" continues to appear in lines 143 and 144, because this is where we describe how we identified the study cohort. After we describe excluding the continued pregnancies, the word "seeking" does not appear again.

Thank you again for your work on this paper.

Sincerely and with gratitude, Liz

From: Randi Zung <RZung@greenjournal.org> Sent: Thursday, January 24, 2019 2:26:05 PM To: Janiak, Elizabeth Subject: RE: Your Revised Manuscript 18-2097R1

External Email - Use Caution

Dear Dr. Janiak:

The Editors have discussed your revised manuscript. They have one suggestion. Since you excluded adolescents who continued the pregnancy, the Editors believe "undergoing" should be used instead of "seeking." Would you please make this edit throughout your submission? I have made this change to your title as an example.

Please edit the version of your manuscript that is attached to this message (v4).

Please return your final version to me when you are ready.

Thanks, Randi

From: Janiak, Elizabeth Sent: Friday, January 18, 2019 2:21 PM To: Randi Zung <RZung@greenjournal.org> Cc: Fulcher, Isabel

Subject: Re: Your Revised Manuscript 18-2097R1

Dear Ms. Zung--please see our responses below and the updated manuscript, attached. Please note that while I do include line numbers in the response below, I am not certain they will be correct when the manuscript is opened in different versions of Word or on a Mac vs a PC. We also quote the text below and have used tracked changes as requested, so we are optimistic all changes can be easily located and verified. Thank you for your work on this manuscript.

Warm regards, Liz

From: Randi Zung <<u>RZung@greenjournal.org</u>> Sent: Tuesday, January 15, 2019 10:22 AM To: Janiak, Elizabeth Subject: Your Revised Manuscript 18-2097R1

External Email - Use Caution

Dear Dr. Janiak:

Your revised manuscript is being reviewed by the Editors. Before a final decision can be made, we need you to address the following queries. Please make the requested changes to the latest version of your manuscript that is attached to this email. **Please track your changes and leave the ones made by the Editorial Office.** Please also note your responses to the author queries in your email message back to me.

1. General: The Editor has made edits to the manuscript using track changes. Please review them to make sure they are correct. We have reviewed and approve all changes.

2. Corresponding Author Information: Is this the correct contact information to publish if your paper is accepted? Thank you for checking. Both address and email were incorrect and have been updated.

3. Precis: An observational research design cannot prove causality so please use associative language. We have made this change. The precis now reads: "**Précis:**Massachusetts' abortion parental consent law is associated with clinically significant delays which may constrain options available for the clinical management of minors seeking abortion."

4. Line 54: Please limit this to one decimal point. As I calculate the .02 days, it's about 0.05 minutes and irrelevant in this setting. Same for all of these day values. We have limited to one decimal place for all means and proportions throughout.

5. Line 56: In the manuscript, you say 6.15 (line 220). As one would round to 6.1 and the other to 6.2, please clarify which is correct. This discrepancy was due to our original decision to round to two decimal places when reporting means. As the original number was 6.148, when rounding to two decimals we rounded to 6.15. However, as we have now been asked to round to one decimal, the correct number is 6.1. This has been made consistent in each instance where this number appears.

6. Line 63: Have changed to "may constrain" in abstract (and here please) as for some the option of medical abortion was never possible. Thank you, we agree with this change in the abstract and have also made this change in the precis as requested.

7. Line 107: There were some questions about this from your reviewers. As I recall, the navigator system is only for those women requesting services at PP. If so, could you make that explicit here? By saying "statewide" a reader may assume that you mean those outside the PP system. Thank you so much for this question. In fact, the program is available to people seeking abortion anywhere and does occasionally provide a connection to legal counsel for a minor seeking care at another clinic or at a hospital. We have added a sentence to clarify this (lines 140-142): "This program is available free of charge to minors seeking abortion at any provider anywhere in the state, and serves all minors seeking judicial bypass for abortion at PPLM."

8. Line 114: You indicate that state law "requires the consent of one parent or legal guardian for all nevermarried legal minors prior to obtaining abortion." What qualifies as an emancipated minor in Massachusetts? In some state laws, marriage would be a qualifying characteristic. Is it not so in Massachusetts? As such, would a 16 year old married woman requesting an abortion still require parental consent? I see you've answered my question now. May be worth stating what qualifies as an emancipated minor then. One of the reviewers in the initial review was surprised that even legally emancipated minors (e.g., those formally emancipated via a court order, not via the act of marriage) cannot consent to an abortion in Massachusetts, so we added this mention of emancipated minors here to clarify. We can see why the way we tried to explain this was not clear, and have added a sentence and changed some phrasing that we believe will clarify, principally by adding the phrase "never-married". Having been married (whether currently married, divorced or widowed) is thesole condition under which a minor can obtain an abortion in Massachusetts without either parental consent or judicial bypass. Lines 146-154 now read: "The state of Massachusetts does not provide consent for minors in its custody (such as incarcerated individuals or those in the foster care system), and never-married legally emancipated minors may not consent for themselves under the parental involvement statute.¹⁶Therefore, the following groups must utilize judicial bypass: 1) nevermarried minors not involving their parents or guardians in the abortion decision or whose parents or guardians refuse to provide consent, 2) never-married minors whose parents or guardians support the abortion but are unable to provide documented consent for logistical reasons, 3) never-married minors who are in foster care or incarcerated and, 4) never-married emancipated minors with no legal guardian."

9. Line 170: Can you state in this paragraph how EGA was determined? PPLM uses ultrasound for gestational dating for all patients. This sentence has been rewritten to clarify (lines 207-209): "To create these variables, we first calculated gestational age at first contact as gestational age via ultrasound on the day of procedure minus the number of days since first contact."

10. Abstract-Results and Results section: In both the abstract and the paper, please provide absolute numbers as well as whichever effect size you are reporting + Confidence intervals, as appropriate for the data being presented. P values may be omitted for space concerns. By absolute values, I mean something like xx (outcome in exposed)/yy(outcome in unexposed) (zz%) (Effect size= ; 95% CI=.). An example might be: Outcome 1 was more common in the exposed than the unexposed 60%/20% (Effect size=3;95% CI 2.6-3.4). Thank you for this guidance. For all the effect estimates (odds ratios and mean differences), we have incorporated this format. For comparison of proportions, we have formatted as suggested in comment 12.

11. Line 209: So that the reader isn't having to do sums, could you please start this paragraph with something like : During the study period, there 2026 abortions provided to minors. Of these.....".

Thank you, we have made the suggested change. Lines 253-254 now read: "During the study period, there were 2,206 abortions provided to minors. Of these, 1,559 (77%) abortions were provided with parental consent and 467 (23%) abortions followed judicial bypass. "

12. Line 214: For clarity, could you consider presenting the data something like this throughout:

"The parental consent group disproportionately identified as non-Hispanic white, 39% (611/1559) compared to the judicial bypass group at 16% (74/467)." [the please provide the statistical evidence to demonstrate that represents a difference between groups. You have missing data for 15-18% of this demographic, which will need to be mentioned as a limitation. Also, are there any other notable differences by race and ethnicity that are worth mentioning here? From your table, it's not clear which groups may or may not be different].

Regarding presentation of data, following this guidance, lines 256-263 now read: "We found significant differences (P < 0.05) by consent type for all demographic and social characteristics (Table 1). The distributions of race ethnicity categories and of age categories were significantly different between the judicial bypass and parental consent groups (P < 0.001). Additionally, Medicaid insurance was more prevalent among abortions following judicial bypass (75%, 348/467) than among those with parental consent (59%, 925/1,559) (P<0.001). Ten percent (46/467) of the judicial bypass group reported a prior birth, compared to 6% (97/1,559) of the parental consent group (P=0.010). Twelve percent (56/467) of the judicial bypass group reported a prior abortion, compared to 9% (136/1,559) of the parental consent group (P=0.034)."

Regarding the request for statistical evidence to demonstrate the difference between groups in non-Hispanic white race and the question regarding other racial differences between consent type groups: In Table 1, we tested if there was a difference in race ethnicity distribution between the two consent groups. We have updated our wording to reflect this. In pairwise comparisons, proportions of every racial group do differ between consent types, except unknown/missing (p=0.08). Since it would be cumbersome to list every racial/ethnic difference, we have elected to omit the mention of non-Hispanic white race and refer only to the overall difference in distributions in the Results section.

Regarding the request we note potential misclassification of race as a limitation, we have included a comment about the Unknown race ethnicity category in the limitations (lines 464-466): "Further, the race ethnicity category was either unknown or refused to answer for 17% of abortions."

13. Line 222: Please provide statistical evidence that this "shift" is statistically different. Visually (nice graph) it looks like it but what are the stats?

We have updated our wording to reflect that the significance findings for the means are indeed corroborated in the figure. This sentence now reads (291-293): "This finding is corroborated in Figure 1, where the mean of the distribution of delay in time to abortion with parental consent is closer to no delay compared to the mean of the distribution among the judicial bypass group."

14. Line 229: We do not allow authors to describe variables or outcomes in terms that imply a difference (such us of the terms "trend" or "tendency" or "marginally different") unless there is a statistical difference. Please edit here and throughout. You would just say "There was no difference shown in abortion procedures requiring two visits..." We have updated the language as requested. Lines 298-300 now read: "There was no significant difference in the proportions of abortion procedures requiring two visits in order to achieve adequate cervical dilation ("two-day procedures") between the judicial bypass and parental consent groups."

15. Line 251: See my note just below the end of the manuscript about this figure.

 In Figure 2, according the legend, I can't tell which individual represented by the lines are judicial bypass and which are parental. I don't have the figure legend here: is panel A the judicial bypass group and panel B the parental consent group? I assume that's the case but please make sure the figure legend states it. Is the y axis # of cases? Please so state.

On January 9, we corresponded with Stephanie Causway, Senior Production Editor, regarding this Figure. We attach the updated Figure legend as shared by Ms. Causway. We believe that as formatted here, this Figure and the legend address all of this feedback.

16. Line 253: Please provide statistical evidence that there is a difference. Not sufficient to just say it was "larger". It was only statistically different for the medical abortion threshold. Overall was it statistically different? We have conducted a statistical test for this statement and added this in to the text with the formatting suggestion. Lines 401-404 now read: "Figure 2 provides an additional illustration for this finding as the proportion of judicial bypass abortions, 33% (141/428), passing any of the three thresholds is significantly larger than that among parental consent abortions, 19% (268/1441) (*P*< 0.001)."

17. Line 254: Where is the in-text citation for Table 4? Tables should be cited in order at first mention. Please reorder your tables if needed.

Table 4 is referenced in line 404 of the revised manuscript. It was erroneously referred to as "Table 5" in our previous submission.

18. Line 263: In your multivariable analysis, Medicaid as proxy for SES wasn't significant. We have changed the word "affects" here to "involves" to clarify that in this sentence we are simply observing that the judicial bypass group is disproportionately Medicaid-insured (in other words, this sentence refers to the proportions in Table 1, not to multivariable models).

19. Table 1: Please correct all weeks data to 1 decimal. We have fixed this.

20. Table 2: Please check p value as CI's cross 1. The results here are for a continuous outcome (mean delay in days), thus the null in this case is mean difference of 0, not 1. We have confirmed all p values are correct.

To facilitate the review process, we would appreciate receiving a response by January 18.

Best, Randi Zung

Randi Zung (Ms.)

Editorial Administrator | *Obstetrics & Gynecology* The American College of Obstetricians and Gynecologists 409 12th Street, SW The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail contains patient information, please contact the Partners Compliance HelpLine at <u>http://www.partners.org/complianceline</u>. If the e-mail was sent to you in error but does not contain patient information, please contact the sender and properly dispose of the e-mail.

From:	
To:	Stephanie Casway
Subject:	Re: O&G Figure Revision: 18-2097
Date:	Wednesday, January 9, 2019 3:34:36 PM

Thank you! This looks good to go from our perspective.

Sincerely,

Liz

From: Stephanie Casway <SCasway@greenjournal.org>
Sent: Wednesday, January 9, 2019 3:02:29 PM
To: Janiak, Elizabeth
Subject: RE: O&G Figure Revision: 18-2097

External Email - Use Caution

Good Afternoon Dr. Janiak,

Thank you so much for your review. Attached you will find an updated version of Figure 2. Per journal style, we do not include headers on figures. However, I have added the information to each graph using a box. Please let me know if this is okay.

Have a great day!

From: Janiak, Elizabeth
Sent: Wednesday, January 9, 2019 2:48 PM
To: Stephanie Casway <SCasway@greenjournal.org>
Subject: Re: O&G Figure Revision: 18-2097

Dear Stephanie Casway,

thank you for being in touch about this.

I believe Figure 1 looks great--two co-authors also took a look to ensure we didn't miss anything.

For Figure 2, we had a few ideas:

-First, can we write "Parental Consent" and "Judicial Bypass" somewhere on the Figure? -Can we add the proportion that passed a threshold within each consent type group?

I attach a rough mockup of what a revised Figure 2 would look like. If you agree with these additions, would a member of your staff make them in accordance with stylistic guidelines of the journal? What I attach is not very refined looking--more of a brainstorm than a final figure.

Thank you so much for your time.

Sincerely, Liz Janiak



From: Stephanie Casway <<u>SCasway@greenjournal.org</u>>
Sent: Wednesday, January 9, 2019 11:33:15 AM
To: Janiak, Elizabeth
Subject: O&G Figure Revision: 18-2097

External Email - Use Caution

Good Morning Dr. Janiak,

Your figures and legend have been edited, and PDFs of the figures and legend are attached for your review. Please review the figures CAREFULLY for any mistakes.

PLEASE NOTE: Any changes to the figures must be made now. Changes 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 be grateful to receive a reply no later than Friday, 1/11. Thank you for your help.

Best wishes,

Stephanie Casway, MA Senior Production Editor *Obstetrics & Gynecology* American College of Obstetricians and Gynecologists 409 12th St, SW Washington, DC 20024 Ph: (202) 314-2339 Fax: (202) 479-0830 <u>scasway@greenjournal.org</u>

The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail contains patient information, please contact the Partners Compliance HelpLine at http://www.partners.org/complianceline . If the e-mail was sent to you in error

but does not contain patient information, please contact the sender and properly dispose of the e-mail.