

**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)\*

\*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:    | May 28, 2021                            |
|----------|---|
| То:      | "ASHLEY R BRANT"                        |
| From:    | "The Green Journal" em@greenjournal.org |
| Subject: | Your Submission ONG-21-969              |

RE: Manuscript Number ONG-21-969

Impact of a state law mandating access to immediate postpartum long-acting reversible contraception

Dear Dr. BRANT:

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 Jun 18, 2021, we will assume you wish to withdraw the manuscript from further consideration.

#### **REVIEWER COMMENTS:**

Reviewer #1: The authors present an interesting paper regarding the effect of a changing state mandate on postpartum LARC usage. I would ask the authors to consider the following:

1. It would be helpful to understand how if at all the mandate is enforced in Ohio. Does any state agency ask for any specific data to ensure the mandate is being carried out uniformly?

2. A major limitation of the study is the institutions studied. University affiliated teaching hospitals would be better positioned and motivated to provide postpartum LARC placement. It would be a great interest to learn whether nonteaching community hospitals have adoption rates similar to those described in this study. Do the authors have any information or data on this question?

3. Another concern is that the measurement of new pregnancies was limited to the systems' EMR. However, many patients may lose their coverage, move elsewhere, or choose to receive care in another institution. Without any information regarding the stability of the population studied, it is challenging to know with any degree of certainty, that the number reported are truly accurate.

4. Do the authors have any information on PP LARC use in states that public or private insurers unbundled charges for PP LARC placement compared to those who do not?

5. What percentage of maternity hospitals and births in Ohio occur in faith-based institutions who are exempt from the mandate? Are patients aware of this limitation?

6. While the mean gestational age was similar in both groups were any differences seen in LARC usage between women delivering at previable GA, preterm GA, or term GA?

7. Was there a standard expectation regarding educating patients during prenatal care and after delivery regarding LARCs? It would be interesting to learn why the midwifery group had higher usage compared to physicians.

Reviewer #2: This study examines the impact of a law mandating that hospitals in Ohio offer immediate postpartum LARC. The authors compared LARC use and repeat pregnancy within 12 months during the two year periods immediately preceding and following implementation of this law. They found significant increase in LARC use and decrease in in repeat pregnancy rates within 12 months.

1. How did the authors select the controls (non LARC) users - were they the next three deliveries at the same hospital on the same day? (P8 line 121)

2. Why did the authors choose LARC utilization per month as the primary outcome?

3. The authors only used deliveries within their system to ascertain repeat pregnancy within 12 months; could they search statewide birth records for repeat deliveries (that might be important due to demographic differences noted within the LARC/non LARC groups that might increase geographic mobility)

4. It would be interesting to see if the midwife population differed in any demographic aspects that were seen to be

#### associated with increased LARC use

Reviewer #3: This is a retrospective cohort examining the effect of an Ohio state law mandating immediate postpartum LARC access in maternity hospitals. The study is well written and well-conducted. There are limitations that are acknowledged. Specifically, follow up for pregnancy rates outside the system and reliance on diagnostic codes. 1. Introduction: This can be shortened. Specifically lines 61-68 can be reduced to a couple lines. I'd also like to see more details about the law that was passed, specifically, was there an accompanying requirement that insurance companies pay for this service? How was it funded?

2. Methods: At what point in the pregnancy/postpartum was BMI assessed?

3. Methods: What was the rationale for choosing those co-morbidities. Why history of breast cancer? That is quite rare. I don't see gestational diabetes which is more common.

4. Methods: Table 1, I am concerned that the code list is quite short. For example, it doesn't contain O02 categories of missed abortion. In addition, it doesn't contain encounters for supervision of pregnancy or termination of pregnancy, the Z codes. Therefore, I am not sure you can reliably say you captured all pregnancies.

5. Discussion: Add more about reimbursement for this policy at the hospitals.

#### STATISTICAL EDITOR COMMENTS:

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

Lines 34-41, 155-162 and Table 2: The stats test used (chi-square) evaluates the distribution of groups, it is not the same as a pair-wise test. It is no doubt true that the differences were attributable to differences in proportion Black, Hispanic, Public insured or even smoking status, since none of the tests were binary. Need to modify the statement or do a pairwise stats test. Regarding BMI, there more patients with missing data than there were who received LARC. Need to state how many were missing BMI among the LARC and non-LARC groups. Potentially this evaluation of difference in BMI is statistically biased.

Table 3: The difference in mean GA at delivery is statistically significant in this large sample, but is is clinically important?

Table 4: Need to include the number of repeat pregnancies in each group (appears to be ~ 34 and 214). Also need to include as footnote the variables included in the multivariable model. For the race unknown and payor type unknown, the number of pregnancies is not stated, but likely these multivariable models are over fitted, as well as underpowered. For the LARC group, the number of pregnancies among those delivered via private provider are likely small (Table 2), so again the model is likely over fitted for the aOR.

#### EDITOR COMMENTS:

1. Please, throughout, substitute the language of association with that of causation for your findings; that is, use "association" instead of "impact." The journal uses "impact" only to mean "to strike."

2. The Editors of Obstetrics & Gynecology are seeking to increase transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:

- A. OPT-IN: Yes, please publish my point-by-point response letter.
- B. OPT-OUT: No, please do not publish my point-by-point response letter.

3. For studies that report on the topic of race or include it as a variable, authors must provide an explanation in the manuscript of who classified individuals' race, ethnicity, or both, the classifications used, and whether the options were defined by the investigator or the participant. In addition, the reasons that race/ethnicity were assessed in the study also should be described (eg, in the Methods section and/or in table footnotes). Race/ethnicity must have been collected in a formal or validated way. If it was not, it should be omitted. Authors must enumerate all missing data regarding race and ethnicity as in some cases, missing data may comprise a high enough proportion that it compromises statistical precision and bias of analyses by race.

Use "Black" and "White" (capitalized) when used to refer to racial categories. The nonspecific category of "Other" is a convenience grouping/label that should be avoided, unless it was a prespecified formal category in a database or research instrument. If you use "Other" in your study, please add detail to the manuscript to describe which patients were included in that category.

- 4. Add the reason(s) your study was found to be exempt to lines 146-147.
- 5. Your study uses ICD-10 data. Please make sure you do the following:
- a. State which ICD-10-CM/PCS codes or algorithms were used
- b. Use both the diagnosis and procedure codes.
- c. Verify the selected codes apply for all years of the study.

d. Conduct sensitivity analyses using definitions based on alternative codes.

e. For studies incorporating both ICD-9 and ICD-10-CM/PCS codes, the Discussion section should acknowledge there may be disruptions in observed rates related to the coding transition and that coding errors could contribute to limitations of the study. The limitations section should include the implications of using data not created or collected to answer a specific research question, including possible unmeasured confounding, misclassification bias, missing data, and changing participant eligibility over time.

f. The journal does not require that the title include the name of the database, geographic region or dates, or use of database linkage, but this data should be included in the abstract.

g. Include RECORD items 6.3 and 7.1, which relate to transparency about which codes, validation method, and linkage were used to identify participants and variables collected.

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

7. 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 5,500 words. Stated word limits include the title page, précis, abstract, text, tables, boxes, and figure legends, but exclude references.

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

\* All financial support of the study must be acknowledged.

\* Any and all manuscript preparation assistance, including but not limited to topic development, data collection, analysis, writing, or editorial assistance, must be disclosed in the acknowledgments. Such acknowledgments must identify the entities that provided and paid for this assistance, whether directly or indirectly.

\* All persons who contributed to the work reported in the manuscript, but not sufficiently to be authors, must be acknowledged. Written permission must be obtained from all individuals named in the acknowledgments, as readers may infer their endorsement of the data and conclusions. Please note that your response in the journal's electronic author form verifies that permission has been obtained from all named persons.

\* If all or part of the paper was presented at the Annual Clinical and Scientific Meeting of the American College of Obstetricians and Gynecologists or at any other organizational meeting, that presentation should be noted (include the exact dates and location of the meeting).

\* If your manuscript was uploaded to a preprint server prior to submitting your manuscript to Obstetrics & Gynecology, add the following statement to your title page: "Before submission to Obstetrics & Gynecology, this article was posted to a preprint server at: [URL]."

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

In addition, the abstract length should follow journal guidelines. The word limit for Original Research articles is 300 words. Please provide a word count.

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

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

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

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

12. Your manuscript contains a priority claim (line 177: "This paper represents the first study of the impact of statemandated universal IPP LARC access"). We discourage claims of first reports since they are often difficult to prove. How do you know this is the first report? If this is based on a systematic search of the literature, that search should be described in the text (search engine, search terms, date range of search, and languages encompassed by the search). If it is not based on a systematic search but only on your level of awareness, it is not a claim we permit.

13. 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.

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

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

15. Authors whose manuscripts have been accepted for publication have the option to pay an article processing charge and publish open access. With this choice, articles are made freely available online immediately upon publication. An information sheet is available at http://links.lww.com/LWW-ES/A48. The cost for publishing an article as open access can be found at https://wkauthorservices.editage.com/open-access/hybrid.html.

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

You will be receiving an Open Access Publication Charge letter from the Journal's Publisher, Wolters Kluwer, and instructions on how to submit any open access charges. The email will be from publicationservices@copyright.com with the subject line 'Please Submit Your Open Access Article Publication Charge(s)'. Please complete payment of the Open Access charges within 48 hours of receipt.

#### \*\*\*

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

\* A confirmation that you have read the Instructions for Authors (http://edmgr.ovid.com/ong/accounts/authors.pdf), and

\* A point-by-point response to each of the received comments in this letter. Do not omit your responses to the Editorial Office or Editors' comments.

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

Again, your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Jun 18, 2021, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

The Editors of Obstetrics & Gynecology

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

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: https://www.editorialmanager.com/ong/login.asp?a=r). Please contact the publication office if you have any questions.



To the editors:

Please find enclosed our revised manuscript entitled **"Trends in immediate postpartum long-acting reversible contraception before and after a state policy mandated inpatient access"** for consideration for publication in *Obstetrics & Gynecology*. Please see our response to the reviewers and editor's comments beginning on page 2 of this document.

Dr. Brant 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 have been explained.

Support for this study was provided through a Society of Family Planning Research Fund grant awarded to Ashley Brant. The funding organization did not play a role in study design, data analysis, manuscript preparation, or the decision to submit for publication. Dr. Brant and Dr. Emery are Merck Nexplanon® Trainers; the authors have no other conflicts of interest to report. Our study was exempt from review per the Institutional Review Board of Cleveland Clinic.

These study results were presented as a poster at the American College of Obstetricians and Gynecologists Annual Clinical Meeting, held virtually May 2021. The manuscript is not under consideration elsewhere.

We look forward to hearing the reviewers' comments. Please contact Dr. Brant should you need additional information. Thank you for your consideration.

Sincerely,

ashing Resurd

Ashley R. Brant, DO, MPH



**REVIEWER COMMENTS:** 

**Reviewer #1:** The authors present an interesting paper regarding the effect of a changing state mandate on postpartum LARC usage. I would ask the authors to consider the following:

1. It would be helpful to understand how if at all the mandate is enforced in Ohio. Does any state agency ask for any specific data to ensure the mandate is being carried out uniformly?

There is no state agency in Ohio that is tasked with enforcing the mandate. Individual hospitals have used various committees to track this including committees involved with patient care quality and compliance.

2. A major limitation of the study is the institutions studied. University affiliated teaching hospitals would be better positioned and motivated to provide postpartum LARC placement. It would be a great interest to learn whether nonteaching community hospitals have adoption rates similar to those described in this study. Do the authors have any information or data on this question?

We do not have data on immediate postpartum LARC rates at other institutions. Based on conversations with colleagues in non-academic settings, we suspect our rate is higher compared to smaller, community hospitals. The discussion has been modified to reflect this point (lines 214-216).

3. Another concern is that the measurement of new pregnancies was limited to the systems' EMR. However, many patients may lose their coverage, move elsewhere, or choose to receive care in another institution. Without any information regarding the stability of the population studied, it is challenging to know with any degree of certainty, that the number reported are truly accurate.

Cleveland Clinic is a large multi-hospital system with three maternity units spread across the city and there are also hospital system sponsored financial plans in place to support uninsured patients seeking health care. Stability of the population is a problem in any retrospective study which is one of the weaknesses of our study (discussed on lines 210-214)



4. Do the authors have any information on PP LARC use in states that public or private insurers unbundled charges for PP LARC placement compared to those who do not?

43 states and the District of Columbia have unbundled IPP LARC but little is known about experiences of states adopted within the last few years (American College of Obstetrics and Gynecology, 2019). Data from Iowa, South Carolina and Louisiana demonstrated increases in IPP LARC provision that varied substantially (43% to 1638%: Okoroh et al. 2018; Steenland, Pace, Sinaiko, & Cohen 2019). Wisconsin had smallest increase in IPP LARC provision pre versus post unbundling (1.57 fold; Kramer et al. 2021).

5. What percentage of maternity hospitals and births in Ohio occur in faith-based institutions who are exempt from the mandate? Are patients aware of this limitation?

In total in Ohio, 18.5% of hospitals were religiously affiliated as per 2016 statistics with 9.4% owned by a Catholic organization, 5.1% affiliated with a Catholic group, and 4% affiliated with other non-Catholic groups. Data on births at these hospitals is beyond the scope of this article and is not known by the authors. None of the 3 hospitals at Cleveland Clinic in this study is faith based. Also, it is not known if patients delivering at the study hospitals or other hospitals (Cleveland Clinic or other) are aware of this limitation.

6. While the mean gestational age was similar in both groups were any differences seen in LARC usage between women delivering at pre-viable GA, preterm GA, or term GA?

Pre-viable deliveries <20 weeks were excluded. Table 3 has been updated to include the proportion of term and preterm deliveries.

7. Was there a standard expectation regarding educating patients during prenatal care and after delivery regarding LARCs? It would be interesting to learn why the midwifery group had higher usage compared to physicians.



There is no standard methodology for educating and counseling patients about IPP LARC during prenatal care visits. Within Cleveland Clinic Health System, the majority of physicians and midwives provide counseling about IPP LARC in the late second or early third trimesters. Within the EMR, there is also a prompt in the note template for counseling about IPP LARC in the 29 to 32 week gestation time frame though this study did not assess use of this prompt. Additionally, at the time of admission for delivery, patients are counseled and asked about their preference for IPP LARC and this conversation is routinely documented in the admission note as it is part of the standard admission note template. The manuscript has been updated to reflect this (lines 82-86).

**Reviewer #2**: This study examines the impact of a law mandating that hospitals in Ohio offer immediate postpartum LARC. The authors compared LARC use and repeat pregnancy within 12 months during the two year periods immediately preceding and following implementation of this law. They found significant increase in LARC use and decrease in in repeat pregnancy rates within 12 months.

1. How did the authors select the controls (non LARC) users - were they the next three deliveries at the same hospital on the same day? (P8 line 121)

GREEDY Matching Algorithm was used to match deliveries at the same hospital on the closest delivery day, although it was not always guaranteed, most of the controls were matched to the same day because the pool of potential control was very large (lines 107-109).

2. Why did the authors choose LARC utilization per month as the primary outcome?

To identify trends in IPP LARC use. AS with many interventions, there may be a robust initial effect after implementation of a new mandate which may decrease over time. As such, monthly utilization rates were chosen as a marker for persistence of the intervention over time.

3. The authors only used deliveries within their system to ascertain repeat pregnancy within 12 months; could they search statewide birth records for repeat deliveries (that might be important due to demographic differences noted within the LARC/non LARC groups that might increase geographic mobility)

It is beyond the scope of this study to use state-wide records to assess our secondary outcomes.



4. It would be interesting to see if the midwife population differed in any demographic aspects that were seen to be associated with increased LARC use

The study is not designed to allow assessment of differences in physician versus midwife patient demographics. Generally speaking, midwifery patients tend to have fewer risk factors for adverse OB outcomes but we did not collect data on OB risk stratification.

**Reviewer #3**: This is a retrospective cohort examining the effect of an Ohio state law mandating immediate postpartum LARC access in maternity hospitals. The study is well written and well-conducted. There are limitations that are acknowledged. Specifically, follow up for pregnancy rates outside the system and reliance on diagnostic codes.

1. Introduction: This can be shortened. Specifically lines 61-68 can be reduced to a couple lines. I'd also like to see more details about the law that was passed, specifically, was there an accompanying requirement that insurance companies pay for this service? How was it funded?

#### The introduction has been shortened (Lines 45-49).

In addition to ORC 3727.02, an accompanying provision under Ohio Administrative Code 5160-2-79 was also passed that specifies that LARC devices may be billed separately when provided during inpatient hospitalization with an inpatient obstetrical delivery claim. Manuscript updated (lines 63-66).

2. Methods: At what point in the pregnancy/postpartum was BMI assessed?

We used BMI on the date of delivery (line 112).

3. Methods: What was the rationale for choosing those co-morbidities. Why history of breast cancer? That is quite rare. I don't see gestational diabetes which is more common.

We included common co-morbidities that impact IUD or hormonal contraceptive safety. We recognize it is not an exhaustive list of conditions included in the CDC MEC, but it represents the majority of common conditions associated with MEC category 4. Migraine with aura was intentionally excluded because of concern about the accuracy of ICD-10 codes for identifying migraine with aura.



4. Methods: Table 1, I am concerned that the code list is quite short. For example, it doesn't contain OO2 categories of missed abortion. In addition, it doesn't contain encounters for supervision of pregnancy or termination of pregnancy, the Z codes. Therefore, I am not sure you can reliably say you captured all pregnancies.

We used multiple methods to identify repeat pregnancies; ICD10 codes *and* new pregnancy episodes in the EMR. We acknowledge that the reviewer identified ICD10 codes associated with pregnancy that we initially excluded and we have therefore updates our ICD10 code list and repeated the analysis. Please see updated table 1. The results have been updated throughout the manuscript and table 4. We also updated Table 1 to provide more detail regarding the codes used.

5. Discussion: Add more about reimbursement for this policy at the hospitals.

ORC 3727.02 and OAC 5160-2-79 allow for the unbundling of the IPP LARC device charge from the inpatient obstetrical delivery claim in Ohio, similar to 37 other states.

STATISTICAL EDITOR COMMENTS:

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

1. Lines 34-41, 155-162 and Table 2: The stats test used (chi-square) evaluates the distribution of groups, it is not the same as a pair-wise test. It is no doubt true that the differences were attributable to differences in proportion Black, Hispanic, Public insured or even smoking status, since none of the tests were binary. Need to modify the statement or do a pair-wise stats test.

Text updated in abstract and lines 147-150 to address comment.

Regarding BMI, there more patients with missing data than there were who received LARC. Need to state how many were missing BMI among the LARC and non-LARC groups. Potentially this evaluation of difference in BMI is statistically biased.

## Cleveland Clinic

Ashley Brant, D.O, MPH Staff Ob/Gyn & Women's Health Institute

Table 2 footnote updated. There are 1646 missing in control and 526 in LARC group, the missing between groups roughly follows the 3:1 matching ratio, so it was possible that BMI was missing completely at random.

2. Table 3: The difference in mean GA at delivery is statistically significant in this large sample, but is it clinically important?

## No, we do not think the difference in GA is clinically important.

3. Table 4: Need to include the number of repeat pregnancies in each group (appears to be ~ 34 and 214). Also need to include as footnote the variables included in the multivariable model. For the race unknown and payor type unknown, the number of pregnancies is not stated, but likely these multivariable models are over fitted, as well as underpowered. For the LARC group, the number of pregnancies among those delivered via private provider are likely small (Table 2), so again the model is likely over fitted for the aOR.

## Total number of repeat pregnancies was erroneously removed from Table 4, it has been added back.

After a closer look, the LARC group had an adequate number of repeat pregnancy outcomes, however, Race (Others and Unknown, Payor type (Other and Unknown) both attained clinical significance. At the reviewer's suggestion, combining them to bigger groups was accomplished. Now Race (Others and Unknown) are combined into one group and Payor type was combined to "Other or Unknown" and "Public". Also, OB parity in multivariable model was removed because it did not affect the model.

In the new table, we included frequencies of repeat pregnancy outcomes in each level of predictors and amounts of outcomes all satisfied the general guideline that a minimum of 10 cases with the least frequent outcome for each cell. Results from the new model are minimally changed from the initial version so our discussion remains unchanged.

## EDITOR COMMENTS:

1. Please, throughout, substitute the language of association with that of causation for your findings; that is, use "association" instead of "impact." The journal uses "impact" only to mean "to strike."



#### Done in manuscript

2. The Editors of Obstetrics & Gynecology are seeking to increase transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:

#### OPT-IN: Yes, please publish my point-by-point response letter.

3. For studies that report on the topic of race or include it as a variable, authors must provide an explanation in the manuscript of who classified individuals' race, ethnicity, or both, the classifications used, and whether the options were defined by the investigator or the participant. In addition, the reasons that race/ethnicity were assessed in the study also should be described (eg, in the Methods section and/or in table footnotes). Race/ethnicity must have been collected in a formal or validated way. If it was not, it should be omitted. Authors must enumerate all missing data regarding race and ethnicity as in some cases, missing data may comprise a high enough proportion that it compromises statistical precision and bias of analyses by race.

# Race and ethnicity were extracted from the EMR; typically self-reported by the patient. See manuscript line 110-111.

Use "Black" and "White" (capitalized) when used to refer to racial categories. The nonspecific category of "Other" is a convenience grouping/label that should be avoided, unless it was a prespecified formal category in a database or research instrument. If you use "Other" in your study, please add detail to the manuscript to describe which patients were included in that category.

4. Add the reason(s) your study was found to be exempt to lines 146-147.

## See line 136-137.

- 5. Your study uses ICD-10 data. Please make sure you do the following:
- a. State which ICD-10-CM/PCS codes or algorithms were used.



#### Table 2

b. Use both the diagnosis and procedure codes.

#### Table 2

c. Verify the selected codes apply for all years of the study.

ICD10 codes were used throughout the entire study timeframe.

d. Conduct sensitivity analyses using definitions based on alternative codes.

See manuscript lines 117-119, 123-126 for a description of analysis of accuracy of ICD codes.

e. For studies incorporating both ICD-9 and ICD-10-CM/PCS codes, the Discussion section should acknowledge there may be disruptions in observed rates related to the coding transition and that coding errors could contribute to limitations of the study. The limitations section should include the implications of using data not created or collected to answer a specific research question, including possible unmeasured confounding, misclassification bias, missing data, and changing participant eligibility over time.

#### Only ICD10 codes were used. All ICD data is from 2017 and later.

f. The journal does not require that the title include the name of the database, geographic region or dates, or use of database linkage, but this data should be included in the abstract.

The abstract includes a description of EMR data use.



g. Include RECORD items 6.3 and 7.1, which relate to transparency about which codes, validation method, and linkage were used to identify participants and variables collected.

#### **RECORDS** revised and resubmitted.

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

#### NA. EMR and ICD10 data used.

7. 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 5,500 words. Stated word limits include the title page, précis, abstract, text, tables, boxes, and figure legends, but exclude references.

## Total word count excluding references: 4407

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

\* All financial support of the study must be acknowledged. Acknowledged on title page.

\* 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. None

\* All persons who contributed to the work reported in the manuscript, but not sufficiently to be authors, must be acknowledged. Written permission must be obtained from all individuals named in the acknowledgments, as readers may infer their endorsement of the data and conclusions. Please note that your response in the journal's electronic author form verifies that permission has been obtained from all named persons. None



\* 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). Virtual ACOG ACM 2021, 4/30/21-5/2/21, poster format.

\* If your manuscript was uploaded to a preprint server prior to submitting your manuscript to Obstetrics & Gynecology, add the following statement to your title page: "Before submission to Obstetrics & Gynecology, this article was posted to a preprint server at: [URL]. NA

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

In addition, the abstract length should follow journal guidelines. The word limit for Original Research articles is 300 words. Please provide a word count.

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

Terminology updated throughout manuscript.

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

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

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

12. Your manuscript contains a priority claim (line 177: "This paper represents the first study of the impact of state-mandated universal IPP LARC access"). We discourage claims of first reports since they



are often difficult to prove. How do you know this is the first report? If this is based on a systematic search of the literature, that search should be described in the text (search engine, search terms, date range of search, and languages encompassed by the search). If it is not based on a systematic search but only on your level of awareness, it is not a claim we permit.

#### Manuscript updated to reflect recommendation (lines 164-165).

13. 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>.

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