## Variations in Postpartum Opioid Prescribing Practices among Obstetrician-Gynecologists

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### ABSTRACT

Introduction. There have been many efforts to combat the United States opioid crisis that has been occurring for the past two decades, specifically with postpartum patients that often were prescribed opioids. Prior studies described how accounting for usage of inpatient opioids on the day prior to discharge had an impact on how much discharge opioids were prescribed on the day of discharge. These studies provided a guideline to use the inpatient opioid amount from the day before discharge to determine discharge opioid quantity and minimize how much was being prescribed. In July 2018, the American College of Obstetrics and Gynecologists (ACOG) published Committee Opinion 742, guidelines for obstetricians-gynecologists about postpartum pain management. Prescription pain medications (including opioids, if necessary) require a shared decision-making approach between the physician and patient to determine the medication type and quantity. This study aimed to determine if there were differences in prescribing practices based on the specific post-operative day that opioid prescriptions were written, and if there were differences in the prescribing practices for cesarean deliveries following the publication of ACOG Committee Opinion 742.

**Methods.** This retrospective chart review included patients who had a live cesarean birth at one rural Midwest facility anytime between July 1, 2017 and February 28, 2021. This study excluded those with chorioamnionitis and those discharged after more than four days. Opioid amounts were converted to oral morphine milligram equivalents (MME) for comparison, and total MME was calculated for each prescription. Patients were stratified into two groups based on the day that their discharge opioid medication prescriptions were written (i.e., a day prior to discharge or the day of discharge). Patients were also stratified based on date of delivery, before or after the publication of ACOG Committee Opinion 742.

**Results.** Of 411 cesarean patients, 93.9% (n = 386) had opioids prescribed at discharge, 86% (n = 330) of whom received a prescription written on the day of discharge. There was no difference in the quantity of MMEs, doses per day, or dosage from discharge prescriptions between those written on the day of discharge and those written on a prior day. Patients whose deliveries occurred after the publication of ACOG Committee Opinion 742 (63.9%, n = 263) received discharge prescriptions with fewer average MMEs (159.53 ± 61.64) than those whose deliveries occurred before the publication (36%, n = 148; 187.35 ± 53.42;  $\chi^2$  (1, N = 411) = 17.71; p < 0.001), and they were prescribed fewer doses per day.

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**Conclusions.** After cesarean sections, the specific post-operative day did not seem to impact the prescribing trends as there were no differences in MMEs, doses per day, or dosage between prescriptions that were written on the day of discharge and before the day of discharge. Patients whose deliveries occurred after the publication of ACOG Committee Opinion 742 received discharge prescriptions with fewer MMEs, fewer doses per day, and the same dosage than those whose deliveries occurred before the publication, reflecting the overall national trend of decreasing prescription opioids over these years. *Kans J Med 2022;15:373-379* 

## INTRODUCTION

From 1999 to 2019, there was a four-fold increase in the number of drug overdose deaths in the U.S., with prescription opioid overdose accounting for 247,000 deaths.<sup>1</sup> The quantity of opioids prescribed per patient (determined through morphine milligram equivalents (MMEs)) was approximately three times higher in 2015 than the MMEs prescribed in 1999.<sup>2</sup> The overall rate of opioid prescriptions peaked at 81.3 prescriptions per 100 patients in 2012, stabilized at 70.6 prescriptions per 100 patients from 2015 through 2017<sup>2</sup>, and has decreased more since then, at 43.3 prescription per 100 patients in 2020.<sup>1</sup>

Although postpartum caesarean and vaginal delivery patients often were prescribed opioids, patients with caesarean deliveries more commonly were prescribed discharge opioid prescriptions.<sup>3</sup> However, there was a lack of standardization regarding the quantity of opioids prescribed for caesarean or vaginal deliveries;<sup>34</sup> the quantities did not always correlate with postpartum patient's measures of pain,<sup>4</sup> and patients often were prescribed more opioids than what was consumed.<sup>56</sup>

Prior studies have described the quantity of discharge opioid prescriptions written on the day of discharge and evaluated if accounting for the usage of inpatient opioids on the day prior to discharge had an impact on how much was prescribed.78 Hill and colleagues suggested that home post-discharge opioid use was best predicted by usage of inpatient opioids the day before discharge, and suggested a guideline to use the inpatient opioid amount from the day before discharge to determine discharge opioid quantity and minimize how much is being prescribed.7 Schwab and colleagues implemented a protocol that eliminated patient-controlled analgesia on the days prior to discharge and found that patients continued to be prescribed excess opioids at discharge compared to inpatient opioid use the day prior to discharge.<sup>8</sup> However, it was unknown if the day that the discharge prescriptions were written, which can be on the day of discharge or an earlier postoperative day, led to a difference in prescribing practices for discharge opioid medications after caesarean deliveries.

In an effort to combat the opioid crisis, the American College of Obstetrics and Gynecologists (ACOG) published a Committee Opinion in July 2018 with guidelines for obstetricians-gynecologists about postpartum pain management.<sup>9</sup> While there is varying information on what

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might reduce overprescribing opioids, ACOG Committee Opinion 742 described that prescription pain medications (including opioids, if necessary) required a shared decision-making approach between the physician and patient to determine which type of medication and the appropriate quantity to prescribe.<sup>9</sup>

Therefore, this study sought to determine if patients with caesarean deliveries received different prescribing practices based on the day that discharge opioid medications were written, relative to the day of discharge. This study also sought to determine if patients with caesarean deliveries that occurred before the publication of ACOG Committee Opinion 742 experienced a change in opioid prescriptions compared to those whose deliveries occurred after the publication. Specifically, this study sought to determine if the publication contributed to a change in the type and quantity of MMEs.

### **METHODS**

**Participants.** Eligible patients had a live birth via cesarean anytime between July 1, 2017 and February 28, 2021 and received care in a specific rural community hospital. Patients were identified through the medical records at Newton Medical Center in Newton, KS through DRG codes (783, 784, 786, 787, 785, or 788) for all types of caesarean deliveries. Patients eligible for this study delivered newborns at Newton Medical Center with APGAR (Appearance, Pulse, Grimace, Activity, and Respiration) scores that were greater than zero at one minute. Patients were excluded from this study if they were diagnosed with chorioamnionitis or discharged post-operatively after more than four days.

**Instrument.** The primary outcome for this study was the discharge prescription's morphine milligram equivalents (MMEs). The independent variables included the date of the written postpartum opioid prescription (day of discharge or prior to day of discharge) and date of delivery (if it occurred before or after the publication of ACOG Committee Opinion 742). Possible confounding variables included previous narcotic use, type of cesarean, and type of anesthesia.<sup>10</sup>

The data abstracted from each patient's medical records included demographics (e.g., name, race, ethnicity, date of birth), maternal history (e.g., smoking status, diabetes, past opioid use), delivery information (e.g., first or repeat cesarean, anesthesia type, date, time), and infant information (e.g., gestational age, APGAR score). Discharge information (e.g., date, time) and opioid medication information (e.g., prescription type, dose, date prescription written) also were abstracted from patient charts.

Opioids were converted to oral MMEs to compare the different types of opioids.<sup>11</sup> The total MME of each prescription was calculated by using an opioid conversion factor, based on the strength of each opioid, and multiplying it by the dose and the number of tablets in the prescription. For example, oxycodone is a stronger opioid than hydromorphone, so it had a 1.5 conversion factor when converting to MME, whereas hydromorphone had a conversion factor of 1.

Procedures. This project was approved by the Institutional Review

Boards at the University of Kansas Medical Center and Newton Medical Center. Patient charts that met study criteria were abstracted into a Research Electronic Data Capture (REDCap<sup>®</sup>) database hosted at the University of Kansas School of Medicine.<sup>12</sup>

Patients were stratified into two groups based on if physicians wrote their discharge opioid medication on the day of discharge or if it was written on a day prior to discharge. Patients also were stratified into two additional groups based on their date of delivery, with reference to the publication of ACOG Committee Opinion 742. Patients who had their caesarean delivery from July 1, 2017 through July 1, 2018 were categorized as having delivered "before the ACOG publication", and patients who had their caesarean delivery from July 2, 2018 through February 28, 2021 were categorized as having delivered "after the ACOG publication".

Statistical Analysis. Data were analyzed using SAS version 9.4 (SAS Int. Inc., Cary, NC). Means and standard deviations (or medians and interquartile ranges) were reported for continuous variables; counts and percentages were reported for categorical variables. Likelihood ratio chi-square and Fisher's exact tests were for 2\*2 and r\*c contingency tables to test the association and agreement for the categorical and nominal variables. Based on the distribution of the quantity of opioid meditation, a robust regression approach was used to test the relationship between the quantity of MME prescribed and if it was prescribed on the day of discharge or prior to the day of discharge, as well as if it was before or after the publication of ACOG Committee Opinion 742. For modeling the relationship between number of pills and the predictor variable, negative binomial regression model was utilized. Goodness of fit criteria such as Akaike and Bayesian Information criteria were used to identify the approach that better fits for the model between outcome and predictor variables. All statistical tests at  $p \le 0.05$ were considered significant.

### RESULTS

In total, 411 patient charts were reviewed for this study, and all met inclusion and exclusion criteria. The ages of the patients ranged from 15 to 43 years, with a mean patient age of 28 years (SD = 5.0). Most of the population was White (95.1%, n = 391; Table 1). Sixty-nine percent (n = 286/411) of patients had a history of past pregnancies prior to the current caesarean delivery. For approximately half of the patients (52.8%, n = 217/411), this was a repeat caesarean delivery. Nearly two-thirds of the patients had a history of past opioid use (64.2%, n = 264/411). Most patients (65.5%, n = 269/411) had a spinal block anesthesia, 67.3% of whom (n = 181/269) had Duramorph\* (morphine sulfate injection) as part of their anesthesia plan. The average body mass index for patients was 35.21 and the average gestational age was 38.66 weeks. There were no significant differences in demographic or clinical characteristics before or after the publication of ACOG Committee Opinion 742.

continued.

## Table 1. Demographic and clinical characteristics of patients, n (%) or mean $\pm$ SD.

	All Patients	Before ACOG Publication	After ACOG Publication	p Value
Total	411 (100.0%)	148 (36.0%)	263 (64.0%)	
Ethnicity				0.562
Hispanic or Latino	43 (10.5%)	16 (10.8%)	27 (10.3%)	
Not Hispanic or Latino	358 (87.1%)	130 (87.9%)	228 (86.7%)	
Unknown/not reported	10 (2.4%)	2 (1.4%)	8 (3.0%)	
Race				0.537
Asian American	3 (0.7%)	2 (1.4%)	1(0.4%)	
Native Hawaiian or Other Pacific Islander	1 (0.2%)	1 (0.7%)	0 (0.0%)	
Black or African American	10 (2.4%)	4 (2.7%)	6 (2.3%)	
White or Caucasian	391 (95.1%)	139 (93.9%)	252 (95.8%)	
Unknown/not reported	6 (1.5%)	2 (1.4%)	4 (1.5%)	
Smoking status				0.364
Never smoker	275 (66.9%)	95 (64.2%)	180 (68.4%)	
Current smoker	83 (20.2%)	29 (19.6%)	54 (20.5%)	
Former smoker	52 (12.7%)	24 (16.22%)	28 (10.65%)	
Unknown/not recorded	1 (0.24%)	0 (0.0%)	1(0.4%)	
Diabetes status				0.281
Type 1 diabetes	6 (1.5%)	4 (2.7%)	2 (0.8%)	
Type 2 diabetes	3 (0.7%)	2 (1.4%)	1 (0.4%)	
Gestational diabetes	39 (9.5%)	13 (8.8%)	26 (9.9%)	
No diabetes diagnosis	363 (88.3%)	129 (87.2%)	234 (89.0%)	
Hypertension				0.563
No	382 (92.9%)	139 (93.9%)	243 (92.4%)	
Yes	29 (7.1%)	9 (6.1%)	20 (7.6%)	
Chronic pain				0.790
No	401 (97.6%)	144 (97.3%)	257 (97.7%)	
Yes	10 (2.4%)	4 (2.7%)	6 (2.3%)	
Past opioid use				< 0.001
No	147 (35.8%)	72 (48.7%)	75 (28.5%)	
Yes	264 (64.2%)	76 (51.4%)	188 (71.5%)	
Alcohol consumption during pregnancy				0.477
No	347 (84.4%)	121 (81.8%)	226 (85.9%)	
Yes	43 (10.5%)	19 (12.8%)	24 (9.1%)	
Unknown	21 (5.1%)	8 (5.4%)	13 (4.9%)	
History of past pregnancy				0.373
No	125 (30.4%)	49 (33.1%)	76 (28.9%)	
Yes	286 (69.6%)	99 (66.9%)	187 (71.1%)	
First or repeat cesarean				0.518
First	194 (47.2%)	73 (49.3%)	121 (46.0%)	
Repeat	217 (52.8%)	75 (50.7%)	142 (54.0%)	
Anesthesia type				0.293
Epidural	142 (34.6%)	56 (37.9%)	86 (32.7%)	
Spinal	269 (65.5%)	92 (62.2%)	177 (67.3%)	

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### Table 1. Demographic and clinical characteristics of patients, n (%) or mean ± SD. continued.

	All Patients	Before ACOG Publication	After ACOG Publication	p Value
Duramorph <sup>®</sup>				0.979
No	88 (32.7%)	30 (32.6%)	58 (32.8%)	
Yes	181 (67.3%)	62 (67.4%)	119 (67.2%)	

### Table 2. Opioid discharge prescription characteristics, n (%) or mean $\pm$ SD.

	All Patients with Opioid Prescription	Before ACOG Publication	After ACOG Publication	p Value	
Total	386 (100%)	145 (37.6%)	241 (62.4%)	1	
Opioid type				0.412	
Hydrocodone	272 (70.5%)	108 (74.5%)	164 (68.1%)		
Oxycodone	111 (28.8%)	36 (24.8%)	75 (31.1%)		
Hydromorphone	2 (0.5%)	1 (0.7%)	1 (0.4%)		
Tramadol	1 (0.3%)	0 (0.0%)	1 (0.4%)		
MME prescribed	$169.98 \pm 60.15$	$187.35 \pm 53.42$	$159.53 \pm 61.64$	< 0.001	
Doses per day				< 0.001	
Four	69 (17.9%)	1 (0.7%)	68 (28.2%)		
Six	317 (82.1%)	144 (99.3%)	173 (71.8%)		
Prescription dose	Prescription dose				
2 mg	2 (0.5%)	1 (0.7%)	1 (0.4%)		
5 mg	364 (94.6%)	137 (94.5%)	228 (94.6%)		
7.5 mg	17 (4.4%)	6 (4.1%)	11 (4.6%)		
10 mg	1 (0.3%)	1 (0.7%)	0 (0.0%)		
50 mg	1 (0.3%)	0 (0.0%)	1 (0.4%)		
Number of days between prescription date and discharge date					
Zero	330 (85.5%)	120 (82.8%)	210 (87.1%)		
One	52 (13.5%)	23 (15.9%)	29 (12.0%)		
Two	4 (1.0%)	2 (1.4%)	2 (0.8%)		

Of the 411 patients included in this study, 93.9% (n = 386) had opioids prescribed to them at discharge, 85.5% of whom (n = 330) received a prescription that was written on the day of discharge (Table 2). The other 14.5% (n = 56) received a prescription that was written one or two days prior to discharge. The most common prescription type was hydrocodone (70.5%, n = 272), and the most common prescription dosage was 5 mg (94.6%, n = 360; Table 2). Most patients (82.1%, n = 317) received a prescription with instructions to take a dose up to six times per day (every four hours). The total MME ranged from 25 to 450, with a mean of 169.9 MME (SD = 60.15).

Differences in Outcomes in Reference Day that Discharge Prescription was Written. There was no significant difference in the discharge opioid prescriptions' MME between those written on the day of discharge ( $163.65 \pm 63.45$  MME) and those written one- or two-days prior ( $171.19 \pm 43.46$  MME). There was also no difference in average doses per day instructions on the discharge opioid prescriptions between those written on the day of discharge and those written one- or two-days prior. The proportions of prescriptions written with instruction to take four doses or six doses per day were the same for prescriptions written on day of discharge and a day that was prior to discharge. Additionally, the dosage between prescriptions written on day of discharge versus written on a day prior to discharge was not different, but the ranges were not identical. All prescriptions written on day of discharge had a dosage of 5 mg, while the dosage for prescriptions written on a day prior to discharge for prescriptions written on the dosage for prescriptions written on the dosage for prescriptions written on the dosage for prescriptions written on a day prior to discharge ranged from 2 mg to 50 mg.

**Differences in Outcomes in Reference to Publication of ACOG Committee Opinion 742.** Patients whose caesarean deliveries occurred after the publication of the ACOG document (62.4%, n = 241) received prescriptions at discharge with fewer quantities of MMEs than for those who delivered before the publication (37.6%, n = 145;  $\chi^2(1, N = 411) = 17.71$ ; p < 0.001; Figure 1). The average quantity of MME for the deliveries that occurred prior to the publication was 187.35 ± 53.42 MME, whereas the average quantity of MME for the deliveries that occurred after the publication was 159.53 ± 61.64 MME. However, there was no difference in the type of opioid prescribed before compared to after the publication of ACOG Committee Opinion 742.



Figure 1. Differences in MME based on date of delivery: Before or After ACOG guidelines.

On average, patients whose deliveries occurred after ACOG Committee Opinion 742 was published received prescriptions at discharge with fewer doses per day than patients whose deliveries occurred before the publication ( $\chi^2(1, N = 411) = 46.60$ ; p < 0.001). Nearly all (99.3%, n = 144) caesarean delivery patients who delivered before the publication received a prescription for opioid medication to be administered up to six times a day, whereas 71.8% of their post-publication counterparts (n = 173) received the same number of doses per day.

There was no difference in prescription dosage. The dosage was 5 mg for 94.5% of patients (n = 137) who delivered before the ACOG Committee Opinion 742 was published and 94.6% of patients (n = 228) who delivered after the publication. However, fewer discharge opioid prescriptions were written on the day of discharge (82.8%, n = 120) before the publication of ACOG Committee Opinion 742 than after the publication (87.1%, n = 210;  $\chi^2(2, N = 386) = 5.65$ ; p < 0.05).

**Outcomes of Patients with History of Opioid Use.** Two incidental findings were found in this study in relation to patients with past opioid use. A significant difference was found in the proportion of patients who had a history of opioid use between those who delivered before (51.4%, n = 76) and after the publication of ACOG Committee Opinion 742 (71.8%, n = 188). Additionally, patients who previously used opioids (64.2%, n = 264) had a lower quantity of MMEs in their discharge prescription (165.45 ± 61.36 MME) than those who did not have a history of opioid use (35.8%, n = 147; 177.95 ± 59.06 MME; p = 0.05; Figure 2).

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continued.



Figure 2. Difference in MMEs based on history of past opioid use: Yes or No.

### DISCUSSION

This study indicated that 94% of patients who underwent caesarean deliveries were given a discharge opioid prescription. This was consistent with other studies, where 94% to 97% were prescribed discharge opioids after caesarean deliveries.<sup>34</sup> However, the current study contributes to the literature due to its rural setting and population, whereas previous studies have been conducted in large medical centers with more patients and more diverse samples that may not reflect rural communities. The current study was unique in that it explored the discharge opioid prescribing patterns for patients with caesarean deliveries in relation to the day of hospital stay that the discharge prescription was written, as well as if the surgery occurred before or after the publication of ACOG Committee Opinion 742.

The current study suggested that the quantity of discharge prescription MMEs, dosage, and doses per day did not differ between those that were written on the day of discharge and those that were written on a day prior to discharge. This result aligned with other studies that suggested post-operative discharge medications may be planned ahead of time, based on a preoperative evaluation rather than being determined on the day of discharge.<sup>13-15</sup> However, an interesting difference between the groups was the minimum and maximum values of prescription dosage. For those written prior to day of discharge, 100% of the prescriptions had a dosage of 5 mg, while the dosage for prescriptions written on the day of discharge ranged from 2 mg to 50 mg. Although the average dosages between the two groups did not have a significant difference, there may be some implication to this result based on the dosages. When writing prescriptions prior to day of discharge, pain evaluation was not factored, so physicians more likely used a standard order, and in this case, the 5 mg dosage, leading to less variability in prescribing practices. This was consistent with another study that

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continued.

suggested that when utilizing a standard order set, there was less variability in the prescribing patterns of discharge opioid medications.<sup>16</sup>

This study suggested that greater MME quantities and doses per day were prescribed for patients with caesarean deliveries that occurred prior to the publication of ACOG Committee Opinion 742 than those that occurred after the publication. This difference may be due to the increased awareness of the national problem leading to more initiatives overall. ACOG Committee Opinion 742 highlighted the significance of the issue for physicians and provided suggestions for postpartum discharge opioid medications to aid in minimizing opioid quantity.

The differences in MME quantity can be attributed to consistent efforts to decrease opioid prescriptions from July 1, 2017 through February 28, 2021. The peak of opioid prescriptions occurred in 2012, but there has been a consistent annual decline, with fewer opioids prescribed each year.<sup>1</sup> Due to the stratification in the current study having one group of patients from July 2017 through July 2018 and the other group from August 2018 through February 2021, the significant decrease in MME quantity was likely reflective of the national trend.

Additionally, around the time that the ACOG document was published, there were increased initiatives involving physician awareness, national guidance, and a push on how to minimize opioid quantity given the decades-long opioid epidemic. These included quality improvement projects by Baruch and colleagues<sup>17</sup>, Osmudson and colleagues<sup>18</sup>, Prabhu and colleagues<sup>19</sup>, and Lavand'homme<sup>20</sup>, which were all published in 2018. These studies described strategies to reduce opioid quantity post-caesarean deliveries to continue the decline of opioid prescriptions in the U.S.

Prior studies have examined physician adherence to ACOG recommendations, but there was a lack of consensus on the extent to which physicians adhere to guidelines. One study suggested that physicians strongly adhered to ACOG guidelines regarding prenatal practices<sup>21</sup>, whereas another study suggested that physicians were highly nonadherent to guidelines.<sup>22</sup> Conflicting reports of physician adherence to past ACOG guidelines challenged the assumption that the dissemination of ACOG Committee Opinion 742 was the single reason for the significant change in opioid quantity.

Not only was past opioid use significantly associated with a decreased MME in discharge opioid prescriptions, but there was also a significantly greater number of patients with past opioid use among those that delivered after the publication of the ACOG document. This might provide evidence that more people were exposed to opioids than in the past and reflects the opioid crisis. Additionally, this suggested that more people were exposed to opioid quantity within prescriptions.

Finally, this study suggested that there were more discharge opioid prescriptions being written prior to day of discharge (17%, n = 25) before the publication of ACOG Committee Opinion 742 than after the publication (13%, n = 31). This was important because it is another

aspect of prescribing practices that significantly changed over time. Suggested guidelines from prior studies<sup>78</sup>, as well as suggestions from ACOG Committee Opinion 742, stated the need for accounting inpatient opioid use the day prior to discharge and shared decision making as a way to minimize discharge opioid quantity. Simply writing discharge prescriptions on the day of discharge rather than on an earlier day allowed for the opportunity to utilize those suggestions. Because this aspect of prescribing practices significantly changed over time, before and after the publication of the ACOG document, it could indicate an avenue to make further strides in combating the opioid crisis.

As of September 2021, ACOG withdrew the Committee Opinion 742 on Postpartum Pain Management and replaced it with ACOG Clinical Consensus No. 1 Pharmacologic Stepwise Multimodal Approach for Postpartum Pain Management.<sup>23</sup> The information regarding recommendations for discharge opioid medications remained the same in the updated document. However, when reaching out to ACOG, the authors of the current study were not given the specifics as to why the ACOG Committee Opinion 742 was replaced.

**Future Studies.** Future studies can examine obstetrician-gynecologists from other clinics that look to ACOG for guidelines to determine if a similar change in MMEs occurred following the publication of the ACOG guidelines regarding opioid prescribing. This process could reinforce the idea that increased awareness, initiatives, and overall public eye on the opioid crisis around that time made a significant difference in prescribing practices. More specifically, future research needs to be conducted to explore if similar relationships are found with different patient populations, as the current study had a majority population of White patients in a rural setting.

Additionally, while the current study did not find a difference in opioid quantity for prescriptions written on the day of discharge compared to those written on a day prior to discharge, this could have been due simply to not having enough patients that had their prescriptions written prior to discharge. It could be valuable to have a future study with a longer timeframe to include more patients that had their discharge opioid prescriptions written on a day prior to discharge and observe if the results are different.

**Limitations.** One weakness in the current study was the lack of patient diversity. Although this may make the results less generalizable, having all patients from one clinic allowed the investigators to control for fewer differences in how caesarean procedures were performed, prenatal care, and overall hospital stay. Another limitation was the cutoff for the two groups of patients who had their caesarean deliveries before and after July 1, 2018, the day that ACOG Committee Opinion 742 was published. Distribution and practice changes might have taken some time, but the current study assumed that it could have all occurred on July 1, 2018. Finally, as this study was a retrospective chart review, this study was limited by missing data; however, most of the missing data came from demographic or patient characteristic information. All variables of interest were included in the medical records.

### CONCLUSIONS

Cesarean patients who had their discharge prescriptions written on the day of discharge versus a day that was prior to discharge had no differences in MMEs, doses per day, or dosage in their prescriptions. Patients whose deliveries occurred after the publication of ACOG Committee Opinion 742 received discharge prescriptions with fewer MMEs and fewer doses per day than those whose deliveries occurred before the publication. However, the opioid dosage remained the same in the two groups.

In our study group, there was not a significant difference in how much postpartum opioid prescriptions patients were receiving based on what point of their stay the prescription was written. However, there has a been a trend in decreasing amount of postpartum opioids being prescribed overall, as evidenced by the decline before and after the ACOG Committee Opioid 742 published in July 2018.

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