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The Mainstreaming Addiction Treatment Act and Pharmacist-Prescribed Buprenorphine

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The number of prescribers of buprenorphine for opioid use disorder (OUD) is limited, which might hinder access to treatment.¹ The Mainstreaming Addiction Treatment (MAT) Act, effective December 2022, aimed to increase buprenorphine access by removing federal requirements for clinicians to obtain a Drug Addiction Treatment Act (DATA) waiver to prescribe buprenorphine for OUD.² Previously, pharmacists could only prescribe buprenorphine through a collaborative practice agreement with DATA-waivered clinicians; the MAT Act now allows pharmacists to prescribe buprenorphine directly or via a collaborative practice agreement, though states may still have specific restrictive criteria for pharmacist prescribing.³ This study examines the impact of the MAT Act on trends in pharmacist-prescribed buprenorphine from 2019 to 2024. Results were examined overall and by patient age and sex given documented differences in buprenorphine dispensing by patient demographics.^{1,4}

Methods |

In this cross-sectional study, data were analyzed from the IQVIA National Prescription Audit database, which includes nationally projected estimates of all US retail pharmacy dispensations. Data include buprenorphine prescriptions written by pharmacists and dispensed from January 2019 to September 2024. Buprenorphine formulations approved for the treatment of pain (ie, Butrans, Belbuca) were excluded. Interrupted time series

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Concept and design: All authors.

Acquisition, analysis, or interpretation of data: Tran, Rikard, Guy.

Drafting of the manuscript: Tran.

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Statistical analysis: Rikard, Guy.

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analysis was used to model the effects of the MAT Act on the quarterly number of pharmacist-prescribed buprenorphine dispensations. Prais-Winsten regression with the Cochrane-Orcutt transformation and robust standard errors were used to adjust for first-order serial autocorrelation and were verified using the Durbin-Watson statistic. Two-sided $P < .05$ was considered statistically significant. Analyses were conducted using Stata version 17.0 (StataCorp LLC). This study followed the Strengthening the Reporting of Observational Studies in Epidemiology Statement guidelines. Institutional review board review was not applicable because deidentified secondary data were used in accordance with 45 CFR §46.

Results |

Prior to the MAT Act (fourth quarter 2022), the quarterly number of prescriptions prescribed by pharmacists was increasing by 5.5 prescriptions per quarter (95% CI, 2.8 to 8.1; $P < .001$) (Figure and Table). After implementation of the MAT Act (first quarter 2023), there was a level increase of 80.9 pharmacist-prescribed buprenorphine prescriptions (95% CI, 35.0 to 126.9; $P = .002$) and a slope change of 72.1 prescriptions per quarter (95% CI, 63.6 to 80.5; $P < .001$).

Among female patients, after implementation of the MAT Act, there was a level increase of 55.2 pharmacist-prescribed buprenorphine prescriptions (95% CI, 35.3 to 75.2; $P < .001$) and a slope change of 29.6 (95% CI, 25.1 to 34.1; $P < .001$). Among male patients, there was no significant level change, but there was a slope change of 43.0 (95% CI, 34.4 to 51.7; $P < .001$).

Among 20- to 39-year-old patients, there was no significant level change in pharmacist-prescribed buprenorphine prescriptions, but there was a slope change of 30.7 (95% CI, 14.3 to 47.1; $P = .001$). Among 40- to 64-year-old patients, there was both a level change (43.3 [95% CI, 12.7 to 73.9]; $P = .008$) and a slope change (34.1 [95% CI, 26.6 to 41.7]; $P < .001$) in pharmacist-prescribed buprenorphine prescriptions. Meanwhile among patients 65 years and older, there was a level change of 32.5 prescriptions (95% CI, 0.7 to 64.4; $P = .05$), but no significant slope change.

Discussion |

Findings from this study indicate that the MAT Act was associated with a significant increase in pharmacist-prescribed buprenorphine dispensed from US retail pharmacies. This study observed increases overall and across all sex and age groups, suggesting that pharmacist-prescribed buprenorphine can impact diverse patient populations. Variations in state rules and regulations might result in less access to pharmacist-prescribed buprenorphine in some states. Additionally, despite increased access to buprenorphine via pharmacist prescribing, less than 1% of buprenorphine prescriptions are written by pharmacists,¹ and buprenorphine remains underutilized in the US.⁵ Still, findings demonstrate that pharmacists are well positioned to bridge gaps in access to buprenorphine. Study limitations include variations in state laws,³ which may confound results, and lack of data on race and ethnicity, clinical diagnoses, and patient outcomes. Focused strategies

on better integration of pharmacists into the OUD care model might play a role in a comprehensive approach to enhancing access to treatment among people with OUD.³

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Data Sharing Statement:

See the Supplement.

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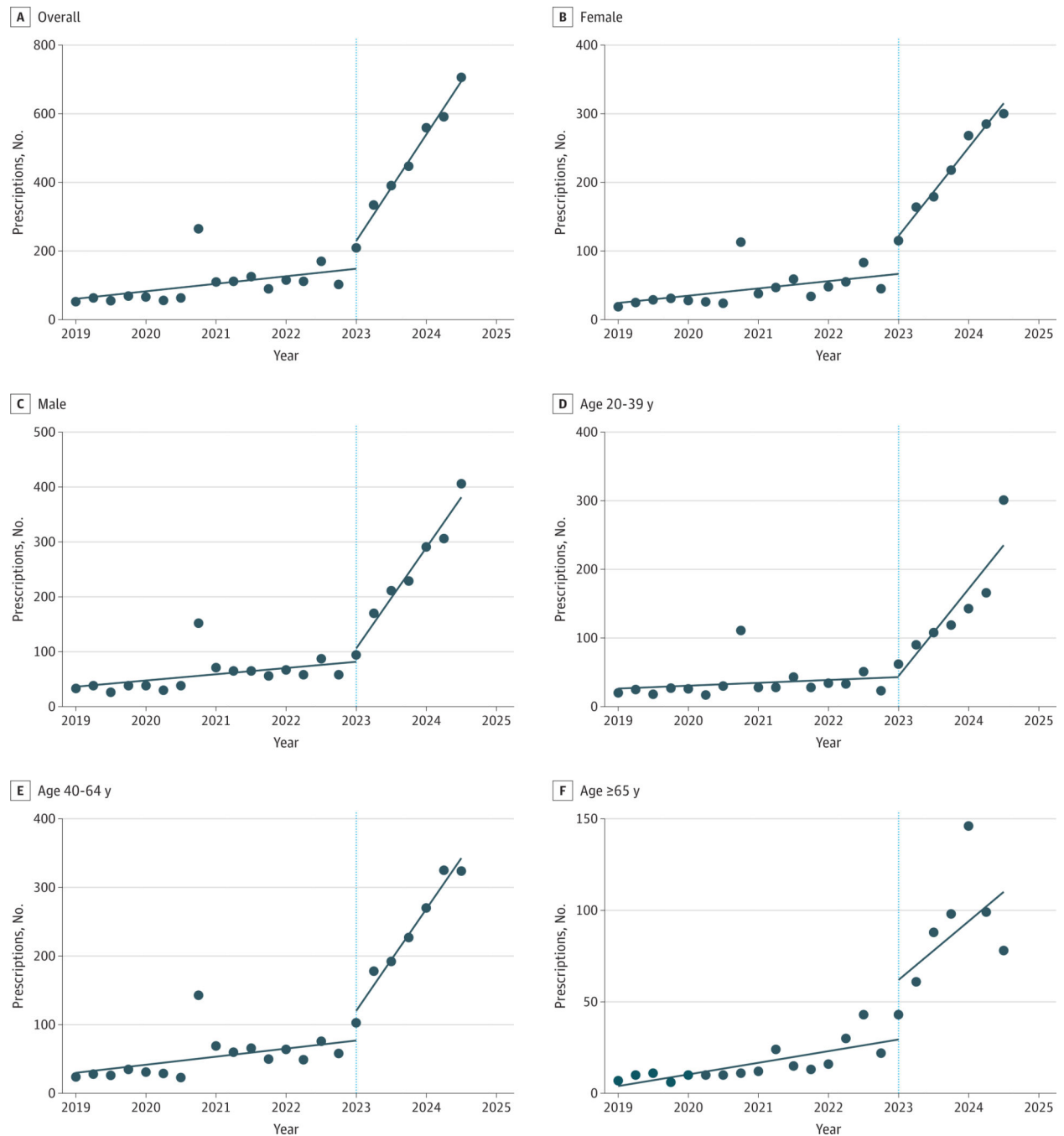


Figure. Interrupted Time Series Estimates of the Quarterly Number of Pharmacist-Prescribed Buprenorphine Dispensations From US Retail Pharmacies, 2019 to 2024

The dotted vertical line indicates Mainstreaming Addiction Treatment (MAT) Act implementation in the fourth quarter of 2022; the dots, actual prescriptions; and the solid lines, predicted prescriptions. Data in this figure were derived from IQVIA National Prescription Audit Patient Insights, 2019–2024 (<https://www.iqvia.com/insights/the-iqvia-institute/available-iqvia-data>).

Interrupted Time Series Estimates of Pharmacist-Prescribed Buprenorphine Dispensations From US Retail Pharmacies, 2019 to 2024^a

Table.

Quarterly trend before MAT Act			Immediate change			Quarterly trend after MAT Act			Slope change associated with policy change		
Estimate (95% CI)	P value		Estimate (95% CI)	P value		Estimate (95% CI)	P value		Estimate (95% CI)	P value	
Overall	5.5 (2.8 to 8.1)	<.001	80.9 (35.0 to 126.9)	.002		77.6 (69.5 to 85.6)	<.001		72.1 (63.6 to 80.5)	<.001	
Patient sex											
Female	2.6 (1.5 to 3.8)	<.001	55.2 (35.3 to 75.2)	<.001		32.2 (27.8 to 36.6)	<.001		29.6 (25.1 to 34.1)	<.001	
Male	2.8 (1.3 to 4.4)	.001	24.4 (−6.2 to 54.9)	.11		45.9 (37.3 to 54.4)	<.001		43.0 (34.4 to 51.7)	<.001	
Patient age, y											
20–39	1.0 (−0.1 to 2.2)	.08	1.6 (−34.4 to 37.5)	.93		31.8 (15.4 to 48.2)	.001		30.7 (14.3 to 47.1)	.001	
40–64	2.9 (1.6 to 4.3)	<.001	43.3 (12.7 to 73.9)	.008		37.1 (29.6 to 44.5)	<.001		34.1 (26.6 to 41.7)	<.001	
≥65	1.6 (0.5 to 2.7)	.008	32.5 (0.7 to 64.4)	.05		8.0 (−3.5 to 19.6)	.16		6.4 (−5.2 to 18.1)	.26	

Abbreviation: MAT Act, Mainstreaming Addiction Treatment Act.

^aData for this table were derived from IQVIA National Prescription Audit Patient Insights, 2019–2024.