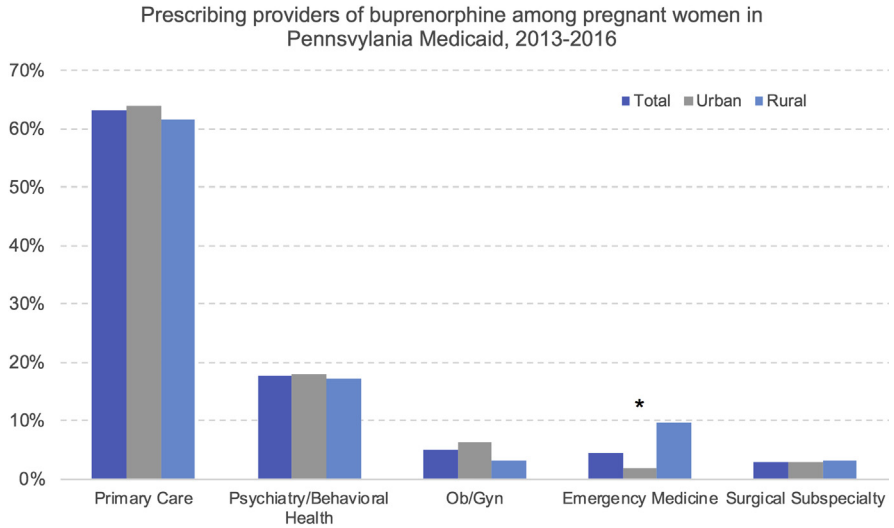
Medical specialty of buprenorphine prescribers for pregnant women with opioid use disorder

OBJECTIVE: Opioid use disorder during pregnancy has quadrupled over the past decade, as have maternal and neonatal morbidity related to substance use.[1] Although medication-assisted treatment (MAT) with methadone or buprenorphine during pregnancy significantly reduces the risk of adverse maternal and neonatal outcomes, many pregnant women do not receive MAT, and many opioid treatment providers do not provide MAT services for pregnant women, particularly in rural areas.[2,3] Buprenorphine's office-based availability and enhanced safety profile have resulted in federal, state, and local efforts to rapidly expand the number of buprenorphine-waivered physicians to meet increased demands for substance use treatment.[4] Obstetric providers could play a critical role in filling the opioid treatment gap during pregnancy, but the number of obstetric providers prescribing buprenorphine to pregnant women remains unknown. Therefore, the purpose of this analysis was to describe the medical specialty of providers prescribing buprenorphine to pregnant women with opioid use disorder and to determine differences in provider specialty in rural vs urban counties.

STUDY DESIGN: Pennsylvania Medicaid claims and enrollment data were evaluated to identify 4010 pregnant women with opioid use disorder who had a live birth between 2014 and 2016 and who received MAT during pregnancy. In this cohort, pharmacy data were used to identify pregnant women who received buprenorphine, defined as a claim with an ICD-9 or ICD-10 diagnosis of opioid use disorder during pregnancy and having at least 2 buprenorphine prescription fills during pregnancy. Medicaid provider data were then used to determine the medical specialty among providers prescribing buprenorphine to pregnant women. Provider specialties were categorized as obstetrics/gynecology, primary care, surgery or surgical subspecialty, psychiatry/behavioral health, or emergency medicine. Counties were classified as urban or rural according to definitions provided by The Center for Rural Pennsylvania, and each provider's practice setting was categorized as urban or rural based on the county of his/her practice.[5] Descriptive statistics were used to calculate the distribution of provider specialty among prescribers. χ^2 tests were used to examine differences in prescriber specialty by urban and rural practice setting.

FIGURE
Medical specialty of buprenorphine prescribers for pregnant women with opioid use disorder, 2013–2016 (n = 569)



Data are from Pennsylvania Medicaid. Primary care providers include physicians and certified registered nurses with family practice, general practitioner, internal medicine, and pediatrics specialties. Psychiatry/behavioral health includes psychiatry and neurology as well as behavioral health specialist consultants. Obstetrics/gynecology includes the obstetrics/gynecology specialty. Emergency medicine includes the emergency medicine specialty. Surgical subspecialty includes ophthalmologists, orthopedic surgery, surgery, and urologist specialties. A small number of prescribers (n = 37, data not shown) were allocated among multiple other specialties. χ^2 tests were used to examine differences in prescriber specialty by urban and rural practice setting. *$P < .05$.

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RESULTS: Among 4,010 pregnant women with opioid use disorder who received MAT, 2098 (52.3%) were prescribed methadone, 1933 (48.2%) were prescribed buprenorphine, and 166 (4.14%) received both. Among pregnant women using buprenorphine, 569 providers prescribed their buprenorphine prescriptions. Of these providers, 359 (63.1%) were in primary care, 101 (17.8%) were psychiatrists/behavioral health providers, 29 (5.1%) were obstetricians/gynecologists, 26 (4.6%) were emergency medicine providers, 17 (3.0%) were surgeons, and 37 (6.5%) were of various other specialties. When medical specialty was stratified by rural vs urban practice setting, obstetricians/gynecologists were a greater proportion of prescribing providers in urban (6.2%) vs rural (3.1%) counties ($P = .10$). In contrast, emergency medicine providers were a significantly greater proportion of prescribing providers in rural (9.2%) vs urban (2.1%) areas ($P < 0.01$). There were few urban−rural differences among primary care, psychiatry/mental health, and surgery and surgical-related providers (Figure).

CONCLUSION: Few obstetricians/gynecologists prescribe buprenorphine for Medicaid-enrolled pregnant women with opioid use disorder. In rural areas, emergency medicine providers accounted for nearly 1 in 10 buprenorphine prescribers. Future research should evaluate whether obstetric providers can decrease barriers to MAT for pregnant women by prescribing buprenorphine, particularly in rural areas. ■

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