Retention and Attrition of Medicare Buprenorphine Prescribers

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BACKGROUND

The shortage of clinicians that have received waivers under the Drug Addiction Treatment Act (DATA) of 2000 to provide medicationassisted treatment (MAT) for opioid use disorder is becoming more salient with the ongoing opioid epidemic.¹ Current policies to increase access to MAT have focused on allowing physicians to increase their buprenorphine patient limit from 100 to 275, and on expanding buprenorphine prescribing authority to nurse practitioners and physician assistants.^{2,3} While studies have shown a substantial number of DATA-waived physicians never begin prescribing buprenorphine,³ little is known about how many continue to prescribe buprenorphine once they begin. In addition, Medicare beneficiaries are an oftenoverlooked population in the opioid epidemic despite having one of the fastest rising rates of opioid addiction.^{4,5} To provide new insight on retention and attrition of buprenorphine providers, we used Medicare public use file data to track whether physicians who started prescribing buprenorphine for Medicare beneficiaries continue to prescribe over time.

METHODS

Linking ProPublica Prescriber Checkup (2010-2012) and Medicare Part D Public Use File (PUF) (2013-2017) data sets, we constructed a longitudinal database, tracking providers who wrote 11 or more prescriptions or refills of buprenorphine for Medicare Part D

KEY FINDINGS

- From 2012 to 2017, 6,971 new prescribers wrote 11 or more MAT buprenorphine prescriptions or refills for Medicare Part D beneficiaries.
- 2. From 2012 to 2017, the total active MAT workforce only grew by 2,705 due to high attrition of participation of many of the new MAT prescribers.
- The adjusted attrition rate of MAT buprenorphine prescribers is nearly 30% after 3 years and approaches 40% after 6 years.

beneficiaries from 2012 to 2017. We identified six cohorts of new prescribers in each year starting in 2012 by excluding prescribers who prescribed buprenorphine in prior years. We then merged the prescriber panel data with AMA Masterfile (2016) using National Provider Identifier to obtain additional prescriber characteristics including age, medical education, and residency status. We restricted the provider specialty to internal medicine, family medicine, OB/GYN, psychiatry, addiction medicine, and geriatrician, who are likely prescribing buprenorphine for MAT purposes. We excluded advanced practice nurses and physician assistants from the analysis since they were first eligible to prescribe buprenorphine for MAT purposes in 2016 and therefore we do not have enough longitudinal data to determine attrition patterns. We presented the trends in the total number of prescribers and analyzed the retention over time by the year they started to prescribe (i.e., cohort). We then ran prescriber random-effect panel regressions on probability of prescribing MAT buprenorphine and number of prescriptions using a set of dummy variables representing: years since first prescribing buprenorphine, initial panel size, prescriber specialty, age, gender, being an international medical graduate, being a doctor of osteopathy, years since residency training, and Rural Urban Commuting Area (RUCA) codes of

practice zip codes. We also controlled for county level characteristics, year, and state fixed effects. The standard errors are clustered at the prescriber level.

FINDINGS

The total number of MAT buprenorphine prescribers increased from 5,103 in 2012 to 7,808 in 2017 – a net increase of 2,705. However, the total number of new prescribers who were first identified as prescribing MAT buprenorphine during that same interval was much higher at 6,971. The low growth rate in the total active MAT prescribers alludes to high attrition rates over time. Indeed, for prescribers who started in 2012, only 74% prescribed in 2013 and the retention rate continues to drop to 68% in 2014 and by 2017, only 56% were still prescribing to Medicare beneficiaries. The trend of high attrition is consistent across all five cohorts. After adjusting for other prescriber characteristics, the attrition rate of MAT buprenorphine prescribers is nearly 30% after 3 years and approaches 40% after 6 years. Since the data only includes physicians who are in fact still active but wrote less than 11 Part D prescriptions or provide MAT to non-Medicare beneficiaries.

CONCLUSION

The results of this study suggest significant attrition in MAT buprenorphine prescribers for Medicare beneficiaries.

POLICY IMPLICATIONS

Given that many DATA waived physicians do not even begin prescribing, it is important to identify policies and programs that encourage those who started prescribing to stay active.

References:

- 1. Andrilla CHA, Moore TE, Patterson DG, Larson EH. Geographic distribution of providers with a DEA waiver to prescribe buprenorphine for the treatment of opioid use disorder: a 5-year update. *J Rural Health*. 2019;35(1):108-112.
- Spetz J, Toretsky C, Chapman S, Phoenix B, Tierney M. Nurse Practitioner and Physician Assistant Waivers to Prescribe Buprenorphine and State Scope of Practice Restrictions. JAMA. 2019;321(14):1407-1408. doi:10.1001/jama.2019.0834
- 3. Thomas CP, Doyle E, Kreiner PW, et al. Prescribing patterns of buprenorphine waivered physicians. *Drug Alcohol Depend*. 2017;181(October):213-218. doi:10.1016/j.drugalcdep.2017.10.002
- 4. Dufour R, Joshi A V, Pasquale MK, et al. The Prevalence of Diagnosed Opioid Abuse in Commercial and Medicare Managed Care Populations. *Pain Pract*. 2014;14(3):E106-E115. doi:10.1111/papr.12148
- Lembke A, Chen JH. Use of Opioid Agonist Therapy for Medicare Patients in 2013Use of Opioid Agonist Therapy for Medicare Patients in 2013Letters. *JAMA Psychiatry*. 2016;73(9):990-992. doi:10.1001/jamapsychiatry.2016.1390
- 6. FDA. (2019). Drugs@FDA: FDA Approved Drug Products. Accessed on March 1, 2019: <u>www.accessdata.fda.gov/scripts/cder/daf/index.cfm</u>

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