

# Barriers and Facilitators of Buprenorphine Prescribing Among Nurse Practitioners in Massachusetts



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## BACKGROUND

In 2017 in Massachusetts there were more than 1,900 estimated fatal opioid overdoses, accounting for more than 5 deaths per day. Buprenorphine, commonly referred to by its brand name Suboxone, has shown to improve survival rates, increase treatment retention, and decrease opioid use.<sup>2</sup>

In July 2016, nurse practitioners (NPs) were granted buprenorphine prescriptive authority under the CARA Act. Despite the potential for great expansion, only about 2% of NPs in Massachusetts currently possess a DATA 2000 waiver.<sup>3</sup>

There is a paucity of research examining the buprenorphine prescribing patterns and perceived barriers and facilitators of buprenorphine prescribing among NPs.

## AIMS

- To assess NPs' interest in and action toward obtaining a buprenorphine waiver.
- To understand the attitudinal, organizational, and structural facilitators and barriers associated with NPs' responses to the opioid epidemic.
- To compare and contrast the relative importance of facilitators and barriers in order to best inform outreach and education efforts.

## METHODS

The Massachusetts Coalition of Nurse Practitioners' emailed its members an invitation email for this survey in March 2018, with an option for NPs to share the survey with their NP colleagues.

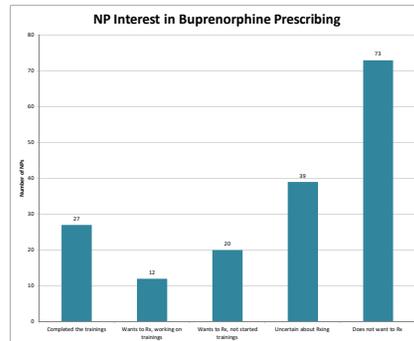
The survey asked about demographics and interest in and action towards obtaining a buprenorphine waiver, and also used two validated tools to measure attitudes on addiction (Drug and Drug Problems Perceptions Questionnaire [DDPPQ]) and organizational climate and physician collaboration (Nurse Practitioner Primary Care Organizational Climate Questionnaire [NP-PCOCQ]).

Univariate, bivariate and multiple regression analyses were performed using SPSS.

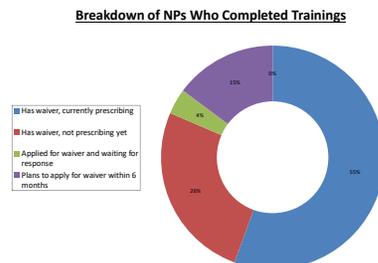
## RESULTS

### NP and NP Practice Characteristics

- 204 NPs responded to the survey; 192 NPs were eligible to complete it based on inclusion criteria of actively seeing patients in clinical practice in Massachusetts.
- The majority of respondents were female (93.7%, 177), board certified in Adult, Adult-Gero, or Family (76.4%, 156), worked in primary care (60.4%, 114), and were practicing as a NP for a mean of 13.4 years.
- 48.7% ( $n = 92$ ) of NPs reported that the majority of their patients had government-subsidized health insurance (MassHealth and/or Medicare).
- 84% held a Masters degree, 10% had a DNP, and 5% had a PhD.
- 14.6% ( $n = 25$ ) reported that >50% of their patients had an opioid use disorder. Only 5.3% ( $n = 9$ ) reported that none of their patients had an opioid use disorder.

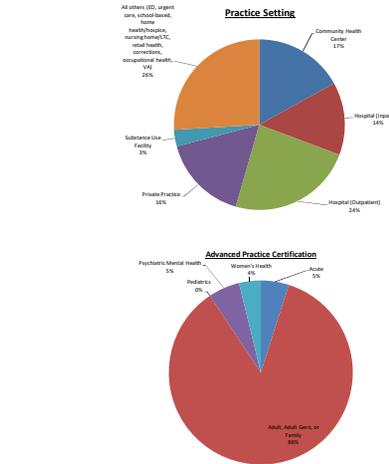


### Distribution of Buprenorphine Continuum

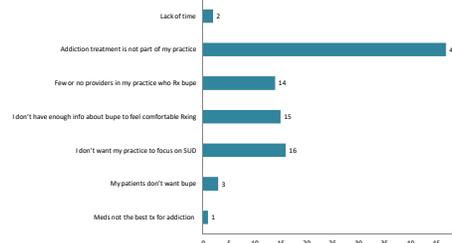


### Interest in and Actions Towards Obtaining a Buprenorphine Waiver

- 12.9% ( $n = 22$ ) of NPs in Massachusetts had their buprenorphine waiver, compared with national and states averages of 1.5-3%.<sup>6</sup>
- 2.9% ( $n = 5$ ) completed the trainings but did not yet have their waiver.
- 7% ( $n = 12$ ) wanted to prescribe but were still in the process of completing the required trainings.
- 11.7% ( $n = 20$ ) wanted to prescribe but had not yet started the trainings.
- 22.8% ( $n = 39$ ) were uncertain about prescribing buprenorphine, with 7% ( $n = 12$ ) learning about buprenorphine for the first time during this study.
- 42.7% ( $n = 73$ ) did not want to prescribe buprenorphine.



### Reasons for Not Wanting to Prescribe Buprenorphine



## CONCLUSIONS

There has been no published research to date on buprenorphine prescribing among NPs since NPs were granted prescriptive authority in 2016. The data from this study suggest that many NPs in Massachusetts provide care to a significant number of patients with an opioid use disorder. NPs in this study want to play an integral role in treating opioid use disorder and have taken clear action by obtaining a waiver.

While many NPs did not want to prescribe buprenorphine, some were uncertain and others require more information about this treatment prior to making a decision.

The Drug and Drug Problems Perceptions Questionnaire, where lower scores indicate more positive attitudes on addiction, was the strongest predictor of interest in buprenorphine prescribing. Respondents with lower scores were significantly more likely to have a buprenorphine waiver.

## IMPLICATIONS

Targeted outreach and education efforts on addiction and medications to treat opioid use disorders should focus on NPs who are unfamiliar with buprenorphine and those who are unsure about prescribing to increase their self-efficacy on this topic and potential interest in buprenorphine.

Augmenting the current trainings to include a stronger focus on case studies, tailoring the trainings for nurse practitioners, and offering shadowing opportunities with experienced buprenorphine prescribers may enhance the training process.

Further research could survey NPs in a state that grants full practice authority, such as New Hampshire, to determine how state scope of practice laws impact interest in buprenorphine prescribing. Future research could also inquire about the number of patients to which waived NPs are prescribing, and if NPs are not currently prescribing, the reasons for this.

## REFERENCES

- Massachusetts Department of Public Health. (2018). *Data Brief: Opioid-Related Overdose Deaths Among Massachusetts Residents*. Retrieved from <https://www.mass.gov/files/documents/2018/02/14/data-brief-overdose-deaths-february-2018.pdf>.
- U.S. Department of Health and Human Services (HHS), Office of the Surgeon General. *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. Washington, D.C.: HHS, November 2016. Retrieved from <https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf>.
- Substance Abuse and Mental Health Services Administration. (2018). *Buprenorphine Treatment Practitioner Locator*. Retrieved from [https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/treatment-physician-locator?field\\_bup\\_physician\\_us\\_state\\_value=MA](https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/treatment-physician-locator?field_bup_physician_us_state_value=MA)