

## ***2021 NCSBN Scientific Symposium - Prescriptive Authority and Nurse Practitioner Opioid Prescribing Practices Video Transcript***

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### **Event**

2021 NCSBN Scientific Symposium

More info: [ncsbn.org/15185.htm](https://ncsbn.org/15185.htm)

### **Presenter**

Ulrike Muench, PhD, RN Assistant Professor, The Regents of the University of California San Francisco

- [Woman] Ulrike Muench is an associate professor in the School of Nursing at the University of California, San Francisco, and a nurse and nurse practitioner by training. Her research examines the evolving roles and practice patterns of health care professionals, especially nurses and nurse practitioners. She uses big data and large surveys with interdisciplinary social science methods to inform local, state, and national policies.

Her research has been published in leading health care journals, including JAMA, New England Journal of Medicine, and Health Affairs.

- [Ulrike] Hello, everyone. My name is Ulrike Muench, and I'm an associate professor in the School of Nursing at UCSF, and affiliated faculty at the Philip R. Lee Institute for Health Policy Studies. Today, I'm sharing with you preliminary results from our study in which we examined opioid prescribing patterns of nurse practitioners and the association with state scope of practice regulations.

beneficiaries who receive their care predominantly from MDs, and examined how the volume and types of prescriptions differed in these two groups of patients across the top 20 drug classes in primary care.



For acute pain, the guidelines suggest that three-day supply will often be sufficient. And that more than seven-day supply will rarely be needed. Of note, in response to the guidelines, 15 states have passed laws limiting first-time opioid prescription to seven days or less. We began by calculating the number of opioid initiations in 2018 for individuals who were opioid-naive in 2017 by provider specialty.

We saw a total of approximately 2 million opioid initiations in 2018. Of those, 17 were prescribed by providers in general surgery. Giving us an indication that these first opioid prescriptions are likely associated with a surgical event. After general surgery, we see the physician primary care specialties of internal medicine and family medicine, followed by PAs, emergency medicine, and then NPs.

If we go back to one of our slides from earlier that showed the total number of opioid prescriptions in our studies, we can see that when we focus on the initiations only, NPs no longer represent the third-largest share.

Next, we excluded individuals for whom we were able to identify that they had a surgery to help us better understand what is happening with initiations in primary care. And we see that the percent of initiations from general surgery providers drops significantly, with larger shares going now to primary care specialties.

And when we focus on primary care alone, we see that both PAs and NPs contribute to initiations less than physicians, which in itself isn't surprising because there are fewer NPs and PAs than primary care physicians. Next, we take a deeper dive into the different specialties just within NPs, as well as begin looking at our prescribing measures of interests.

We are able to identify these specialties by using the taxonomy code for the provider that is based on the National Provider Identification number or NPI. We can obtain the NPI from the prescriber characteristics file. The first two columns show us the distributions of opioid initiations among NP specialties.

Similar to when we looked at all providers, the largest shares of initiations are occurring in primary care specialties. The third column shows the average day supply on the initiations. If you remember from the guidelines, initiations are recommended to be three days in length or rarely greater than seven days.

The average day supply in our data is almost nine days in length, with some of the largest days' supply coming from psych/mental health NPs with 11.8 days' supply. The next three columns show the frequency column and row percentages for the share of first opioid prescriptions that were greater than seven-day supply.

52.7% are occurring in family, which is not surprising given that it is the largest NP specialty. The row percentage tells us the within specialty percentage. For example, for all opioid initiations within family NPs, 35% of the beneficiaries received the greater than seven-day prescription, compared to gerontology where almost half of all initiations were greater seven-day supply.

Next up is our morphine milligram equivalency measure, which indicates the daily morphine dose. Generally speaking, the share of beneficiaries who received MME of greater 50 milligrams from NPs was small, on average, 8.2%, with the largest percentage of 13% occurring in acute care.

Moving to our short and long-acting opioid measures, the good news is that very few initiations were with long-acting opioids, only 633 prescriptions in total. So conversely, the majority of initiations were with short-acting opioids. And this was the case consistently across all NP specialties.

Next, we asked what picture emerges when we examine whether these prescribing patterns look differently in full practice authority states, versus states that do not allow NPs to practice and prescribe without physician oversight? Let's begin by looking at average day supply. The blue bars represent opioid initiations from full practice authority states, and the green bars from non-full practice authority states.

average day supply, the likelihood of experiencing a prescription of greater seven-day supply or a prescription of greater than 50 milligrams of MME are slightly less favorable for NPs compared to physicians.

Descriptive results so far indicate a possible association with scope of practice. Counterintuitively, non-full practice authority states were more likely to see longer average day supply from NPs, while full practice authority states were more often observing initiations of MME of greater 50 milligrams per day.

Our preliminary regression results show that increased likelihood for an NP-managed beneficiary to experience an opioid initiation. And we observed this effect in both full practice authority states and

These are really excellent questions. Well, I'm not seeing any additional questions coming in. Thank you