Naloxone-Prescribing Practices:
A Missed Opportunity

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To the Editor—We read with interest your recent issue describing the statewide care efforts for opioid-addicted patients, particularly Khatiwoda et al.'s article assessing naloxone kit use [1]. Given the Surgeon General's emphasis on naloxone in combatting the opioid epidemic [2], we assessed the opioid and naloxone-prescribing practices at Wake Forest Baptist Health System, an 885-bed tertiary referral center in northwest North Carolina. We assessed 2 groups for whom naloxone should be considered: those with an opioid abuse disorder and those prescribed opioid doses ≥ 50 morphine milligram equivalents (MME)/day. Doses ≥ 50 MME/day have been associated with increased overdose risk [3].

To determine patients at risk for opioid addiction, we extracted patients aged 18 and older with ICD codes of opioid use disorder, intoxication, withdrawal, and/or unspecified opioid-related disorder from January 1, 2012, through January 1, 2017. We then extracted all opioid prescriptions written during this same period, converted them to MME, and flagged prescriptions of ≥ 50 MME/day as "at risk [4]." Intravenous, bulk-form, and prescriptions with incalculable total opioid value were excluded. Finally, we pulled all naloxone prescriptions during this period.

During the study period 2,214,438 opiate prescriptions were written for 159,746 individuals. 220,998 (0.1%) prescriptions for 8,992 (0.06%) individuals qualified for naloxone due to receiving an "at risk" prescription. The most common opiates prescribed (by proportion of total prescriptions) were oxycodone (52.02%), hydrocodone (38.02%), and morphine (3.69%). Oxycodone (143,707), morphine (29,304), and hydromorphone (20,173) had the highest total number of naloxone-eligible prescriptions while methadone (51.59%), oxymorphone (39.40%), and morphine (32.65%) had the highest proportion of naloxone-qualifying prescriptions. Recipients averaged 47.2 years of age (standard deviation = 20.8) and were 76% Caucasian and 17% African American; 3,936 patients had an opioid abuse ICD code during the study period. Combining these 3,936 patients with the 8,992 patients who received an "at-risk" prescription yielded an estimated 12,928 patients who qualified for naloxone, but only 4 (0.0003%) individuals received a prescription.

The limitations of our study include the potential for missed prescriptions and for overlap between the opioid prescription and opioid disorder group; however, multiple formulations of naloxone were assessed to minimize potential missing data. Additionally, it is possible that prescriptions were not captured if they were acquired utilizing the state's standing order for naloxone which allows patients to receive naloxone directly at a pharmacy without an individual prescription [5]. While the CDC's opioid and naloxone-prescribing guidelines and recommendations emerged in the last 2 years of our study period, the gap between the patients at risk and those with a naloxone prescription is striking. We are missing an important opportunity to impact this public health crisis through prescribing naloxone for opioid overdose prevention. Investigations to better understand the barriers and attitudes regarding naloxone prescribing are needed. NCMJ

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