Variability in emergency department electronic medical record default opioid quantities: A national survey

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While opioid prescribing for acute pain in U.S. emergency departments (EDs) is more consistent with recommendations for a 3-day or less supply than in other settings, the average number of tablets prescribed still remains highly variable [1-3]. Furthermore, larger initial prescriptions are associated with prolonged opioid use and potential for misuse [2,3]. Setting default tablet order amounts lower than the baseline average (e.g. 10 tablets) reduces the tablet number prescribed [4]. Conversely, if set too high (e.g. 20 tablets), prescribers are nudged into prescribing more than they would have without a default [5]. It is unknown whether EDs have default orders for opioid amounts and whether these defaults are consistent with the recommended 3-day supply (typically ≤12 tablets) [6]. Thus, we conducted a national survey of U.S. EDs to determine the presence and size of default opioid tablet amounts.

We surveyed the American College of Emergency Physicians Emergency Medicine Practice Research Network (EMPRN), a volunteer national survey panel of 893 emergency physicians nationwide. Outcomes included 1) the default number of tablets for the two most commonly prescribed opioids, hydrocodone/acetaminophen (5–325 mg and oxycodone/acetaminophen (5–325 mg), 2) whether the ED had a default tablet number for each and 3) whether these defaults are consistent with the recommended 3-day supply (typically ≤12 tablets) [6]. Thus, we conducted a national survey of U.S. EDs to determine the presence and size of default opioid tablet amounts.

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Of the 893 members surveyed, 299 (33%) from 47 states responded (Table 1). Defaults were present in 161 (54%) EDs. There was significant variation in default tablet amounts (Fig. 1). The median default tablet number for both hydrocodone and oxycodone was 15 (IQR 12–20) with 22.3% and 25.0% being for ≤12 tablets, respectively. Of EDs with defaults, 15 (10%) reported ≤30 tablets (range 30–90 tablets). Northeast region EDs had the largest proportion of defaults for ≤12 tablets (38.6%) versus no default (43.9%) or >12 tablets (17.5%, p = 0.014). EDs with default quantities <12 tablets were more likely to be located in states with prescribing limits (50%) compared with those with no default (30%) or a default of >12 tablets (36%) (p = 0.023).

This study demonstrated wide variation in default opioid orders (from 1 to 90 tablets) with 42% having defaults >12 tablets among those with default quantities. Given the tendency for prescribers to

![Fig. 1. Distribution of emergency department default opioid tablet order quantities among survey respondents and proportion for a standard 3-day supply (12 tablets) or less.](https://doi.org/10.1016/j.ajem.2019.03.023)
use default opioid amounts, it appears that a significant proportion of existing EMR defaults may actually encourage higher prescribing than if these EDs had no defaults or if the defaults were lower. We found that guideline concordant EMR defaults were more common in states with opioid prescribing limits, suggesting that state policies may encourage compliance. This study is limited by a suboptimal response rate and limited data describing the characteristics of EDs. As a result, it is unclear whether these findings are representative of EDs nationally. In summary, our findings indicate that there is significant opportunity to change ED EMR opioid defaults to be concordant with existing national and state guidelines.

**Declarations of interest**

None.

**References**


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