

Emergency Medicine Providers Systematically Underestimate Their Opioid Prescribing Practices

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Background:

Opioid misuse is a known public health problem, nationwide and in Massachusetts. The Massachusetts Hospital Association (MHA) developed recommendations to address opioid prescribing in the ED setting, and UMassMemorial Health Care recently implemented a system-wide opioid practice guideline mirroring the MHA policy. Little is known about methods to influence behavior change among ED providers related to opioid prescribing practices. Guideline implementation provided a unique opportunity for a natural experiment related to prescribing patterns, and we hypothesized that a simultaneous experimental intervention to provide clinicians with their individual prescribing data would alter their practices beyond any effect achieved solely by being subject to the new guidelines.

Methods:

As part of an ongoing, prospective, randomized trial of an intervention hypothesized to influence providers' opioid prescribing, we developed a survey instrument consisting of graphical depictions of the distributions of three measures of opioid prescribing among all ED providers at four UMass-affiliated EDs (attending and resident physicians and advanced practice providers). Clinicians randomized to the intervention arm were asked to identify his/her perceived position on each distribution. We compared each provider's self-perception to their actual decile.

Results:

Fifty-one providers were randomized to the intervention arm. Forty-eight completed the survey (94%). Providers underestimated their decile of opioid prescriptions per hundred total prescriptions by a median of one decile ($p=0.0399$ for difference from zero). Attendings underestimated their decile of percentage of patients dispositioned with an opioid prescription by a median of two deciles ($p=0.0292$), while residents did not exhibit a significant difference. Providers showed systematic disagreement with their raw number of prescriptions for extended-release opioid formulations ($\kappa = -0.18$), underestimating by a median of one.

Conclusions:

Based upon three measures of ED opioid prescribing, providers' self-perceptions of their practices systematically underestimated their actual prescribing, which likely has implications related to efforts to influence clinician behavior change.

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