Clinicians must strike and policy makers must support the delicate balance between providing adequate pain relief for patients (including those with cancer or who are recovering from surgery) while avoiding the harms associated with opioid misuse or abuse. In the United States, an estimated 10% of all individuals report living with pain, which historically has been underrecognized and undertreated; at the same time, opioid-related overdoses and deaths have increased substantially with the increasing number of opioid prescriptions.1-3 This opioid epidemic has devastated families and communities in the United States and Canada. Despite considerable attention and efforts to stem the opioid epidemic, overdose deaths continue to increase, although prescriptions have decreased slightly in recent years.4,5

The study by Kurteva et al6 provides additional information regarding the harms associated with opioid prescriptions for patients leaving the hospital. The authors examined the association between postdischarge opioid use (duration and dose) and major adverse events (ED visits or readmissions related to opioid use or death) during the year after hospital discharge.6 The authors used multiple complementary Canadian data sets that captured all medical care delivered and permitted complete follow-up of events occurring in the same province. Among the 1511 patients in the study, 241 (16%) experienced a serious opioid-related event (eg, ED visit, hospitalization, death). Daily opioid use, longer durations of use, and higher daily doses were all associated with an increased risk of adverse events. One-third of the study population had a cancer diagnosis before or with discharge. Interestingly, the authors found that 96% of patients receiving an opioid prescription at discharge filled the prescription within 30 days; among these patients, 12% discontinued their initial prescription, and 5% filled their prescription but reported not taking the medications.

This nicely conducted study adds to the literature demonstrating the association between prolonged use or higher doses of opioids and opioid-related adverse events, including both unintentional and intentional death. Limitations of this study include its inability to address causality. Bidirectional or time-varying associations could be present. For example, complications during recovery could lead to both the need for additional care and more pain, with the latter leading to greater pain medication use. Indeed, time-varying indications for pain relief are but one example of an alternative pathway between the original indication for care and the study outcomes. It was also unclear how the study incorporated time itself across the comparison groups or whether there was a clear time zero, thus raising concerns about potential immortal time bias because of differential survival requirements needed to enter each group. In contrast with this study's findings, prior studies have reported that patients are frequently prescribed more opioid tablets than they need, with as many as 60% of tablets going unused by the patient.7 Future studies examining opioid prescribing patterns should attempt to emulate a randomized clinical trial to provide more rigorous information on the association of treatment decisions with patient outcomes.

In an effort to address opioid misuse, organizations such as the Institute of Medicine have highlighted the need for interdisciplinary and comprehensive treatment approaches for pain, including nonpharmacologic alternatives. Similarly, entities such as the US Centers for Disease Control and Prevention have released prescribing guidelines designed to help mitigate harms. In Massachusetts, the Board of Registration in Medicine recommends additional consideration before prescribing doses of 50 morphine milligram equivalents (MME) or greater per day and avoiding...
prescribing doses of 90 MME or greater per day. For individuals with acute pain, guidelines recommend limiting prescription duration to a few days at most. Moreover, many US states have implemented prescription drug monitoring programs to help to track opioid prescribing and inform practices. Despite these recommendations and programs, there remains a lack of consistency around current practice for both pain management and opioid prescribing: what exists might not be sufficient.

One future approach could be to integrate guidelines into insurance benefit designs or utilization management programs. Clinicians would receive reimbursement from insurance plans or patients would receive favorable cost sharing only with better guideline adherence. Another possibility would be to incorporate aspects of the guidelines explicitly in either the financial contracts or quality ratings for hospitals and physicians, such that financial and reputational incentives more closely align with clinical goals. A third approach would be to tighten regulations concerning prescriptions, eg, formally limiting the duration of prescriptions or the numbers and types of clinicians who can prescribe, and tasking agencies, such as the Drug Enforcement Administration or state regulators, with requiring prior authorization to prescribe more than 7 days of an opioid medication. On the patient side, efforts to improve expectations, such as providing information about pain trajectories after surgery and disposal of unused opioid drugs, could help to remove excess medication from the community.7

Any new approaches would need careful evaluation of the impact on pain control, opioid misuse and abuse by patients and others in their communities, and administrative burden for clinicians, hospitals, and regulators. Investment would also be needed to keep guidelines and approaches up to date. In sum, this valuable study serves as a reminder that it will likely take many efforts to find and maintain the balance between providing pain care and mitigating the downstream harms of that care.

ARTICLE INFORMATION
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