

Inturrisi), Weill Cornell Medical College, New York, New York.

Correspondence: Dr Foley, Department of Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave, PO Box 52, New York, NY 10065 (foleyk@mskcc.org).

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In reply

To be clear: I did not express, nor do I feel, frustration in caring for patients with complex pain and substance use issues. I have chosen to work in a county hospital caring for people with human immunodeficiency virus, many of whom have mental illness and/or substance addiction, because I find the work satisfying and rewarding. What I was trying to express was my concern that the model of pain treatment I was taught and have practiced is harming our patients. Indeed, in 2007 there were more deaths in the United States from unintentional drug overdoses due to opioids than heroin and cocaine combined.¹

Although criticizing my suggestion of a maximum dose of opioids for nonmalignant pain as “without a scientific rationale,” Foley and colleagues state as gospel that “the pharmacology of opioid use in the treatment of pain is based on dose titration to effect.” But what evidence do the authors have to support that continually increasing the doses of opioids for nonmalignant pain improves the well-being of our patients? The consensus document they cite states that “there is little evidence to guide safe and effective prescribing [of opioids] at higher doses.”^{2(p120)} Although there have been no randomized studies of opioids in the chronic treatment of nonmalignant pain, there is ample evidence of harms due to opioids, including that some patients taking opioids experience increased pain.²

One promising approach to the management of chronic nonmalignant pain, promulgated by the Washington State Agency Medical Directors, is to use validated tools to track change in function and pain level in patients using opioids.³ In this way, we can learn whether our patients are benefiting from long-term opioid use, not only in reported pain level, but in their ability to function in their daily lives. For those patients requesting higher opioid doses, yet not benefiting from prior dosing, serial assessments of function opens the door for a deeper discussion of why pills often do not alleviate pain and why alternative approaches, such as nondrug therapy as suggested by Foley and colleagues, may be better.

Foley and colleagues are correct that my editorial⁴ incorrectly cited the mean doses from the Braden report.⁵ The correct median doses in morphine equivalents were 35 mg in the Arkansas sample and 32 mg in the HealthCore sample.

The correction notice was published in the November 8, 2010, issue of the Archives.

Mitchell H. Katz, MD

Author Affiliation: Los Angeles Department of Health Services, Los Angeles, California.

Correspondence: Dr Katz, Los Angeles Department of Health Services, 313 N Figueroa St, Room 912, Los Angeles, CA (mkatz@dhd.lacounty.gov).

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LESS IS MORE

Reducing Drugs in Older Adults Is More

With great interest we read the article published by Garfinkel and Mangin¹ on the systematic approach for discontinuation of medicines in older adults. The authors safely discontinued 311 medications across drug classes in 64 participants using the Good Palliative–Geriatric Practice (GP-GP) algorithm. The results will provide a very important evidence base for the practice of geriatric pharmacology.

The application of the GP-GP framework and the assessment of the risks and benefits of the patients' drug therapy were based on the physicians' individual reviews. Estimating the risks of prescribing using this approach may limit the recognition of adverse events in older adults and relies heavily on the experience and knowledge of each physician. To make this algorithm more applicable and generalizable between practitioners, the risk assessment tools based on the drug classes known to increase the risk of adverse events in older adults could be incorporated into the GP-GP algorithm. For example, physicians could use risk assessment tools such as the Drug Burden Index (DBI),² the Anticholinergic Risk Scale (ARS),³ or the sedative load⁴ to guide their medication review process. Such tools provide measures of exposure to medicines with anticholinergic and/or sedative effects. The DBI has been associated with impairments in physical and cognitive functions in older adults.² The feasibility of using the DBI tool alone, without the initial clinical judgment steps of the GP-GP algorithm, to reduce the exposure to anticholinergic and sedative medications in older people was recently tested in a pilot randomized clinical trial.⁵ The feasibility of using the ARS³ and sedative load⁴ tools to reduce medication exposure is yet to be investigated in randomized clinical trials.

Thus the inclusion of the DBI² or other risk tools^{3,4} may improve the applicability of the GP-GP framework across different settings by identifying those patients most at risk of the adverse effects of polypharmacy. Even so, this important study by Garfinkel and Mangin¹ has clearly confirmed the value of research into medication withdrawal in older people.

Danijela Gnjidic, PhD, MPH
David G. Le Couteur, MD, PhD
Darrell R. Abernethy, MD, PhD
Sarah N. Hilmer, MD, PhD

Author Affiliations: Departments of Clinical Pharmacology and Aged Care, Royal North Shore Hospital, Sydney, Australia (Drs Gnjidic and Hilmer); Sydney Medical School, University of Sydney, Sydney, Australia (Drs Gnjidic, Le Couteur, and Hilmer); Centre for Education and Research on Ageing, Concord Hospital, Sydney, Australia (Dr Le Couteur); and Food and Drug Administration, Maryland (Dr Abernethy).

Correspondence: Dr Gnjidic, Clinical Pharmacology Department, 11C Main Bldg, Royal North Shore Hospital, St Leonards, Sydney, 2065 NSW, Australia (danijela.gnjidic@sydney.edu.au).

Financial Disclosure: Drs Hilmer and Abernethy hold an international patent for the Drug Burden Index with Donald E. Mager.

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LESS IS MORE

Reducing Polypharmacy: Is Hospitalization the Right Time?

In their study examining the feasibility of discontinuing medications in elderly patients, Garfinkel and Mangin¹ were able to successfully stop nearly half of community-dwelling patients' medication therapies. Surprisingly, at follow-up 88% of patients reported overall improvement.

The authors propose an evidence-based, step-wise approach to evaluating medication regimens that has now proven effective in clinic and nursing home environments. We believe it would be interesting to extend this tool to the hospital setting. Hospitalization presents an opportune point of intervention where long-term medication management decisions could be addressed as part

of the comprehensive review of medications and their indications inherent in the medication reconciliation process. Up to 1 in 5 patients discharged from the hospital have an adverse event, the majority of which are related to medications.² The likelihood of medication discrepancies and adverse drug events is closely related to the total number of medications a patient is taking.^{3,4} In addition, hospitalization has the potential to provide time for patient education about medications and discussion of how high-risk medications affect a patient's goals of care. Hospital discharge offers a natural break point for the application of this type of tool to reduce rather than expand a patient's medication list.

There are, however, risks in using this within a hospitalist model. The model's innate hand-offs present challenges in ensuring that discontinuation of the medication has not had deleterious effects. In addition, unlike the clinic setting, it is unlikely that the inpatient provider has a good understanding of why the patient is on the medication, which could increase the chances of inappropriately discontinuing a medication. Finally, the authors use "clinical judgment" in determining whether the medications are appropriate for discontinuation and the inter-rater reliability of the tool has yet to be established.⁵ A number of the steps within the tool are open to significant interpretation as to appropriateness of indication, risk, and potential benefit. The ability to apply these judgments in an evidence-based fashion is limited by the paucity of high-quality trials examining medication use in the geriatric population.

Still, polypharmacy, medication error, and adverse drug events are a constant and growing threat among the elderly, and our patients require further interventions to avoid harm. In a world where we strive to achieve more, Garfinkel and Mangin¹ are correct in saying "less is more" in elderly patients. Our challenge is to find better ways to accomplish this goal.

Ryan Borne, MD
Ethan Cumbler, MD
Jeffrey J. Glasheen, MD

Author Affiliations: Hospital Medicine Section, Division of General Internal Medicine, Department of Medicine, University of Colorado Denver, Aurora.

Correspondence: Dr Borne, Internal Medicine, University of Colorado Hospital, 12401 E 17th Ave, Mail Stop F782, Aurora, CO 80045 (ryan.borne@ucdenver.edu).

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In reply

We are delighted to see others look for ways to improve and broaden the use of the Garfinkel GP-GP model.^{1,2} Avoiding adverse events is a major motivator for reducing polypharmacy. Incorporation of risk assessment tools into the GP-GP model might improve the ability of physicians to identify medications particularly likely to cause problems for elderly persons. Hospital admissions can be an opportune time to recommend drug discontinuation. This discharge advice is given to primary care providers who can then initiate and coordinate the withdrawal and monitoring. However, patients are usually discharged on more medication therapy than they were admitted on, and hospital physicians may be reluctant to stop or change medications given by the family physician and vice versa. Transfer between primary and secondary care settings is a time of pharmacological peril. Effective communication is required between primary and secondary care settings, with clear delineation of responsibility for follow-up. A better solution is the case manager approach: teams or experienced physicians, who are preferably geriatricians, with or without pharmacists who would have final responsibility for the patient, particularly for the polypharmacy aspect. The place of clinical judgment should not be understated though in relation to evidence-based medi-

cine. Furthermore, special mention should be made of the need for in-depth consultation with the patient and family before and during the course of the new regime.

Doron Garfinkel, MD
Derelie Mangin, MBChB

Author Affiliations: Geriatric-Palliative Department, Shoham Geriatric Medical Center, Pardes Hana, Israel (Dr Garfinkel); and Primary Care Research Unit, Department of Public Health and General Practice, Christchurch School of Medicine & Health Sciences, University of Otago, Christchurch, New Zealand (Dr Mangin).

Correspondence: Dr Garfinkel, Geriatrics-Palliative Care Unit, Shoham Geriatric Medical Center, Hanadvi Road, Pardes Hana, IS 37000, Israel (dgarfink@netvision.net.il).

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