

Inappropriate Medication in Home Health Care

Yuhua Bao, PhD¹, Huibo Shao, MS¹, Tara F. Bishop, MD, MPH², Bruce R. Schackman, PhD¹, and Martha L. Bruce, PhD, MPH³

¹Department of Public Health, Weill Cornell Medical College, New York, NY, USA; ²Departments of Public Health and Medicine, Weill Cornell Medical College, New York, NY, USA; ³Department of Psychiatry, Weill Cornell Medical College, White Plains, NY, USA.

J Gen Intern Med 27(5):491
DOI: 10.1007/s11606-012-1997-5
© Society of General Internal Medicine 2012

The Authors Reply:—We are pleased to respond to Dr. Lau and Ms. Dwyer's letter. Dr. Lau and Ms. Dwyer point out that the validity of using the Beers list to evaluate prescribing quality among patients receiving end-of-life (EOL) care is questionable. They raise concerns about our examination of potentially inappropriate medication (PIM) without distinguishing between patients receiving and not receiving EOL care in the home health setting.

We agree with Dr. Lau and Ms. Dwyer that, given the different needs and treatment goals between the two patient populations, medication appropriateness should be examined by EOL status. In response, we conducted the same analysis as reported in our article, but stratified by EOL status. To define EOL status, we used a variable in the survey indicating that the patient had a life expectancy of 6 months or less or was receiving palliative/EOL care. Consistent with Lau and Dwyer, we estimated that a weighted 15.7% of our original study population were EOL patients.

Estimated rate of PIM use was similar between EOL patients (36.6%, 95% CI: 29.2–44.8%) and non-EOL patients (39.0%, 95% CI: 36.0–42.1%). Lau and Dwyer mentioned several classes of medications on the Beers list that may be

clinically appropriate for EOL patients. Our estimates indicate that prevalence of medication use in these classes were also comparable by EOL status. For example, 6.5% (CI: 3.6–11.4%) of EOL patients vs. 6.5% (CI: 5.1–8.2%) of non-EOL patients used antihistamines included in the Beers list. The rate of long-acting benzodiazepines use was 2.9% (CI: 1.5–5.4%) among the EOL patients vs. 2.2% (CI: 1.5–3.2%) among the non-EOL patients. Use of anticholinergic agents (including gastrointestinal antispasmodics and other anticholinergics on the Beers list) was low (1–2%) for both populations, with confidence intervals overlapping.

These results indicate that our original estimate of close to 40% PIM use among older home health care patients was not driven by the potentially greater (and appropriate) use of these medications by patients with limited life expectancy or receiving EOL care. Lau and Dwyer make a legitimate point of the need to take into account EOL status when examining medication appropriateness. The policy and practice implications of our original findings, however, remain highly relevant to the vast majority of home health patients who receive active treatment.

Corresponding Author: Yuhua Bao, PhD; Department of Public Health, Weill Cornell Medical College, 402 E. 67th St., New York, NY 10065, USA (e-mail: yub2003@med.cornell.edu).