

EDITORIALS

Changing Chronic Medications in Hospitalized Patients—Bridging the Inpatient–Outpatient Divide

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There is consensus that the hospital is an appropriate place to start chronic medications for conditions that caused the hospitalization (e.g., aspirin for a patient admitted with acute myocardial infarction). However, little is known about physician attitudes toward starting chronic medications for conditions unrelated to the reason for hospitalization (e.g., aspirin in a patient with a history of myocardial infarction admitted for cellulitis). Although hospitalists can identify and remedy potential gaps in the management of chronic conditions, changes in such medications during the hospital stay can create a number of problems. Contextual factors, such as prior medication trials, patient preferences, and longstanding patterns of disease management, may be unknown to the inpatient clinician, and medication confusion, nonadherence, and adverse effects can result from multiple medication changes.^{1,2} The lack of consensus about changing chronic medications for conditions unrelated to the reason for admission reflects a lack of clarity regarding the risk-benefit equation in this area.

The study by Brey and colleagues³ in this issue provides one of the first studies of hospitalist and primary care physician (PCP) attitudes about changing chronic medications during hospitalization for conditions unrelated to the reason for admission. The authors had hospitalists and PCPs consider six cases, half involving a medication change related to the reason for admission and half involving a medication change unrelated to the reason for admission. They found that PCPs were more likely than hospitalists to feel that inpatient interventions were appropriate when unrelated to the reason for admission. However, the majority of both hospitalists and PCPs did not feel interventions in these cases were appropriate.

Although this study provides useful insight into the attitudes of physicians toward these issues, it is likely that even more physicians would be skeptical of ini-

tiating chronic medications in the hospital if the scenarios reflected the messy reality that often faces clinicians when patients are hospitalized. The study asked physician respondents to assume full outpatient electronic medical record (EMR) access and communication at discharge. However, in practice, inpatient physicians often do not have full outpatient EMR access. If they do have full access to records, they typically do not have the time to thoroughly review the chart, leading to over half of internal medicine patients having at least one medication discrepancy at admission.⁴ In addition, communication between hospitalists and PCPs occurs infrequently, and discharge summaries are often not available by the time of the first postdischarge clinic visit and lack important information, such as diagnostic test results and discharge medications.²

We believe that in most clinical settings, the serious problems that accompany changing medications in hospitalized patients argue for a judicious approach to modifying medications for chronic conditions not related to the reason for hospitalization. However, the more important question is how the prescribing process in hospitalized patients can be re-envisioned in a manner that allows individualization of these decisions to serve both the short- and long-term needs of patients. Because the success and appropriateness of long-term treatment decisions often depends on contextual factors, PCP follow-up, and patient medication compliance, in most cases decisions about initiating long-term therapy for conditions not central to the hospital admission should involve each of these circumstances. Shared decision making models involve clinicians and patients sharing information, expressing treatment preferences, deliberating the options,⁵ and coming to an agreement on a treatment plan,⁵ and these models have been associated with improved adherence and disease-specific outcomes.⁶ Shared decision making in many cases could be done quickly and efficiently through a quick check-in with the PCP and a brief discussion with the patient. When consensus cannot be reached with these methods, then raising the issue with the PCP and patient but deferring the final decision until after discharge would be appropriate.

In hospitalized patients, less is often more, and minimizing the number of nonessential medication changes may ultimately yield better outcomes. Although inpatient clinicians can identify important

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gaps in care, the best solutions come from discussions that can bridge the inpatient-outpatient divide and ultimately serve the long-term needs of patients.

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References

1. Forster AJ, Murff HJ, Peterson JF, Gandhi TK, Bates DW. Adverse drug events occurring following hospital discharge. *J Gen Intern Med.* 2005;20:317–323.
2. Kripalani S, Jackson AT, Schnipper JL, Coleman EA. Promoting effective transitions of care at hospital discharge: a review of key issues for hospitalists. *J Hospital Med.* 2007;2:314–323.
3. Breu A, Mueller S, Palamara K, Hinami K, Herzig SJ. Hospitalist and primary care physician perspectives on medication management of chronic conditions for hospitalized patients. *J Hosp Med.* 2014;9(5):303–309.
4. Unroe KT, Pfeiffenberger T, Riegelhaupt S, Jastrzembski J, Likhnygina Y, Colon-Emeric C. Inpatient medication reconciliation at admission and discharge: a retrospective cohort study of age and other risk factors for medication discrepancies. *Am J Geriatr Pharmacother.* 2010;8:115–126.
5. Stevenson FA, Barry CA, Britten N, Barber N, Bradley CP. Doctor-patient communication about drugs: the evidence for shared decision making. *Soc Sci Med.* 2000;50:829–840.
6. Wilson SR, Strub P, Buist AS, et al. Shared treatment decision making improves adherence and outcomes in poorly controlled asthma. *Am J Respir Crit Care Med.* 2010;181:566–577.