LETTERS
Care Transitions Measure and Readmissions

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To the Editor: We echo the concerns explicated in Goldstein et al.'s recent article regarding the inconsistent association between the Care Transitions Measure (CTM-3) and readmission risk.[1] Their findings add to the mounting evidence questioning the predictive ability of the CTM-3 and its use as a quality indicator of care transitions.

We recently compared two measures of preparedness for discharge and readmission: the CTM-3 and B-PREPARED (Brief-Prescriptions, Ready to re-enter community, Education, Placement, Assurance of safety, Realistic expectations, Empowerment, Directed to appropriate services).[2] These measures were assessed in an observational cohort of 1,239 adult patients recently hospitalized for acute coronary syndrome and/or acute decompensated heart failure. Additionally, for all patients we calculated a commonly used, administratively derived readmission index, LACE (Length of stay, Acuity, Comorbidity, and Emergency department use). For our main outcome, we determined all-cause readmission or death at 30 and 90 days post-discharge. Then, we employed Cox regression models to determine the association of the CTM-3, B-PREPARED, and LACE with time to readmission or death at 30 and 90 days after discharge.

Our results showed no association of CTM-3 with readmission/death in simple bivariate and multivariable analyses at either time point. Moreover, CTM-3 alone had a discriminative ability only slightly better than a coin toss in differentiating patients who were or were not readmitted (C statistic 0.523 at 30 days). Interestingly, the B-PREPARED and LACE indices were individually associated with 30-day readmission or death; however, in multivariable models that included CTM-3, B-PREPARED, LACE plus demographics and diagnosis, only LACE remained significantly associated with readmission. In contrast to our study, Goldstein et al. found an independent association of CTM-3 with readmission even when controlling for two factors similar to those in the LACE-Elixhauser count (Comorbidity) and prior hospitalization (Emergency department use). It would be interesting to know whether, in Goldstein's study, the CTM-3 offers any benefit beyond the LACE index.

Like Goldstein et al. we have reservations about the widespread use of CTM-3 as a basis for improving care transitions and hospital reimbursements. Namely, the CTM-3 appears to perform differently in diverse populations, demonstrates a ceiling effect, and may not reflect mutable aspects of care transitions.[3] Future research is needed to assess how well the CTM-3 and other measures of care transitions quality predict readmission risk adequately across broad populations to be rigorous enough for comparing hospitals nationwide.[4,5]

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Compliance with Ethical Standards:

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