Capsule Commentary on McCoy Et al. Hospital Readmissions Among Commercially-Insured and Medicare Advantage Beneficiaries with Diabetes and the Impact of Severe Hypoglycemic and Hyperglycemic Events

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This retrospective cohort study by McCoy et al.¹ used administrative data from commercially insured and Medicare Advantage beneficiaries with diabetes to describe the relative frequency of hospital readmissions for severe dysglycemia (hypoglycemia and hyperglycemia) and other causes. It also examined potential predictors of such events. The authors found that the all-cause 30-day readmission rate was 10.8%. Heart failure was the most common cause for readmission (8.9%), and severe dysglycemia accounted for 2.5% of readmissions (38.3% hyperglycemia, 61.0% hypoglycemia, 0.7% unspecified). Younger age, history of dysglycemia, and a higher Diabetes Complications Severity Index score were independent predictors of severe dysglycemia relative to other readmission causes.

Most studies of dysglycemia using administrative data² have been limited to the assessment of severe events because mild-to-moderate events are (1) most likely to occur in settings outside of clinical care and (2) are unlikely to be recorded as justification for a clinical encounter or payment of health services. The epidemiology and consequences of mild-to-moderate dysglycemia are therefore unaddressed by this study and are much less well understood in the empirical literature.³ Future studies in large populations should strive to assess mild-to-moderate dysglycemia and build on administrative data by leveraging the information in electronic health records, including both structured data fields and free-text clinical notes.³ These additional data will help to provide a more complete understanding of dysglycemia that best informs optimal transitional and ambulatory care practices and permits targeting of interventions to individuals with diabetes at highest risk.

As the authors point out, the absence of frailty measures in their study is a major limitation and complicates the

interpretation of their conclusion that younger individuals are at highest risk for severe dysglycemia admissions. Even if severe dysglycemia events are more common in younger individuals, the consequences of such events are likely more catastrophic for frail older adults.⁴ This is especially true for individuals residing in long-term care settings, where medication regimen complexity is greater and insulin use is more common. Studies of dysglycemia in frail older adults are acutely needed as data on the epidemiology and consequences of occurrence are lacking.⁵

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Compliance with Ethical Standards:

Conflict of Interest: The author has no conflicts of interest with any of the material in this manuscript.

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