Capsule Commentary on Verma et al., Prevalence and Costs of Discharge Diagnoses in Inpatient General Internal Medicine: a Multi-center Cross-sectional Study

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This trial by Verma et al.¹ evaluated the most common and costly diagnoses of patients cared for on inpatient general internal medicine services across seven Canadian hospital sites over a five-year period. The investigators used data from hospital administrative databases to identify the primary diagnosis at discharge. These diagnoses were then aggregated into clinically homogenous categories. From there, cost was estimated for each case using the Canadian relative case weights. The study included over 148,000 patients and described an older (median age 73 years) and sick (median number of coexisting diagnosis was 6) population. The most common discharge diagnoses were heart failure, urinary tract infection, chronic obstructive pulmonary disease, and stroke.

Interestingly, no single diagnosis represented more than 7.9% of admissions at any of the seven hospital sites, and the ten most common conditions only made up 36.2% of hospitalizations. This reinforces the suspicion that hospital medicine involves caring for a medically diverse group of patients. The costliest conditions included delirium, dementia, and cognitive disorders and sepsis.

General internal medicine physicians, often in the role of hospitalists, are leading quality improvement work internationally. However, there is little data informing physicians what the most common or costliest conditions are, making it challenging to prioritize their effort. Given this gap in the literature, the present study offers some description of the clinical landscape in hospital medicine.

However, these results should be interpreted with caution as there are limitations. First, there are slight

differences between manually entered diagnoses and those assigned by the software tool. This is described by the authors in the supplement and is minimal, but still may affect the reported results. Also, the biggest determinant in hospital cost is clinical length of stay. The costliest conditions are those with long lengths of stay, such as delirium and sepsis.^{2,3} Thus, it is difficult to tell whether the cost is related to the length of stay alone or related to other hospital processes. Future work could help delineate this distinction. Testing targeted interventions to improve care outcomes and reduce cost for these conditions could be another next step.

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Compliance with Ethical Standards:

Conflict of Interest: The author has no conflicts of interest with this article.

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