

Commentary

Prior Caregiving as a Proxy for Unmeasured Patient Function in Hospital-at-Home

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Duhamel and colleagues report that 61.6% of caregivers met the threshold for high burden within 48 hours of an acute hospital-at-home (HaH) episode, with prior caregiving experience emerging as the strongest correlate. This commentary proposes that prior caregiving is not only an attribute of the caregiver but also, by definition, an attribute of the patient: a patient who required caregiving before the acute episode was already functionally dependent. Reanalysis of the authors' cross-tabulation shows that stratifying by prior caregiving experience separates high- from low-burden caregivers far more sharply (75.8% vs. 7.7%) than stratifying by prior HaH experience (56.8% vs. 70.5%), suggesting that pre-existing patient dependency, rather than caregiver strain or familiarity with the HaH model, may be the dominant driver of burden at episode onset. Because patient functional status was not collected, this interpretation cannot be directly tested, and no established framework yet exists for measuring patient function in HaH settings, unlike inpatient care. The commentary further notes that burden prevalence and the association between paid caregiver assistance and burden may not generalise across countries with differently structured long-term care systems, using Japan's long-term care insurance system as a contrasting example. Both patient function and caregiver burden need to be measured — at present, only the latter is.

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Duhamel and colleagues report that 61.6% of caregivers met the threshold for high burden within 48 hours of an acute hospital-at-home (HaH) episode, and that prior caregiving for the same patient was near-universal among them (97.4%)^[1]. They interpret this as evidence that accumulated caregiving strain, rather than unfamiliarity with the HaH model, drives burden at episode onset. I write from a small

community hospital in Japan that operates an acute ward and its own home care service, and I would like to propose an additional reading of their cross-tabulation.

Prior caregiving is an attribute of the caregiver, but it is also an attribute of the patient. A patient who required caregiving before the acute episode was, by definition, already functionally dependent. A patient whose family had never provided care was, by the same logic, functionally independent until the acute illness began. The variable therefore carries two meanings at once.

The authors' four-group cross-tabulation is consistent with either reading. Among the 99 caregivers with prior caregiving experience, 75.8% met the high-burden threshold, compared with 7.7% of the 26 caregiving-naïve caregivers. By contrast, stratifying on prior HaH experience yields 56.8% versus 70.5%, a difference roughly one-fifth as large. What separates high-burden from low-burden caregivers is not their familiarity with HaH but whether the patient needed care before the episode.

The direction of this second comparison is itself worth pausing on, since it runs counter to the intuitive expectation that familiarity with HaH would reduce burden. Disaggregating by both variables together resolves the puzzle: among caregivers with prior caregiving experience, burden was similarly high whether or not they also had prior HaH experience (78.0% vs. 72.5%), and among caregiving-naïve caregivers the group with prior HaH experience is too small ($n = 4$) to interpret. The marginal reversal traces to a compositional imbalance rather than to any protective effect of HaH familiarity: 90.9% of caregivers with prior HaH experience also had prior caregiving experience, compared with 72.8% of first-episode caregivers. Prior HaH experience is correlated with prior caregiving experience, and it is the latter that predicts burden. This is consistent with the authors' own multivariable model, in which prior HaH experience was not a significant predictor after adjustment (OR 0.62, 95% CI 0.24–1.59), while prior caregiving experience remained robust. The confounding here reinforces the concern above: caregiving history is doing the explanatory work, which is exactly what would be expected if it is standing in for a patient-level variable rather than measuring the caregiver's own adaptation.

The authors acknowledge that patient functional status, frailty, cognitive impairment, and delirium were not collected. My suggestion is that prior caregiving may be serving as an unrecognised proxy for exactly these variables. If so, the finding is not that accumulated caregiver strain produces burden, but that families of functionally dependent patients report burden when hospital-level care arrives at home. The two readings carry different implications: the first points toward caregiver-directed support, the second toward maintaining patient function.

This ambiguity is not a flaw in the authors' design so much as a symptom of a structural gap. In inpatient settings, patient function is recorded as a matter of routine. In Japan, every inpatient is assessed daily under the national reimbursement system, using an instrument built to quantify nursing workload but which captures transfers, oral care, feeding, and dressing. It has served as a functional outcome in cohort studies of tens of thousands of admissions^[2]. No equivalent framework exists for HaH in any country I am aware of. A systematic review found no studies measuring physical activity in HaH settings^[3], and a more recent review comparing HaH with inpatient care found the same absence among six comparative studies^[4]. Caregiver burden is now being measured in HaH before patient function is.

That ordering matters for interpretation. Without patient functional data, it is not possible to determine whether the caregivers in this study were burdened by the HaH episode, by their patient's pre-existing dependency, or by the interaction of the two. The authors are appropriately cautious about causal inference; my point is narrower, that a specific unmeasured variable may be embedded in one of their key predictors.

A second observation concerns generalisability. The authors note that in Israel acute HaH is fully covered under mandatory insurance while long-term care support is means-tested and fragmented, so that caregivers routinely carry responsibilities unsupported by the formal system. Japan's arrangement differs. Under long-term care insurance, patients certified as requiring care can access home help, day services, and short-stay respite care with fixed co-payment, and a care manager is assigned to coordinate them. A burden prevalence measured in one long-term care system cannot be transferred to another without accounting for what the formal system already absorbs.

This has a particular bearing on one of the authors' findings. Paid caregiver assistance was associated with higher odds of high burden (OR 5.23). The authors reasonably suggest this reflects families engaging paid help because need is already high. In Japan, however, paid home help is a benefit of long-term care insurance rather than a private purchase, and its presence reflects a certification decision made by the municipality rather than a family's assessment of its own limits. The same variable would mean something different.

Measuring caregiver burden at a defined timepoint in a real-world population addresses a genuine gap, and the authors are right that patient-centred outcomes should not be assumed to reflect caregiver well-being. I would add that caregiver-centred outcomes, in turn, cannot be interpreted without knowing what the patient could do before the episode began. Both need measuring, and at present only one of them is.

Notes

Target of commentary: Duhamel S, Iktelat A, Lerner-Shikory M, Zarbiv E, Lustman A, Sabar R, et al. Caregiver Burden at the Onset of Acute Hospital-At-Home. *Journal of the American Geriatrics Society*. 2026. doi:10.1111/jgs.70573

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Author Contributions

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Use of Generative AI

During the preparation of this work the author used Claude (Anthropic) to assist with drafting and editing of the English text. The author reviewed and verified all content, including citations, and takes full responsibility for the accuracy of the manuscript.

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