Counterpoint

Readmission of elderly patients to hospital: still ill-defined and poorly understood – a response

In the accompanying article, Dr Hasan has highlighted a range of issues surrounding the use of ‘readmission rates’ among elderly patients as both a measure of performance quality of a health care service and as an indicator of possible dysfunction within modern health care systems. The attractiveness of the measure rests with the relative ease of monitoring such categorical events. However, the lack of conformity around definition of patient groups, time periods from the index admission and so-called ‘unplanned’ events severely compromise its utility.

Does this mean that the measure is without value? Before drawing such a conclusion, one must consider the lack of robust alternatives that might provide insight into the phenomena that the indicator seeks to capture. These include, at the patient level, premature discharge, poor discharge preparation and inadequate follow-up care; and at the health system level, changing patterns of health service populations and hospital utilization. Examples of such measures might include assessment of unmet needs after discharge, patient satisfaction through interview or survey and mortality rates in the post discharge period. These measures are either expensive to obtain or suffer similar, but more serious, limitations than are associated with the readmission measure.

These considerations demand a careful examination of the capacity to refine the readmission measure. Potential improvements might be gained through standardization of the definition of unplanned readmission, reporting of readmission rates at a series of time periods after discharge (7, 28, 90 days) and adjustment of the indicator in relation to confounding variables including diagnosis.

While there is no obvious mechanism to secure consensus on these matters at an international level, within the context of a national or local health care system such agreements can be secured. The measure then becomes available as one of a range of tools to monitor performance of the system over time and to compare similar services within the system.

There does seem to be mounting evidence that readmission rates are increasing [1–2]. This would appear to reflect changing characteristics of either the population being served or the system that is delivering the care. A variety of factors might be contributing to the demand aspects of this phenomenon. Population aging, in the setting of widespread policy development that reduces availability and access to permanent institutional care, may result in a significantly larger proportion of sick elderly people living in a community setting. In contrast to the institutional setting, where professional care is often readily on hand should an individual become ill, the threshold for short-term institutional care (i.e. hospital care) is considerably lower for the community-resident sick and frail elderly. Periods of ill-health demand continuous surveillance by a carer, quite apart from the professional input required to deliver care, making the older person living alone particularly susceptible to the need for inpatient care.

Much has been made of the impact of Prospective Payment Systems (PPS) based on clinical Diagnosis Related Groups (DRG) on reduction in length of stay. Such systems promote shorter lengths of hospital stay [3]. It is speculated that this may result in hasty and poorly executed discharge planning, resulting in higher readmission rates. The evidence to support this proposition is inconclusive. The introduction of PPS-based payment systems in the USA may have improved some patient outcomes in the first few years of implementation. However, the impact of such systems may vary as the duration of their use increases. In the short-term, reductions in length of stay may have only marginal effects, whereas, over the longer term, repeated payment reductions for each care episode may result in declining standards of care as safe thresholds of hospital length of stay are transgressed.

If it is accepted that such funding approaches do result in higher rates of readmission, a further level of scrutiny is required. If there is indeed a trade-off between reduced length of stay and readmission, what is the appropriate balance? It can be argued that unnecessarily long lengths of hospital stay may have detrimental effects on elderly patients, and be associated with higher hospital and perhaps health care system costs. On the other hand, readmission is also associated with additional cost, and might have negative effects on patients’ morale. Unfortunately, there is little published information that enables clear elucidation of this balance.

Intervention studies provide some insight into the balance. However, they were designed in order to understand the impact of a preventive intervention in a known health care system environment. They do not directly explore the relationship between length of stay and readmission rates. This is an area that requires further analysis.

Hasan has considered whether readmissions can be avoided. Once again, the evidence is weak. Avoidance might be secured through interventions designed to improve health, enhance discharge planning or ensure appropriate follow up.
There are a handful of apparently successful interventions reported in the literature [4–6] but also numerous similar studies that demonstrate no or insignificant effects [7–11]. There is, at this stage, insufficient evidence to warrant massive investment in such strategies. Further studies are required to refine the targeting and design of such strategies.

No studies have addressed prolonging hospital stay as a strategy to reduce readmissions. This would of course seem almost heretical in a world where cost reduction is increasingly paramount. Targeted increase in hospital stay, with a view to consolidating treatment outcomes and carefully preparing patients for discharge might reduce readmission rates and ultimately total health care costs. Such extensions of stay are now widely accepted in a rehabilitation or geriatric evaluation and management units, but not in the context of an extended stay in an acute environment. The latter concept may warrant further consideration and evaluation.

It is clear from these reflections that the phenomenon of readmissions is of considerable significance when assessing the efficacy of hospital care, and perhaps even home-based care, for older patients. There is a strong case for a continued quest to secure uniformity of measurement, at least within local health systems. Ongoing analysis and intervention studies examining the interplay between the scope and quality of hospital care and health care utilization including readmission rates is likely to prove a very fertile area for understanding the optimal balance of health care service delivery in the future.

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References