

Understanding the Complex Patient: Multimorbidity and Frailty

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Background

This presentation examines 2 distinct groups of complex patients who require substantial resources and represent a significant challenge to hospital service providers and funders.

The two selected groups are;

- a) Patients with very high burden of disease involving a high number of chronic conditions and considered as being severely multimorbid.
- b) Patients who have severe frailty.

Severely multimorbid patients represent less than 2% of the resident population yet absorb more than 20% of the total hospital inpatient cost and on any day occupy nearly 40% of the occupied overnight beds within the major public hospitals. These individuals have major ongoing health problems with significant social disadvantage and very high health care needs across all health settings.

Patients who are very frail at the episode level have several coded conditions that reflect their frailty. Those patients, while few in number, represent a group with very significant discharge delay and hospital impact. They don't share the same range of diagnosis as the Multimorbid group.

As a cohort, complex cases represent a very large cost and challenge to service delivery.

Methods/ Description of Program or Policy

This is an observational study of care utilisation and some outcomes over several years of linked hospital data.

The two groups are identified using different approaches.

For the severely frail a score is determined at the episode level based on a Frailty Risk Score developed by Gilbert et al¹ which uses ICD-10 diagnosis codes.

For the severely multimorbid, ICD coding over the prior 7 years of coding is used to identify chronic conditions in disease clusters each having an impact score. Having 7 or more chronic disease clusters and an impact score over 3 indicates a severely multimorbid individual.

Analysis along several elements has been undertaken for these groups of patients using the past 5 years of admitted data including,

- Rates of admission, Episode duration, Emergency department presentations and annual hospital stay.

¹ Development and Validation of a Hospital Frailty Risk Score focussing on older people in acute settings using electronic hospital records: an observational Study, Thomas Gilbert, Jenny Neuburger, et al, Lancet 2018; 391; 1775-82

- Frequency of readmission over a year mortality in episode and within the year
- Prevalence of comorbidities and types of and coexisting conditions in the primary and subsequent episodes
- Disposition rates to home, aged care

Conclusion

There are distinct differences in these complex care groups with different needs and this illustrates the multidimensional nature of complex patients. The Multimorbid patients represent a challenge in having frequent admitted episodes with a very high burden of disease and social disadvantage. The problem is to some extent keeping them functioning well in the community and reducing their need for frequent hospitalisations. The very frail on the other hand, represent significant difficulty in being able to be discharged to appropriate care.

This requires us to consider differing approaches to management aligned with the differing care needs of these and other complex patients.