**Title:** Hospital Admissions of Residential Aged Care Residents and Community-Dwelling Elders in New Zealand

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**Introduction** Hospitalisations from residential aged care (RAC) residents in New Zealand have not been well-documented. Reports from UK, Australia, and Scandinavia have described hospitalisation rates from RAC as up to double those from the community. Our objective was to compare hospitalisation rates of RAC residents with community-dwelling seniors, and compare the major causes of hospital admission between these two population groups.

**Method** This study is a population-based study that utilised Ministry of Health’s National Minimum Dataset (NMDS) and our department’s OPAL study to calculate the age- and gender-specific hospitalisation rates of RAC and community dwelling residents within Auckland. These dataset’s Australia Refined Diagnosis Related Groups v5.0 (AR-DRG v5.0) were further systematically categorised into selected disease groupings, procedural and treatment groups with reference to Australian Major Diagnostic Categories (MDCs).

**Results** Mean annual hospital admission rates for Auckland population aged 65 or above were estimated as 50.9 per 100 [95% CI: 49.5, 52.4] for RAC residents and 57.0 per 100 [95%CI: 56.6, 57.5] for community dwellers. Hospitalisation rates rose exponentially with age among community dwellers, with a linearly declining pattern for RAC residents. Among community dwellers, men were more likely to be admitted than women, whilst no clear association with gender was observed for RAC residents. RAC residents had higher hospitalisation rates than community dwellers to receive most surgical and non-surgical procedures, whilst rates varied for different medical conditions.

**Conclusions** Hospital admission rates among RAC residents were lower than community dwellers in Auckland. This contra-indicates international studies showing RAC residents having higher hospitalisation rates than community dwellers, presumably because of greater co-morbidity and higher levels of dependence. The results suggest variability of hospital treatment decision-making (access to treatment interventions and rehabilitation) and of RAC care (referral decisions, medication review and compliance, and within-facility treatment) in different countries.