

# Health Care Usage for Older People



Older people who are aged care facility residents use hospital and primary care health services more frequently than older people living in the community

Older people, defined as those aged 65 years and over, make up 17% of the NSW population. The majority of older people in NSW live in the community, with 4.4% living in residential aged care facilities (RACF)<sup>1</sup>.

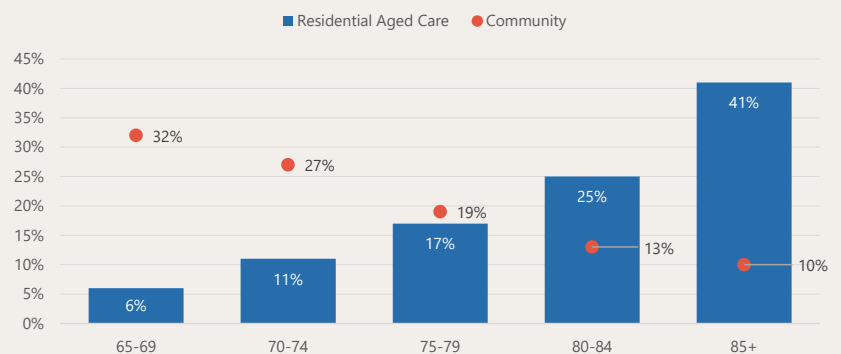
This factsheet provides information from the Lumos data asset, which combines data from general practices (GPs) with data from other NSW Health services. This factsheet presents analyses over a five-year period from 1 July 2016 to 30 June 2021 about how aged care facility residents use health services compared to older people living in the community. The aim is to gain a better understanding about healthcare needs among older people to inform health services management and planning.

## KEY FINDINGS

The residential aged care facility population has a higher proportion of people in older age groups.

Among older people identified in Lumos data as living in residential aged care facilities, 4 in 10 are aged over 85 years, compared to 1 in 10 aged over 85 years among older people living in the community.

Figure 1: Proportion of people aged 65 years and over living in residential aged care facilities or the community by age group.



Aged care facility residents use hospitals and ambulances more often than older people living in the community.

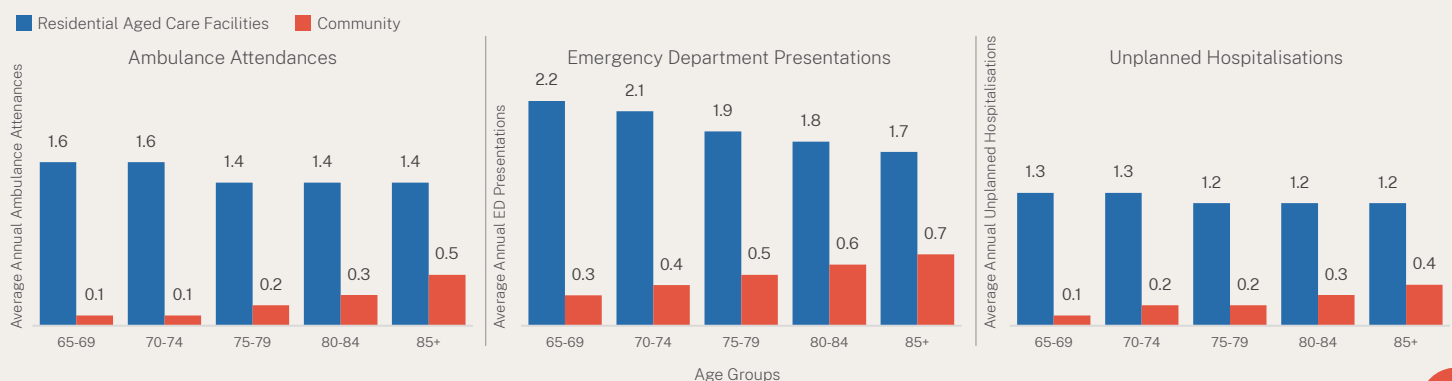
Across all age groups, older people who were aged care facility residents had on average:

Over a 5-year period, older people who were aged care facility residents were more likely to use an ambulance or go to hospital compared to older people living in the community.

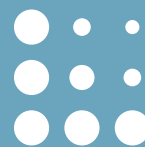
- 7 times the rate of ambulance episodes
- 4 times the rate of emergency department presentations
- 6 times the rate of unplanned hospital admissions, and
- More hospital admissions that were preventable (12% compared to 7% in the community - data not shown)

These differences are shown for individual age groups in Figure 2 below.

Figure 2: Acute care use by age group for people living in residential aged care facilities compared to those living in the community.



# Health Care Usage for Older People



Unplanned hospitalisation due to mental health disorders is more common among older people living in residential care than for those living in the community.

The top reasons for unplanned hospitalisations - accounting for nearly 60% of admissions - were similar among older people living in the community and those living in residential aged care facilities (RACF), although there were slight differences in ranking (Table 1).

An important exception to this is admissions for mental health disorders, primarily dementia. Mental health disorder is the fifth ranked reason for an unplanned admission among those living in RACF, accounting for 7% of admissions among aged care facility residents. Among older people living in the community, mental health disorder ranked considerably lower, accounting for only 2.5% of admissions. This is consistent with Australian population data reporting that RACF patients are older and more likely to be living with dementia than those in community settings<sup>ii</sup>.

Table 1: Top five reasons for unplanned hospitalisations among NSW residents aged 65 years and over, by residence in RACF or the community

Rank	Living in RACF	Living in Community
1	20% Injury <sup>a</sup>	17% Circulatory diseases <sup>c</sup>
2	14% Respiratory diseases <sup>b</sup>	15% Injury <sup>a</sup>
3	12% Circulatory diseases <sup>c</sup>	15% Unspecified chest pain or collapse
4	12% Unspecified chest pain or collapse	12% Respiratory diseases <sup>b</sup>
5	7% Mental health disorders <sup>d</sup>	10% Digestive diseases <sup>e</sup>

- a Primarily fracture of femur or head injury
- b Primarily pneumonia or chronic obstructive pulmonary disease with acute symptoms
- c Primarily heart failure
- d Primarily delirium/dementia
- e Primarily constipation

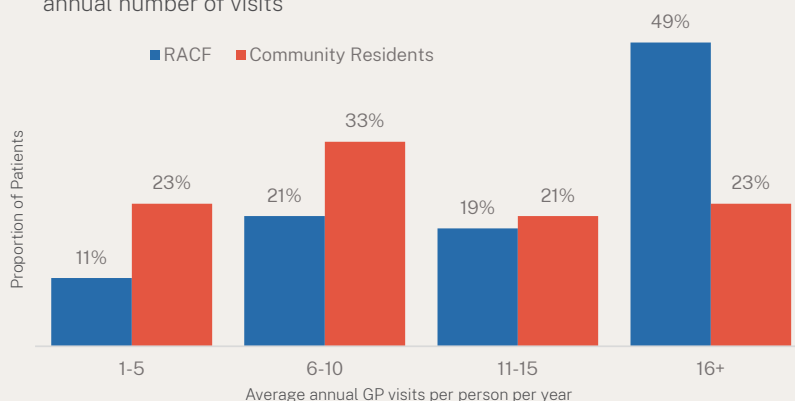
## Aged care facility residents use primary care more often than other older people living in the community

Over the period July 2016–June 2021, older people in the Lumos cohort visited GPs on average nine times per year. The average annual number of GP visits increased with age, with those aged 85 years and over visiting their GP an average of 15 times per year.

Compared to older people living in the community, aged care facility residents saw a GP much more often – almost half saw a GP more than 16 times per year, compared to less than a quarter of older people in the community (Figure 3).

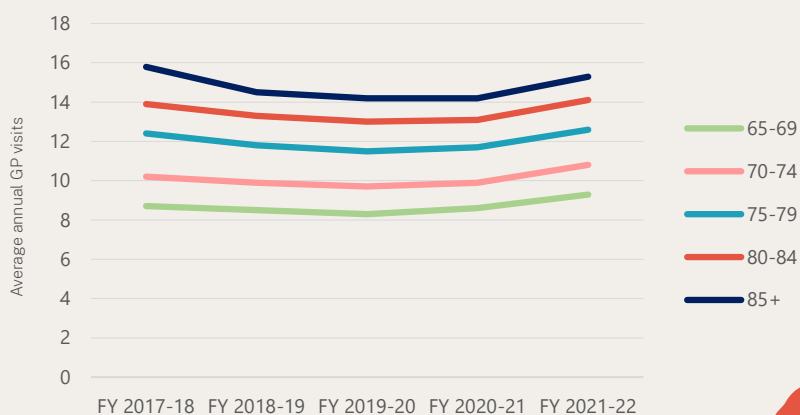
For all age groups, there was a dip in average annual GP visits around 2019-20, which corresponds to COVID-19 lockdowns, with these rates having returned to pre-pandemic levels in 2020-21 (Figure 4).

Figure 3: GP visit\* rates, by RACF or community residence, and average annual number of visits

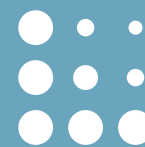


\* A GP visit refers to any episode of care with a GP regardless of whether it was face-to face, telehealth, at the GP premises or another location.

Figure 4: Annual average number of GP visits among people aged 65 years and over by age group.



# Health Care Usage for Older People



## BACKGROUND

The Royal Commission into Aged Care Quality and Safety released its findings in February 2021, highlighting critical issues faced by older people, particularly those in residential aged care facilities (RACF)<sup>iii</sup>. To support reforms it is important to understand how older people living in RACFs are using health care in NSW and how this compares with other older people in the community. While few RACF residents can be reliably identified in acute care data – such as hospital or ambulance records – GP billing records include items that are exclusive to RACF residents which provide greater population coverage. By bringing together GP and acute care data, Lumos makes it possible to identify residents of aged care facilities and to compare their need for acute health services with older people living in the community.

**The Lumos program** links records from participating NSW general practices (GPs) to records held by NSW Health such as hospital admissions, emergency department and outpatient visits, and mortality.

This factsheet provides information about care received in acute and primary care by older persons (65+) that is available in the Lumos data asset.

## ABOUT THE STUDY

**470 practices, representing 19% of all NSW general practices provided data to Lumos in October 2021**

### *How many people were in Lumos?*

4,367,763 people were included in the Lumos cohort extracted in October 2021, representing 53% of the NSW population.

### *Who was included?*

286,739 people were included in the analysis. These comprised those aged 65 years and over at their first GP encounter between 1 July 2016 and 30 June 2021 and who also had five or more encounters at a Lumos participating practice during that period. Their GP records were linked to hospital, emergency department and ambulance data over the same timeframe.

### *How was RACF status determined?*

RACF status was flagged by the presence of RACF-specific MBS items in the GP billing records, supplemented with flags in the acute care data indicating either that the facility was an RACF or that there was referral from/ discharge to an RACF. RACF status was assigned to persons who were flagged as having lived in an RACF at any point from 1 July 2016 to 30 June 2021.<sup>2</sup> In all, 11,582 people (4%) included in the analysis were flagged as having lived in an RACF during the study period.

### *Calculation methods*

Rates were calculated as the number of events in each age group in each financial year, summed from 1 July 2016 to 30 June 2021, divided by the number of person-years<sup>5</sup> in each age group in each financial year, summed from 1 July 2016 to 30 June 2021.

### *Notes*

1. Reason for hospital admission is based on primary diagnosis code.
2. A weight-of-evidence approach was used, with each positive RACF flag weighted according to the estimated positive predictive value of that flag. Determination of RACF status is probabilistic rather than definitive. People's RACF status may change over time; however, we are not able to differentiate between people in permanent care from those in respite or transition care.
3. Hospital admission counts exclude admissions for routine haemodialysis.
4. Hospital admission counts include private hospitals and Victorian border hospitals. Private hospital data were not available for FY20/21 at the time of linkage, however – given that private hospitals account for less than 10% of unplanned admissions – this made no material difference to the average rate of hospitalisation over the 5 years from 1 July 2016 to 30 June 2021.
5. Person-years is the number of years, or fraction thereof, that persons are alive during a defined measurement period. For example, a person who died on 1 January 2017 would have 0.5 person years counted in FY16/17.

### *References*

i - AIHW – Gen Aged Care Data (2021) Aged Care Data Snapshot 2021 <https://www.gen-agedcaredata.gov.au/resources/access-data/2021/october/aged-care-data-snapshot%E2%80%94942021>

ii - AIHW Web Report 2023. Older People. <https://www.aihw.gov.au/reports/older-people/older-australians/contents/about>

iii - <https://agedcare.royalcommission.gov.au/publications/final-report>

