



# Elderly related trauma admissions to Royal Perth Hospital

The Royal Perth Hospital Trauma Registry (RPH-TR) has collected and reported on injury data since August 1994. It contributes to a State Trauma Registry database, combining data from all Perth tertiary hospitals, Midland SJoG and Joondalup Health Campus.

Included on the RPH-TR are all trauma patients presenting to RPH for treatment within seven days of their injury and who were hospitalised for >24hrs, as well as all trauma-related deaths regardless of hospital length of stay.

Injuries are categorised into Minor (Injury Severity Score (ISS) <13); and Major (ISS >12)

From 2013 to 2023, there has been a steady increase in elderly patients (> 65 years old) that were admitted with major trauma injuries to Royal Perth Hospital. Only data from RPH is included in this report.

From 2013 – 2023 there were 2295 elderly patients admitted with major trauma injuries:

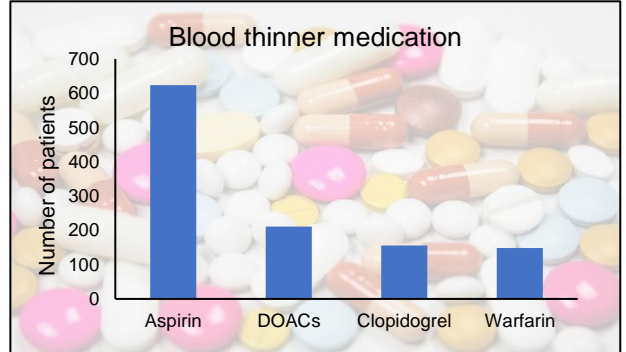
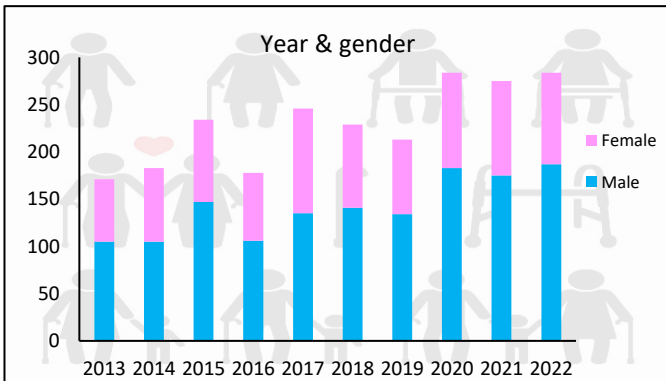
- 1418 (61.7%) were males
- 879 (38.3%) were females

Of the 2295 patients:

- 1770 (77.1%) were from the metro area
- 516 (22.5%) were from regional WA
- 1069 (46.5%) of injuries occurred in the patients' own home

The mechanism of injury for these patients were:

- 1477(64.3%) falls (from standing, ≤3 metres or >3 metres)
- 651 (28.3%) road trauma
- 62 (2.7%) struck or struck by an object
- 27 (1.2%) a crush or cut injury
- 80 (3.5%) other

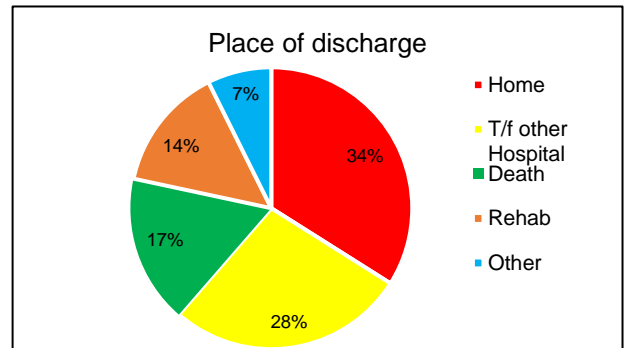


Older patients often take a combination of medications, including within the group of Direct Oral Anticoagulants (DOACs) as Apixaban, Dabigatran and Rivaroxaban

- 1470 (64%) patients were on blood thinner medication

All 2297 elderly trauma patients sustained major injuries with an Injury Severity Score (ISS) ranging from 13-75

- Males had a median ISS of 18 and had an average length of stay of 12 days
- Females had a median ISS of 11 and had an average length of stay of 11 days
- 780 (34%) were discharged home
- 328 (14.3%) required rehabilitation or further step down care 630 (27.4%)
- There were 390 (17%) deaths



Not surprisingly, the majority of elderly trauma patients are admitted as a result of a fall. Increasing age, inactivity, disease and muscle weakness can impair balance abilities. Medications such as anticoagulants often mean these patients are more susceptible to injury and have a longer LOS. Targeted campaigns aimed at keeping people active and therefore allowing them to stay independent for longer, are essential.