

# Elderly trauma admissions to Royal Perth Hospital since 2010

**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 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) <16); and Major (ISS >15)**

From 2010 to 2019 there has been a steady increase in elderly patients (> 65 years old) that were admitted with trauma injuries to Royal Perth Hospital. Only data from RPH is included in this report.

From 2010 – 2019 there were 15 001 older patients admitted:

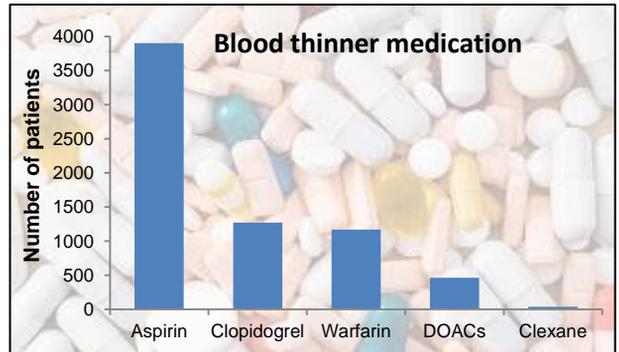
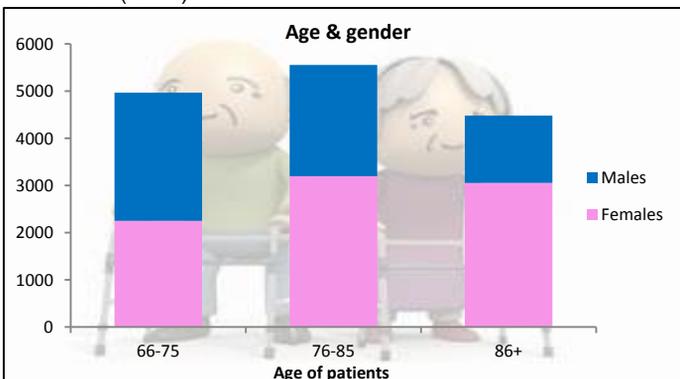
- 6611 (43.3%) were males
- 8390 (56.7%) were females

Of the 15 001 patients:

- 12 818 (85.4%) were from the metro area
- 2111 (14.1%) were from regional WA
- 7828 (52.2%) of injuries occurred in the patients' own home
- 627 (4.2%) of patients had consumed alcohol

The mechanism of injury for these patients were:

- 11 795 (78.6%) falls (from standing, ≤3 metres or >3 metres)
- 1486 (9.9%) road trauma
- 387 (2.6%) struck or struck by an object
- 394 (2.5%) a crush or cut injury
- 939 (6.4%) other

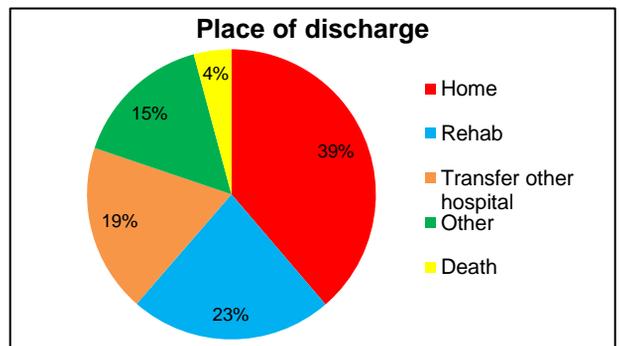


Older patients often take medications in combinations. Medications included in the group of Direct Oral Anticoagulants (DOACs) are Apixaban, Dabigatran and Rivaroxaban

- 6913 (46.1%) were on blood thinner medication

With a maximum length of stay (LOS) of 126 days, the median LOS for all elderly trauma patients was 6.9 days.

- 13 599 (90.7%) patients sustained minor injuries with an ISS of less than 16, and had a median LOS of 6.4 days
- 1402 (9.3%) had major injuries with an ISS greater than 15, and had a median LOS of 12.1 days
- 5806 (38.7%) were discharged home
- 3403 (22.7%) required rehabilitation or further step down care 2818 (18.8%)



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.