

## The effect of the ageing population on the distribution of cancers

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*Bowel cancers and other gastrointestinal cancers will increase at a faster rate than most other cancers as the population ages.*

### Background

Cancer incidence in Australia will grow at an increasing rate as the population ages, however the rate of increase will vary across cancers depending on the typical age of onset of the cancer.

### Methods

Queensland cancer incidence was projected to 2026 by applying age-specific rates averaged over the period 2008-2010 to population projections stratified by age and sex. Relative increases in cancer incidence and crude (non-age-adjusted) rate in the population were calculated and compared across cancer groups.

### Results

Between 2010 and 2026, the total Queensland cancer incidence is projected to increase by 71% (from 23,698 to 40,495) while the crude rate of cancer in the population is estimated to increase by 24% (from 536 to 665 per 100,000 population).

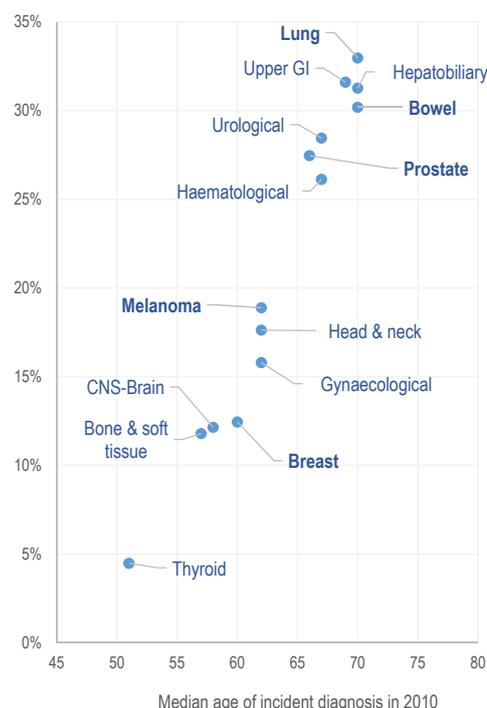
For individual cancer groups, the rate of increase is proportional to the median age at diagnosis.

Thyroid cancers, which have a median age of 50 years, are projected to increase by 44% in incidence and 4% in population rate; in contrast, cancers of the bowel and upper gastrointestinal tract, which collectively have a median age of 70 years, are estimated to increase by 79% in incidence and 30% in population rate. Breast cancers, which have a median age of 60 years, are projected to increase by 55% in incidence and 12% in population rate. The projected distribution of cancers is similar to that in 2010 except for breast and bowel cancers; both cancers had similar incidences in 2010, but the incidence of bowel cancers is projected to exceed that of breast cancers by around 15% in 2026.

### Conclusion

The impact of the ageing population on cancer burden will vary across cancers and will be more marked for gastrointestinal cancers and other cancers with typically late ages of onset.

Projected relative increase in crude population rate of Queensland cancers from 2010 to 2026



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