

December 2020

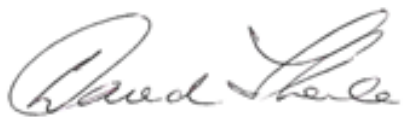
Cancer in Queensland Seniors

A companion report to Cancer in Queensland Seniors: An overview of incidence, mortality, survival and treatment in public and private hospitals 2007 - 2016

Message from the chair

The risk of being diagnosed with cancer increases as we age. In Queensland, as in other Australian States and Territories, will continue to see significant growth in the number of people aged 65+ years (hereafter termed 'seniors'). By 2031, 1 in every 5 Queenslanders will be a senior and it is projected that over 27,100 will be diagnosed with cancer in 2031. The combination of increasing cancer risk and a growing population of seniors, means the number of older people diagnosed with cancer will continue to increase sharply into the future.

This impact report presents a summary of incidence, survival and prevalence of cancer in Queensland seniors. The report additionally includes information on the treatment received and outcomes for colorectal, breast, lung and oesophagogastric cancers. These cancers were selected as they are among the most common diagnosed in the senior population. For further information please see [Cancer in Queensland Seniors 2007-2016](#), which provides a detailed, technical analysis of cancer in Queensland seniors.



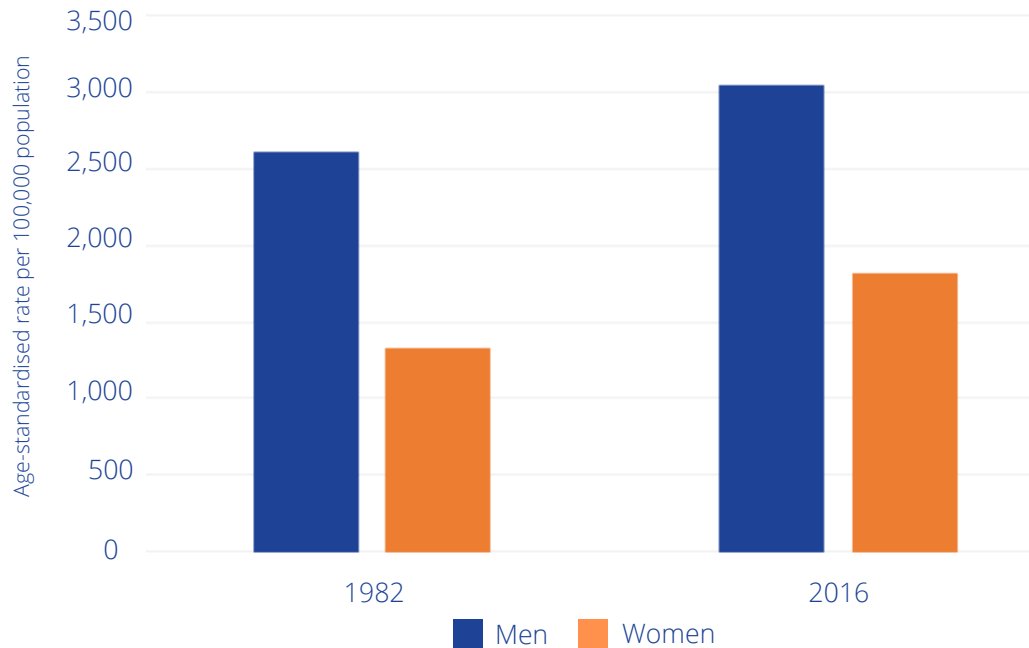
Professor David E Theile AO
Chair Queensland Cancer Control Safety and Quality Partnership
(The Partnership)



Cancer is more common in older age

Approximately 55% of all cancers diagnosed in Queensland and 75% of cancer deaths occur in the seniors age group. Among seniors, men are more likely to be diagnosed with cancer (59%) compared to women. In 2016, the age-standardised rate of cancer for senior men was 3,049 per 100,000 and 1,812 per 100,000 in women. While mortality rates have been declining since about 1996, the actual number of seniors dying from cancer continues to increase due to our ageing population.

From 1982 to 2016, cancer incidence increased by 17% in men and 36% in women



**In Queensland
in 2016**

16,727



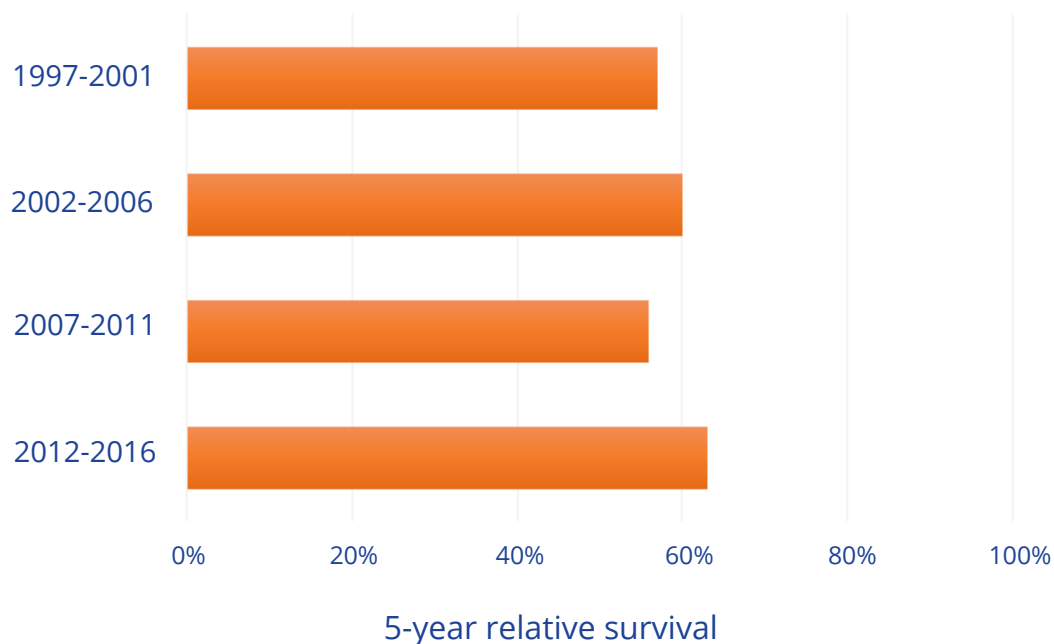
**Queensland seniors
were diagnosed with
cancer, and**

6,875

died due to cancer

Five-year relative survival for seniors has improved over time

The increase in survival in seniors over time is likely the result of improvements in treatments as well as cancers being diagnosed at an earlier stage. Survival does however, vary significantly by cancer type. Cancers of the thyroid, prostate and melanoma have the highest survival. People diagnosed with cancers of the brain, pancreas or liver have the poorest survival.



FIVE-YEAR RELATIVE SURVIVAL* BY CANCER QUEENSLAND, 2012-2016

Cancer Type	2012-2016
Prostate	92%
Melanoma	91%
Endocrine	91%
Breast	89%
Colorectal	68%
Ophthalmic	64%
Haematological	58%
Gynaecological	57%
Urological	57%
Head and neck	55%
Bone and soft tissue	51%
Other invasive cancers	39%
Upper GI	32%
Lung	16%
Hepatobiliary	9%
Mesothelioma	6%
CNS and brain	3%
All cancers	63%

How many seniors are living with cancer?

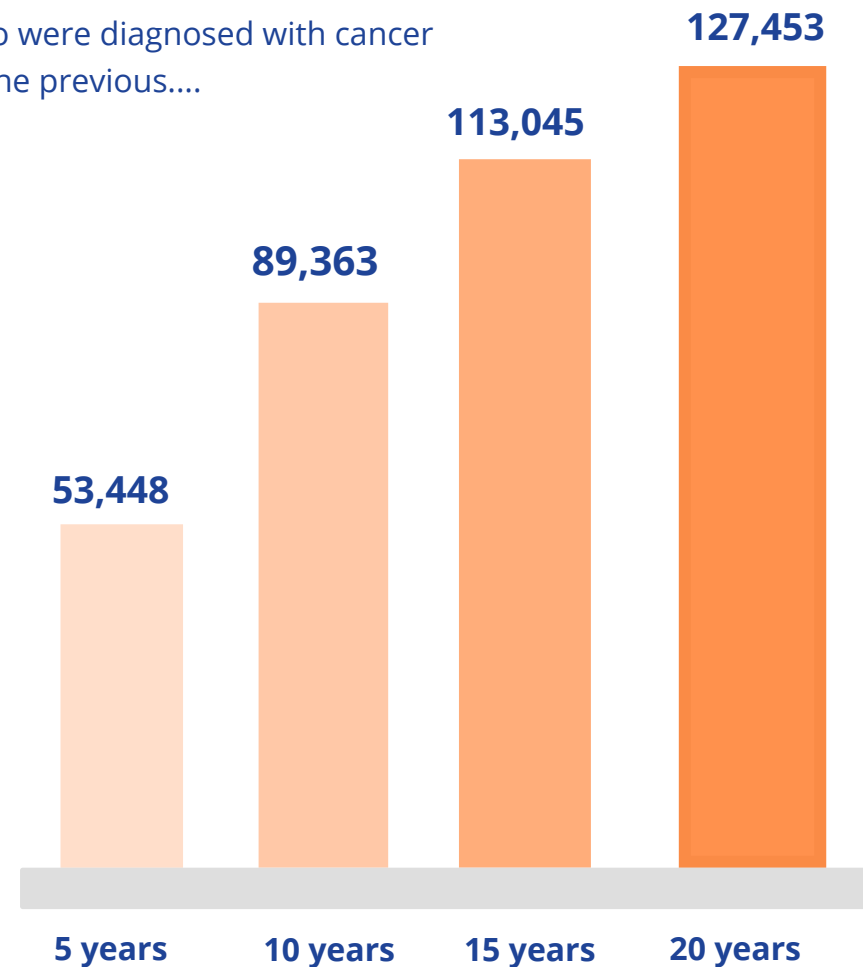
As survival rates continue to improve, the number of people living with a cancer diagnosis will grow. This will place a significant burden on the healthcare system, including ongoing care once cancer treatments are completed.



While large cancer centres are typically located in major cities, regional cancer centres play an important role particularly in a geographically large state such as Queensland.

Provision of clinical and support services as well as palliative care services for the current group of seniors living with a cancer diagnosis, and for those who will be diagnosed in the future, will require careful coordination and ongoing planning.

Number of seniors alive in 2016 who were diagnosed with cancer in the previous....



Treating some of the most common cancers diagnosed in seniors

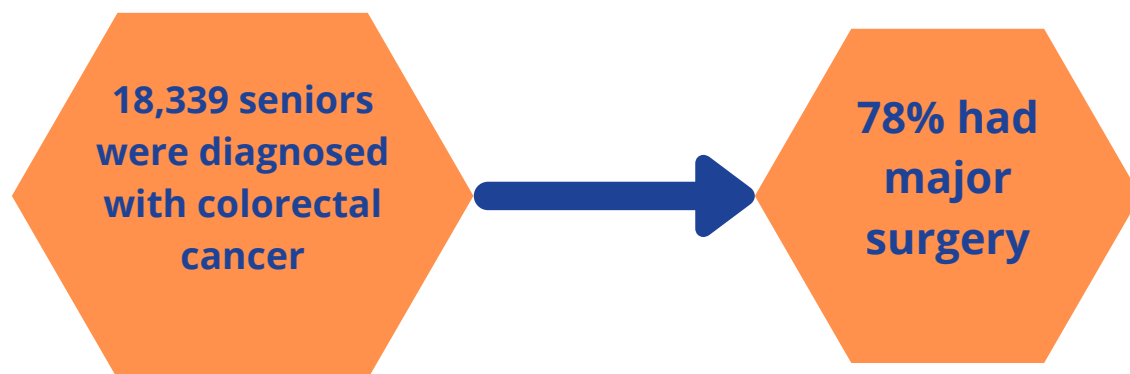


The following pages focus on the treatment given to patients diagnosed with one of four major cancers including colorectal, female breast, lung and oesophagogastric cancers. These cancers are commonly diagnosed in the senior population and surgery plays an important role.

Outcomes such as mortality and survival following surgery are important measures of surgical safety and quality of treatment. These measures help to identify the factors impacting poorer outcomes and can be used to improve patient care.

Treating colorectal cancer in seniors

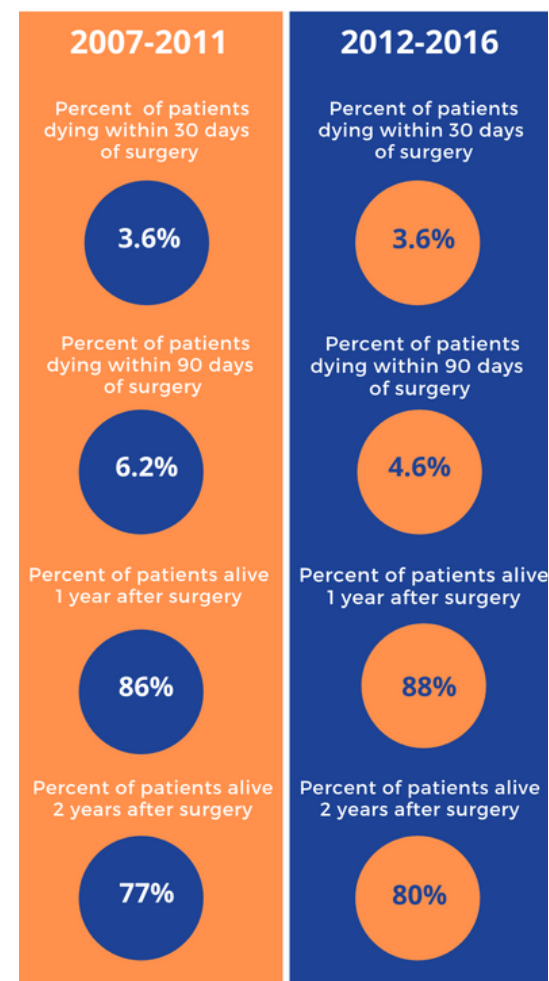
Colorectal cancer is the third most common cancer diagnosed in Queensland seniors and the fourth most common cause of cancer death. From 2007 to 2016.....



Major surgery is the most common treatment for colorectal cancer and can be associated with significant risks. Improvements in surgical procedures along with enhanced care prior to, and after surgery have resulted in better outcomes including a reduction in the number of deaths following surgery and improved survival over time.



Reducing the risk of death following surgery



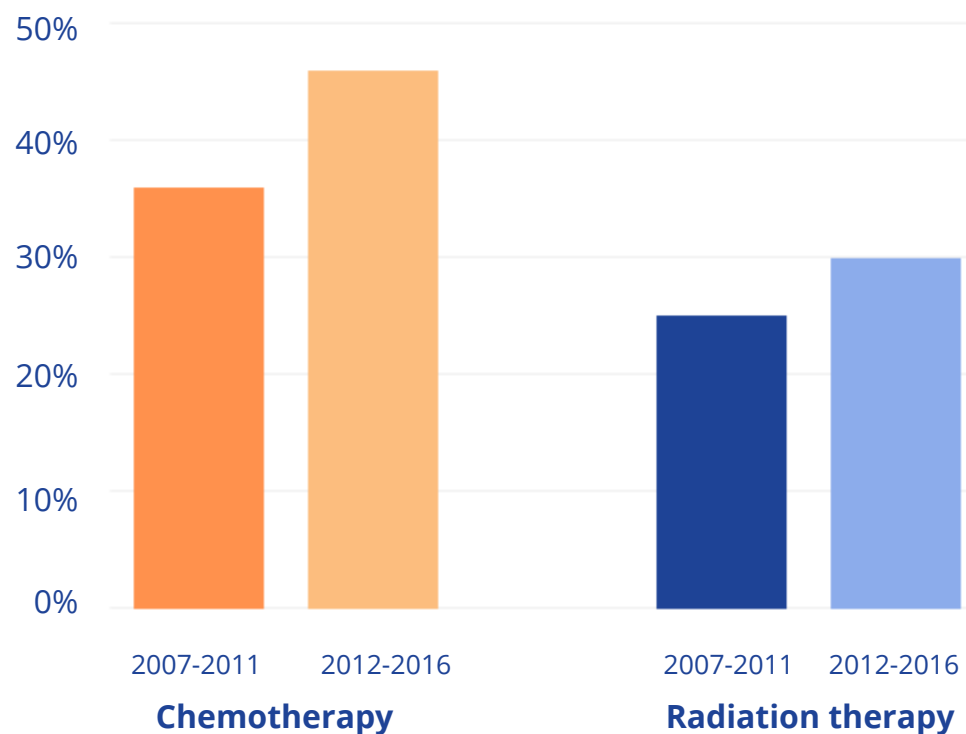
Chemotherapy and radiation therapy for colorectal cancer

Chemotherapy* and radiation therapy may be used before or after surgery or in some cases for palliation.

For example, chemotherapy is recommended for patients with stage 3 colorectal cancer while radiation therapy prior to surgery is recommended for patients with rectal cancer. From 2007 to 2016, the use of chemotherapy increased by 10% and radiation therapy by 5%.

While the increase in treatment rates are relatively small, they may reflect improvements in the management of other chronic conditions often associated with older age. Thus older patients may be able to better tolerate these treatments.

** chemotherapy includes only IV systemic therapy*



Treating breast cancer in senior women

Breast cancer is the most common cancer diagnosed in senior women.

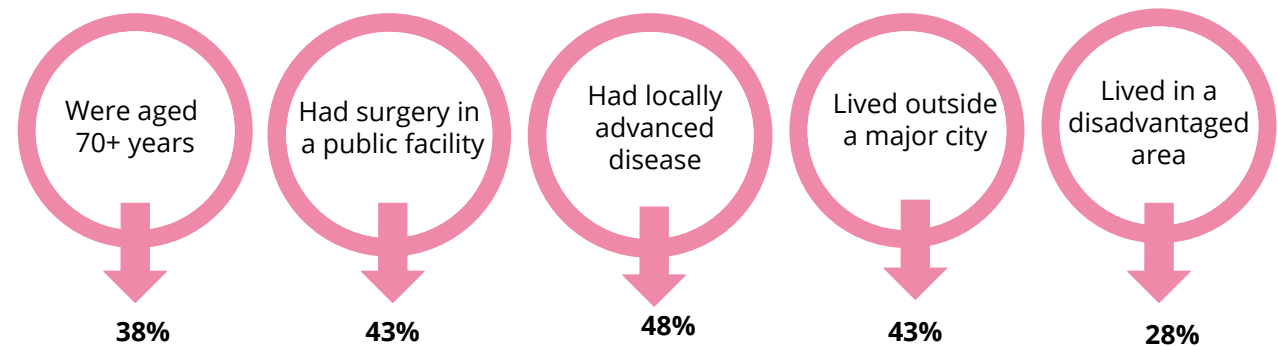
From 2007-2016, 11,650 senior women were diagnosed with breast cancer and 91% received some form of treatment. The vast majority (**86%**) had either mastectomy or breast conserving surgery.



Breast conserving surgery

Breast conserving surgery (BCS) is recommended for women whose breast cancer tumour is 20mm or less. From 2007-2016, 74% of women who had surgery for a tumour 20mm or less received BCS.

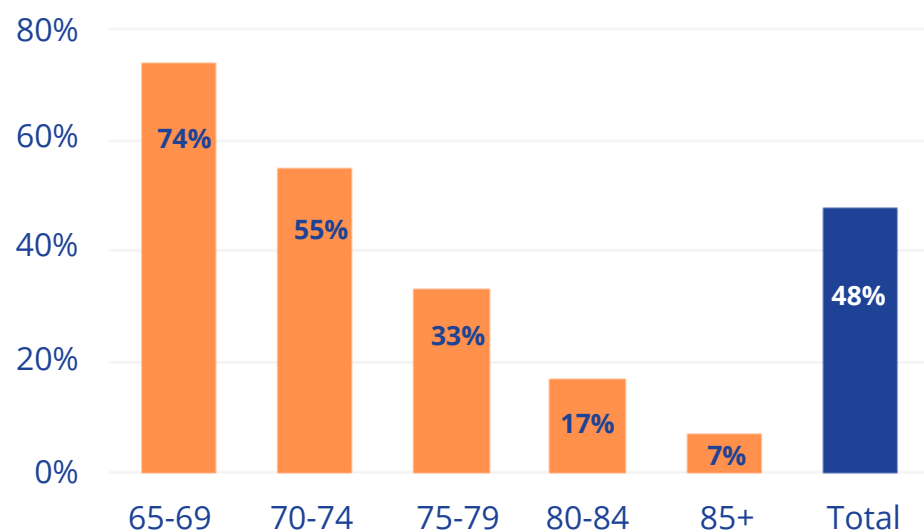
Senior women were less likely to have breast conserving surgery if they...



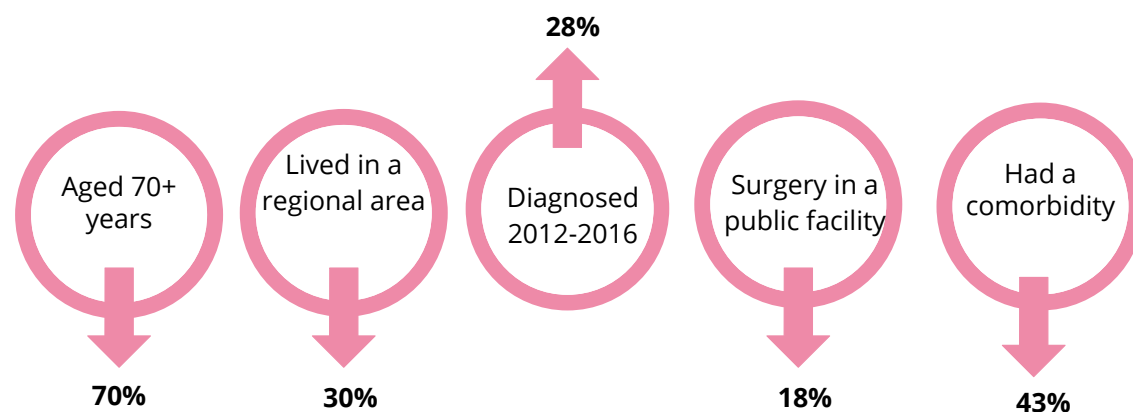
Chemotherapy and radiation therapy for breast cancer

Chemotherapy and/or radiation therapy can be used before or after surgery for breast cancer or can be used for palliation.

About half (48%) of senior women with breast cancer who had positive lymph nodes also received chemotherapy. While this increased by about 10% over time, the likelihood of receiving chemotherapy decreased significantly with increasing age.



Radiation therapy is a recommended treatment following breast conserving surgery. Overall, 85% of women who had breast conserving surgery also received radiation therapy. Several factors either decreased or increased the likelihood of having radiation therapy following breast conserving surgery.

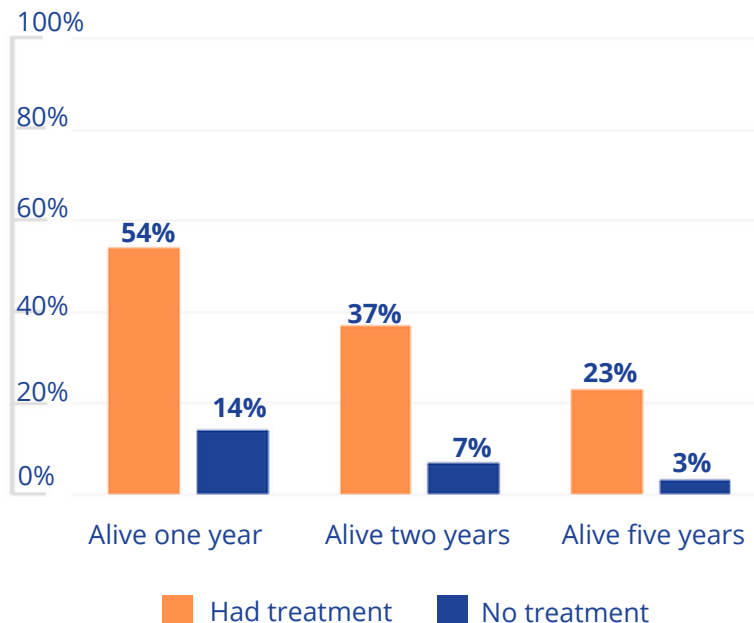


Treating lung cancer in seniors

Lung cancer is the 4th most common cancer in Queensland seniors and the most common cause of cancer death. In 2016, lung cancer accounted for 11% of all cancers diagnosed and 20% of all cancer deaths.

About two-thirds (63%) of lung cancer patients received treatment. This varied according to where a patient lives, being higher for those living in major cities and lower for patients living in rural locations.

Survival rates were significantly lower for patients not receiving treatment, with only 14% alive one year after diagnosis compared to 54% who received treatment.

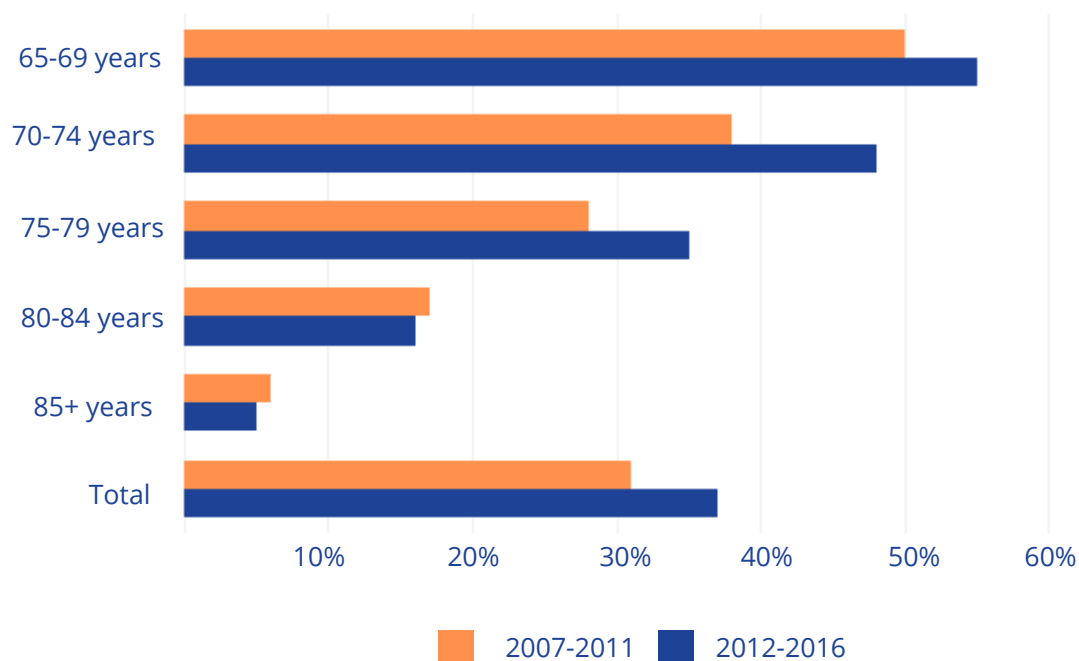


The majority of lung cancers are a type called non-small cell, which when diagnosed at an early stage can be treated with major surgery. These operations often involve removing part or all of the affected lung. From 2007-2016, 18% of seniors diagnosed with non-small cell lung cancer had major surgery.

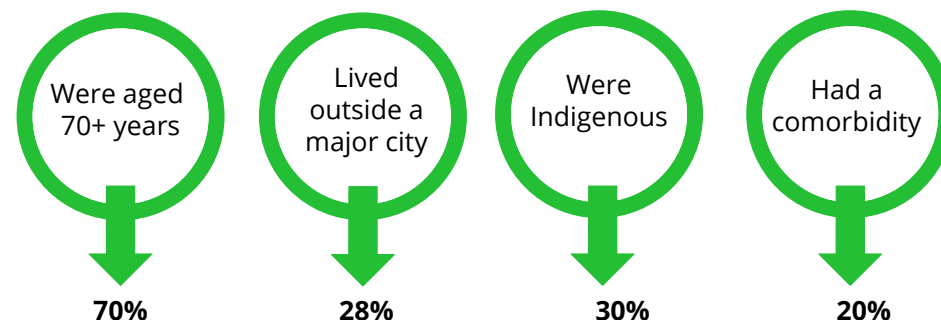


Chemotherapy and radiation therapy for lung cancer

About one-third of all seniors diagnosed with lung cancer received chemotherapy. While the use of chemotherapy increased by about 6% from the earlier to the later time period, its use decreased significantly with increasing age.



Radiation therapy is commonly used for patients with lung cancer and overall, 44% received this treatment. Seniors were less likely to receive radiation therapy if they....



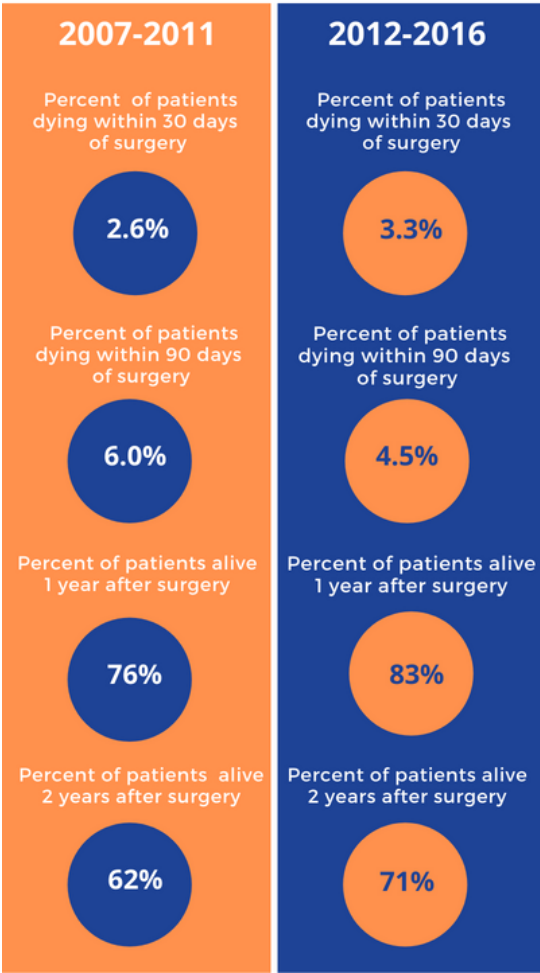
Treating oesophageal and stomach cancer in seniors

From 2007 to 2016, 4,108 Queensland seniors were diagnosed with a cancer of the oesophagus or stomach.

Just under two-thirds (63%) received some type of treatment with treatment rates remaining similar over time.



Reducing the risk of death following surgery

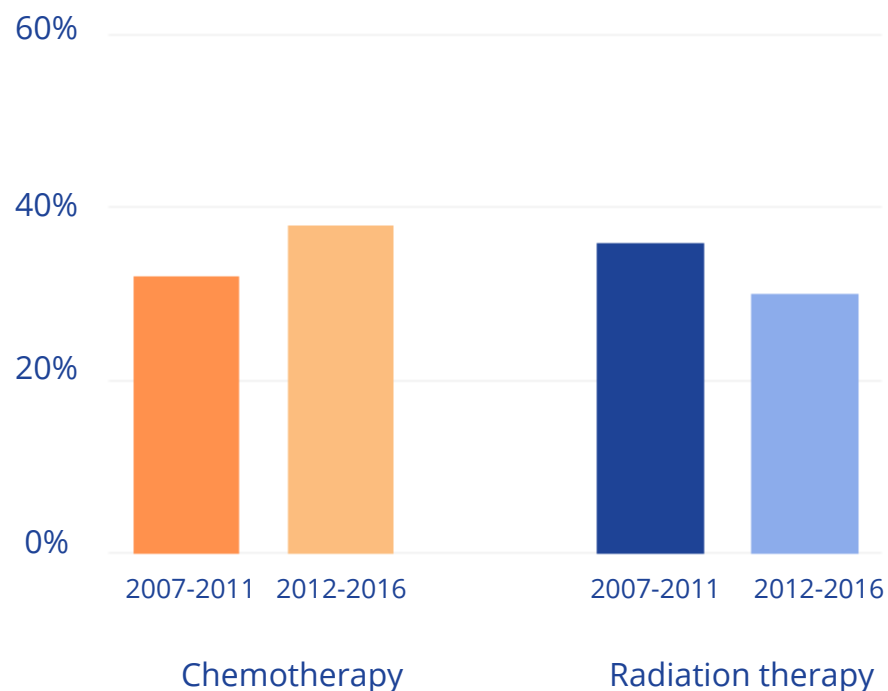


About one-quarter (24%) of seniors underwent major surgery for a cancer of the oesophagus or stomach. These operations are often complex and monitoring outcomes such as mortality and survival following surgery helps to identify where things are going well and areas for improvement.

There have been significant improvements in one and two year survival following surgery.

Chemotherapy and radiation therapy for oesophageal and stomach cancer

About one-third of seniors (34%) diagnosed with a cancer of the oesophagus or stomach received chemotherapy. Chemotherapy rates increased by about 6% over time with the largest increase seen in patients aged 70-74 years.



Several factors may reduce the likelihood a patient will receive chemotherapy and/or radiation therapy. The most common is increasing age.

Age group	Received chemotherapy	Received radiation therapy
65-69	62%	44%
70-74	48%	41%
75-79	31%	35%
80-84	18%	34%
80-84	6%	27%
Total	35%	37%

What does this report tell us?

As we age the risk of developing cancer increases markedly. Over 27,000 Queensland seniors will be diagnosed with cancer in 2031. Providing cancer services whether that be screening for the early signs of cancer, treating cancer, delivering follow-up care or providing palliative care now and into the future will be a challenge for governments, private health care providers and not-for-profit organisations.

Several factors should be considered by healthcare providers, patients and care givers when planning cancer treatment in seniors. These include treatment efficacy, treatment tolerance, the presence of other health conditions as well as options for participation in clinical trials. These factors as well as addressing health worries and psychological distress is important to ensure the best possible outcome for a senior person diagnosed with cancer.



About us

Cancer Alliance Queensland brings together The Queensland Cancer Control Safety and Quality Partnership (The Partnership), Queensland Cancer Control Analysis Team (QCCAT) and the Queensland Cancer Register (QCR).

Cancer Alliance Queensland supports a clinician-led, safety and quality program for cancer across Queensland. As a gazetted Quality Assurance Committee, a key role of The Partnership is to provide cancer clinicians, Hospital and Health Services, hospitals, and treatment facilities with cancer information and tools to deliver the best patient care. Since 2004, QCCAT have compiled and analysed a vast amount of information about cancer incidence, mortality, treatment and survival. This matched and linked data is housed in the Queensland Oncology Repository, which contains approximately 50 million records from 1982-2020.

A note from the team

We hope this impact report gives you some insight into the innovation employed by Cancer Alliance Queensland. Our work spans the continuum of cancer control from diagnosis to multidisciplinary care through to cancer treatment, end of life and survivorship and cuts across that continuum with initiatives to monitor and improve cancer system performance and mobilise evidence to drive service improvements.

For a more detailed version of the report, including definitions of terms and methodology descriptions, go to [Cancer in Queensland Seniors](#)

Should you have any questions about the cancers included in this report, other cancers, or you require support you can contact the Cancer Council Queensland by calling 13 11 20 or visiting their website: <https://cancerqld.org.au/>

Acknowledgements

We gratefully acknowledge past members of The Partnership and individual members of the Queensland Cancer Control Analysis Team who have conceived many of the original ideas and made significant contributions to the Cancer Alliance Queensland program of work.

The Cancer in Queensland Seniors report has been developed under the auspices of the Queensland Cancer Control Safety and Quality Partnership (The Partnership). The report was prepared by Pip Youl, Danica Cossio, John Harrington and Shoni Philpot and the Queensland Cancer Control Analysis Team (QCCAT). We thank Professor David E Theile AO for his guidance throughout the production of this report.

Suggested citation:

Queensland Government. Cancer in Queensland Seniors, 2007-2016. Queensland Health, Brisbane, 2020

Copyright protects this publication. However, the Queensland Government has no objection to this material being reproduced with acknowledgement, except for commercial purposes. Permission to reproduce for commercial purposes should be sought from:

Senior Director

Queensland Cancer Control Analysis Team, Cancer Alliance
Queensland Burke Street Centre, Level 1, B2, 2 Burke St
Woolloongabba QLD 4102

cancerallianceqld.health.qld.gov.au



ISBN: 978-0-9489113-9-5

Date published: December 2020