Prostate cancer quality performance indicator action plan

December 2021

### Acknowledgements

The *Prostate Cancer Quality Performance Indicator Action Plan* (the action plan) follows on from the national *Prostate Cancer Quality Improvement Monitoring Report 2021* (Te Aho o Te Kahu 2021a) (the monitoring report), which was published in September 2021. The monitoring report published district health board (DHB) performance against quality performance indicators (QPIs) using data from the New Zealand Cancer Registry and the Ministry of Health’s national data collections for patients diagnosed with prostate cancer in New Zealand Aotearoa between 1 January 2016 and 31 December 2018.

This action plan is being released by Te Aho o Te Kahu | Cancer Control Agency (Te Aho o Te Kahu), which worked with the national Urological Cancer Working Group (the working group) to identify appropriate actions for both DHBs and Te Aho o Te Kahu based on performance against the QPIs.

The development group acknowledges that each data point reflects an individual or cluster of patients and that each prostate cancer will have significantly affected the patient and their whānau/family. The group acknowledge all of those involved.

For simplicity of language the terms man or men are used throughout this report but should be taken to include all patients with prostate cancer.

Citation: Cancer Control Agency. 2021. *Prostate Cancer Quality Performance Indicator Action Plan*. Wellington: Cancer Control Agency.

Published in December 2021 by the Cancer Control Agency  
PO Box 5013, Wellington 6140, New Zealand

ISBN 978-1-99-110016-0 (online)  
HP 8019



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# Background

## The quality performance indicator programme

Te Aho o Te Kahu | Cancer Control Agency (Te Aho o Te Kahu) has continued the Ministry of Health’s (the Ministry’s) cancer quality performance indicator (QPI) programme, which aims to inform and drive quality improvement for cancer detection, diagnosis and treatment across Aotearoa New Zealand.

The *Prostate Cancer Quality Performance Indicator Action Plan* (the action plan) follows on from the national *Prostate Cancer Quality Improvement Monitoring Report 2021* (Te Aho o Te Kahu 2021a), which was published in September 2021, alongside the *Prostate Cancer Quality Performance Indicator Specifications* (Te Aho o Te Kahu 2021b) and *Prostate Cancer Quality Performance Indicators: Descriptions* (Te Aho o Te Kahu 2021c). These documents can be found on the Reports and Publications webpage of the Te Aho o Te Kahu website at: <https://teaho.govt.nz/reports/publications>.

Te Aho o Te Kahu uses QPIs to inform activity aimed at improving the quality of cancer services and delivering better outcomes for people diagnosed with cancer. The QPIs enable district health boards (DHBs) to compare their performance with that of others and use that comparison to drive their local quality improvement efforts.

The national Urological Cancer Working Group (the working group), which consist of a range of clinical experts who are involved in providing prostate cancer patient care, selected the QPIs. In the selection process, the working group asked the following questions of each potential QPI:

* Does this indicator address an area of clinical importance that could significantly affect the quality and outcome of care delivered for people diagnosed with cancer?
* Will this indicator support our goal of achieving Māori health gain and equity?
* Is there sound evidence and a clear rationale that this indicator can drive quality improvement?
* Can this indicator be measured with data in a national collection?

The potential prostate cancer QPIs were shared with the sector via a consultation document. Once the sector had reviewed and fed back on the selected QPIs and their inclusion had been confirmed, the working group used the Ministry’s national collections data to develop and publish a monitoring report calculating DHB performance against the prostate cancer QPIs.

Following the publication of the monitoring report, in consultation with the working group, Te Aho o Te Kahu produced this action plan. The action plan is intended to guide DHBS and hospitals by providing high-level examples of actions that DHBs and hospitals could take to better understand and improve the quality of their cancer treatment and/or standardise their performance against that of others.

From here, Te Aho o Te Kahu, via its regional hubs, uses the monitoring report and action plan to work with the sector to address areas where there is unwarranted variation between DHBs. The regional hubs support DHBs to develop and implement local quality improvement plans, setting out actions appropriate to the local context and priorities.

The working group will adjust future iterations of the monitoring report and action plan to reflect the health and disability sector reforms, which were announced in mid-2021 and will be implemented from 2022 onwards.

## Development process

The Ministry’s Cancer Services team (the functions of which were transferred to Te Aho o Te Kahu on 3 December 2019) and the national Urological Cancer Working Group (the working group) worked together to develop 15 potential QPIs for prostate cancer. Appendix B lists the members of the working group. The 15 potential QPIs were consulted on in May 2019, and the potential list was reduced to 13 following feedback. Of the 13 potential QPIs for prostate cancer, five were able to be calculated using the Ministry’s national collections data. The five QPIs were calculated, and a draft prostate cancer QPI monitoring report was shared with DHBs in March 2021.

In April 2021, the Lung and Prostate QPI Forum was held in Wellington. The forum was attended by over 80 clinicians or experts in lung and/or prostate cancer. Following the forum, Te Aho o Te Kahu and the working group worked together to refine the monitoring report, based on feedback received at and after the forum.

In September 2021, Te Aho o Te Kahu published the final version of the *Prostate Cancer Quality Improvement Monitoring Report 2021* (the monitoring report) (Te Aho o Te Kahu 2021a). Te Aho o Te Kahu then developed this action plan, using the feedback provided by the working group on the monitoring report.

This action plan provides examples of actions that DHBs, hospitals or Te Aho o Te Kahu could take to improve performance against the five QPIs that were identified within the monitoring report. The five QPIs are:

* routes to diagnosis
* discussion with radiation oncologist before radical prostatectomy
* equitable access to treatment
* length of stay after surgery
* medical oncology review of patients with advanced disease.

The primary audience for this action plan is DHBs, hospitals delivering cancer services, people who deliver care to men with prostate cancer and people who manage health care service delivery generally. The plan will also support Te Aho o Te Kahu in developing and prioritising its own work programme.

We expect that DHBs will review their performance against the monitoring report and, where there is unwarranted variation from other DHBs, use this plan to develop actions to improve their performance and patient outcomes.

Please note that the Ministry, rather than Te Aho o Te Kahu, manages the palliative care/ end-of-life choice work programme as this work programme extends beyond cancer-related palliative care. Therefore, this action plan does not cover palliative care.

## How to use this document

This action plan should be read in conjunction with the monitoring report*.* DHBs should review the monitoring report to identify where their performance is significantly different to that of other DHBs and apply quality improvement principles to plan for and implement improvement projects in those areas.

The ‘recommended actions’ set out in this plan are intended as a guide to the types of actions DHBs or hospitals could take to improve their performance. DHBs and hospitals should develop and implement local quality improvement plans with actions appropriate to their local context and priorities.

The Cancer Care Data Explorer is an interactive tool that allows users to explore the quality of care and outcomes for New Zealanders diagnosed with cancer. It provides baseline data by cancer group and DHB. The tool is available on the Te Aho o Te Kahu website,[[1]](#footnote-1) and DHBs can use it to help them understand the needs of their population in regard to the prostate QPIs described in the monitoring report.

We note that some DHBs and hospitals are already undertaking quality improvement work, and the recommendations in this action plan do not preclude additional actions or the DHBs and hospitals continuing to follow existing effective quality improvement activities.

# Prostate Cancer Quality Performance Indicators

## Routes to diagnosis

### Indicator description

Proportion of men with prostate cancer who are diagnosed following presentation to an emergency department (ED).

### Statement of intent

The majority of men with prostate cancer should be diagnosed through an established elective referral pathway.

### Context

Men diagnosed with prostate cancer following presentation to an ED are more likely to have advanced disease. In most cases, men experience a long period of symptoms before they seek acute/emergency medical attention. Earlier detection of symptomatic prostate cancer, particularly in the primary health care setting, can lead to better outcomes, including better survival and lower risk of complications.

### Key findings from the monitoring report

This data was presented nationally rather than by DHB. Overall, a relatively low proportion of men (6 percent) were diagnosed with prostate cancer following a presentation to an ED. This was similar to ED presentation rates for prostate cancer in the United Kingdom (7 percent).

This indicator showed variation by ethnicity and age. Māori (8 percent) and Pacific peoples (10 percent) were more likely to be diagnosed following an ED presentation compared with New Zealand European/Other ethnicity (5 percent). Men aged 75 years and over were more likely to have their prostate cancer diagnosed following an ED presentation than other age groups (17 percent of men aged 75 years and over compared with 5 percent or less of men in younger age groups).

### Recommended actions

#### Te Aho o Te Kahu | Cancer Control Agency

* + - 1. Continue to review diagnosis of prostate cancer following ED presentation, including inequities in the proportion of patients presenting to ED, and report to DHBs every two years as part of the QPI programme.
      2. Consider establishing a primary health care advisory group to Te Aho o Te Kahu, with the purpose of providing advice on the factors occurring at the primary health care level that support or act as barriers to the early diagnosis of cancer, including prostate cancer. This might cover pre-diagnosis and referral measures, as well as post-diagnosis primary health care management and support.
      3. Follow up with DHBs regarding the accuracy and quality of DHB-level data.

#### DHBs/hospitals delivering cancer services

* + - 1. Encourage and support primary health care providers to undertake prostate-specific antigen (PSA) testing and digital rectal examination of men who have lower urinary tract symptoms or symptoms of metastatic disease.
      2. Encourage and promote the use of educational resources to primary health care providers and priority populations.
      3. Review referral pathways to identify unwarranted variation or delays in the referral process. This may include consideration of the processes for direct referral from primary health care and a review of patients who have been diagnosed following acute presentation to identify barriers that may have prevented earlier diagnosis.
      4. Where potential improvements to the referral pathways are identified, develop and implement a service improvement plan.

## Discussion with radiation oncologist before radical prostatectomy

### Indicator description

Proportion of men with prostate cancer being considered for radical prostatectomy who see a radiation oncologist before treatment, including remote consultations.

### Statement of intent

The majority of men with prostate cancer being considered for radical prostatectomy should consult with a radiation oncologist before treatment, including through remote consultations, if necessary, so they can make well-informed decisions about their treatment options.

### Context

Patient-centred care and informed decision-making are essential components of best-practice cancer care. Men with prostate cancer should discuss their treatment options with the relevant treatment specialist(s). They should receive comprehensive and personalised information that empowers them to make well-informed decisions about their preferred type of treatment. The presentation of information about a patient with prostate cancer for review at a multidisciplinary meeting (MDM) is not a substitute for such one-on-one discussions between the patient and a radiation oncologist.

### Key findings from the monitoring report

A low proportion of men (19 percent) were reported to have consulted with a radiation oncologist before receiving radical prostatectomy. There was wide variation between DHBs (ranging from 3 to almost 46 percent). There was also variation by ethnic group and age. For example, 16 percent of Māori met with a radiation oncologist compared with 19 percent of European/Other. Men with prostate cancer aged between 50 and 59 years and those over 75 years were less likely to see a radiation oncologist compared with those in all other age groups (14 percent for both age groups compared with  
17–26 percent for other age groups).

### Recommended actions

#### Te Aho o Te Kahu

* + - 1. Continue to monitor the proportion of men with prostate cancer who had a discussion with radiation oncologist before radical prostatectomy and report to DHBs every two years as part of the QPI programme.

#### DHBs/hospitals delivering cancer services

* + - 1. Consider implementing standardised referral pathways for all men with prostate cancer who are considering radical treatment to ensure that all people being considered for radical prostatectomy have access to a radiation oncology consultation.
      2. Ensure equitable access to well-timed radiation oncology consultation, including remote consultations, particularly for men with prostate cancer who live in smaller centres and rural areas.
      3. Ensure men receive evidence-based and personalised information about their treatment options from the relevant treatment specialist (for example, a radiation oncologist for radiation treatment or a urologist who performs radical prostatectomy).
      4. DHBs that have a lower percentage of men with prostate cancer meeting with a radiation oncologist before radical prostatectomy should investigate the drivers of variance within their DHB and develop a quality improvement programme accordingly.

## Equitable access to treatment

### Indicator description

Proportion of men treated with:

a) radical surgery

b) curative radiation treatment

c) radical surgery and curative radiation treatment.

### Statement of intent

Men with prostate cancer should receive treatment that is appropriate to their risk group, life expectancy and lifestyle.

### Context

Not every person with prostate cancer needs to be treated right away. Men with low-risk prostate cancer are usually best managed with active surveillance. However, many factors need to be considered before deciding the most appropriate intervention, including the extent and grade of tumour and the patient’s age, expected life span and any other serious health conditions. It is also important to consider the likelihood of the treatment curing the cancer (or helping in some other way), the impact that possible side effects may have on the patient, as well as the opinion of the relevant treatment specialist(s).

### Key findings from the monitoring report

Overall, 30 percent of men with prostate cancer had some form of radical treatment, and this rate varied widely between DHBs (ranging from 16 to 44 percent).

The proportion of men who had radical surgery ranged from 9 percent to 26 percent across DHBs. The proportion of those discharged three or more days after surgery varied widely across DHBs, ranging from 12 percent to 100 percent.

Curative radiation treatment varied widely across DHBs, ranging from 4 percent to almost 21 percent of patients.

Māori were more likely to receive publicly funded curative treatment (37 percent) compared with European/Other men (27 percent), which may be related to the provision of private oncology treatment.

### Recommended actions

#### Te Aho o Te Kahu | Cancer Control Agency

* + - 1. Continue to monitor the proportion of men with prostate cancer who received radical treatment (surgery or radiation treatment) and report to DHBs every two years as part of the QPI programme.
      2. Determine whether there is a need for nationally consistent clinical management guidelines for patients with prostate cancer, which may include the development of standardised selection criteria for active surveillance, radical treatment and watch and wait. Examine the work being undertaken in other countries that has proved successful and could be adapted appropriately for the Aotearoa New Zealand health system.
      3. Continue to work towards integrating private sector data in order to provide a more complete picture of the access to prostate cancer treatment in Aotearoa New Zealand.

#### DHBs/hospitals delivering cancer services

* + - 1. Ensure equitable access to well-timed urology services and radiation oncology consultation, including remote consultations.
      2. DHBs that are identified as outliers should investigate the drivers of variance within their DHB, consider how access to curative treatment for men with prostate cancer can be optimised and develop a quality improvement plan accordingly.

## Length of stay after surgery

### Indicator description

A. Proportion of men with prostate cancer discharged more than two days after radical prostatectomy.

B. Proportion of men with prostate cancer discharged five or more days after radical prostatectomy.

### Statement of intent

The majority of men with prostate cancer who have a radical prostatectomy should be discharged from hospital within three days after surgery.

### Context

Length of stay in hospital following surgery is an indicator of health service efficiency and an important indicator for treatment quality when it comes to faster recovery and fewer complications.

### Key findings from the monitoring report

More than half of all men with prostate cancer (57 percent) were discharged less than three days after surgery for their cancer. The proportion of those discharged three or more days after surgery varied widely across DHBs, ranging from 12 percent to 100 percent.

Older men stayed longer after surgery compared with those in other age groups.

The median length of stay after surgical resection for prostate cancer decreased from three days in 2016 to two days in 2018.

### Recommended actions

#### Te Aho o Te Kahu | Cancer Control Agency

* + - 1. Continue to monitor the proportion of men with prostate cancer who are discharged three or more days after surgery and report to DHBs every two years as part of the QPI programme.

#### DHBs/hospitals delivering cancer services

* + - 1. Investigate length of stay results to identify factors that drive variations between DHBs to improve processes and supports in place for men with prostate cancer who are undergoing surgery.

## Medical oncology review of patients with advanced disease

### Indicator description

Proportion of men with advanced prostate cancer who see a medical oncologist.

### Statement of intent

The majority of men with newly diagnosed castrate sensitive metastatic prostate cancer should consult with a medical oncologist about receiving systemic treatment in addition to androgen deprivation (hormone) therapy.

### Context

International studies have shown that men with advanced (metastatic) prostate cancer who receive chemotherapy when starting hormone therapy have increased survival rates. So, it is expected that all men with advanced disease should see a medical oncologist within two months of starting androgen deprivation (hormone) therapy.

This indicator provides a measure of referral to medical oncology. Currently, national data collections do not have enough detail to allow us to accurately identify the start date for androgen deprivation therapy or consistently identify men who have metastatic prostate cancer. Therefore, we used a proxy cohort of men who subsequently died of prostate cancer as the denominator to estimate this indicator.

### Key findings from the monitoring report

Overall, 38 percent of men had had a first specialist appointment with a medical oncologist (24.7 percent in the two years before death and 14 percent more than two years before death).

Older men were less likely to see a medical oncologist, and variation between DHBs ranged from 18 to 57 percent.

Some of this variation can be attributed to private chemotherapy provision. Te Aho o Te Kahu will continue to work towards integrating private sector data in order to provide a more complete picture of the access to prostate cancer treatment in Aotearoa New Zealand. In addition, the Anti-Cancer Treatment – Nationally Organised Workstreams (ACT-NOW) programme will contribute to ensuring the completeness of medical oncology data. More information about the ACT-NOW programme can be found on the website of Te Aho o Te Kahu at: <https://teaho.govt.nz/about/our-work/act-now-programme>.

### Recommended actions

#### Te Aho o Te Kahu | Cancer Control Agency

* + - 1. Continue to monitor the proportion of men who see a medical oncologist two years or more before death from prostate cancer and report to DHBs every two years as part of the QPI programme.

#### DHBs/hospitals delivering cancer services

* + - 1. Ensure appropriate, up-to-date evidence-based practices are followed with regard to chemotherapy for prostate cancer patients.
      2. Establish and improve referral pathways to ensure men with metastatic castrate-sensitive prostate cancer have access to medical oncology.
      3. Ensure men receive evidence-based and personalised information about their treatment options from the relevant treatment specialist(s).
      4. DHBs that have a lower proportion of men attending a first specialist appointment with a medical oncologist within two or more years before death from prostate cancer should investigate further to better understand the variance and develop a quality improvement programme where appropriate.

# Appendices

## Appendix A: References

Te Aho o Te Kahu. 2021a. *Prostate Cancer Quality Improvement Monitoring Report 2021*. Wellington: Te Aho o Te Kahu. URL: <https://teaho.govt.nz/reports/publications>(accessed 11 November 2021).

Te Aho o Te Kahu. 2021b. *Prostate Cancer Quality Performance Indicator Specifications*. Wellington: Te Aho o Te Kahu. URL: <https://teaho.govt.nz/reports/publications>(accessed 11 November 2021).

Te Aho o Te Kahu. 2021c. *Prostate Cancer Quality Performance Indicators: Descriptions 2021.* Wellington: Te Aho o Te Kahu. URL: <https://teaho.govt.nz/reports/publications> (accessed 11 November 2021).

## Appendix B: Working group members

The national Urological Cancer Working Group comprises:

### Chair

Andrew Williams, Urologist, Auckland District Health Board and Auckland Regional Cancer and Blood Services

### Deputy Chair

Suzanne Beuker, Urologist, Nelson Marlborough District Health Board

### Members

Emma Drake, Cancer Nurse Specialist, Southern District Health Board

Peter Fong, Medical Oncologist, Auckland District Health Board and Auckland Regional Cancer and Blood Services

Jason Gurney, Senior Research Fellow and Director, Cancer and Chronic Conditions (C3) Research Group, University of Otago

Tui Hancock, Whanau Ora Nurse Practitioner, Central Primary Health Organisation

Sharon Harber, Cancer Nurse Specialist, South Canterbury District Health Board

Quinten King, Urologist, MidCentral District Health Board

Madhu Koya, Consultant Urologist, Waitematā District Health Board

Remy Lim, Consultant Radiologist, Auckland District Health Board

Rob Macfarlane, Consumer

Stephen Mark, Urologist, Canterbury District Health Board

John Matthews, Consultant Radiation Oncologist, Auckland District Health Board and Auckland Regional Cancer and Blood Services

Sarah Mortimer, Operations Manager, Blood, Cancer, Renal and Palliative Care, Capital & Coast District Health Board

Tiffany Schwass, Cancer Nurse Specialist, Waikato District Health Board

Alvin Tan, Medical Oncologist, Waikato District Health Board

Simon van Rij, Urologist, Auckland District Health Board

Jonathan Zwi, Pathologist, Auckland District Health Board

## Appendix C: Prostate Cancer Quality Performance Indicators

The table below lists the 13 potential prostate cancer quality performance indicators (PCQPIs); only five of the 13 were able to be calculated using national collection data and DHB performance against these five is presented in the monitoring report. Further information on all 13 prostate cancer QPIs can be found in *Prostate Cancer Quality Performance Indicators: Descriptions* (Te Aho o Te Kahu 2021c).

| **Indicator title** | **Indicator description** | **Calculated in monitoring report** |
| --- | --- | --- |
| PCQI 1. Route to diagnosis | Proportion of men with prostate cancer who are diagnosed following presentation to an emergency department | Yes |
| PCQI 2. Risk group assigned at diagnosis | A. Proportion of men with prostate cancer with risk group assigned at diagnosis  B. Proportion of men with prostate cancer with TNM stage documented on the NZCR | No |
| PCQI 3. MRI prior to radical treatment | Proportion of men with prostate cancer undergoing an MRI prior to radical treatment | No |
| PCQI 4. PSMA scan | A. Proportion of men with high-risk prostate cancer having a PSMA PET/CT scan as part of staging before radical treatment  B. Proportion of men who have a pre-salvage PSMA PET/CT scan before being treated with postoperative/ salvage prostate bed radiation | No |
| PCQI 5. Discussion with radiation oncologist before radical prostatectomy | Proportion of men with prostate cancer being considered for radical prostatectomy who see a radiation oncologist before treatment, including remote consultations | Yes |
| PCQI 6. Medical oncology review of patients with advanced disease | Proportion of men with advanced prostate cancer who see a medical oncologist | Yes |
| PCQI 7. Surgical margin status of pT2 stage disease | Positive surgical margin rates for pT2 stage disease | No |
| PCQI 8. Length of stay after surgery | A. Proportion of men with prostate cancer discharged more than two days after radical prostatectomy  B. Proportion of men with prostate cancer discharged five or more days after radical prostatectomy | Yes |
| PCQI 9. Equitable access to treatment | Proportion of men treated with radical surgery, curative radiation treatment and either radical surgery or curative radiation treatment | Yes |
| PCQI 10. Timeliness of treatment pathway | A. Time from receipt of referral to first specialist appointment (FSA)  B. Time from receipt of referral to diagnosis  C. Time from decision to treat to first treatment | No |
| PCQI 11. Quality of life | Proportion of men whose mental and/or physical quality of life is significantly affected after (radical) treatment  Measure of men’s functional outcome by assessing proportion of men in each EPIC category: urinary incontinence, urinary irritation, urinary obstruction, bowel habits, sexual function and hormonal function | No |
| PCQI 12. Progression-free survival | Proportion of men enrolled in active surveillance, or having undergone radiation treatment or radical prostatectomy, who show no objective evidence of biochemical disease progression at 2, 5 and 10 years after treatment | No |
| PCQI 13. Overall survival | Overall survival for men with prostate cancer at 1, 3, 5 and 10 years from diagnosis by stage | No |

1. See: <https://minhealthnz.shinyapps.io/cancer-care-data-explorer/_w_c2918fca/#!/>. [↑](#footnote-ref-1)