# Proposed prostate cancer quality performance indicators

# FOR CLINICAL REVIEW

**Kia ora koutou**

**We are seeking your clinical review of proposed quality performance indicators for prostate cancer.**

The Ministry and the National Urological Cancer Working Group (the Working Group) have worked together to develop a set of proposed quality performance indicators (QPIs) for prostate cancer.

The proposed indicators have been selected to measure performance and drive quality improvement in prostate cancer diagnosis and treatment services. The Working Group has identified a set of 15 QPIs that measure the quality of care and outcomes for men with prostate cancer in New Zealand and support continuous quality improvement in prostate cancer care.

The indicators are not limited to those that can be measured using currently available data in national collections. Areas where data quality improvement is required (eg, stage, grade of cancer) will be identified as part of the project.

**What feedback are we seeking?**

We are providing an opportunity for all clinicians involved in prostate cancer services to provide feedback on this set of 15 prostate cancer specific indicators. In particular, we would like to know;

* if you think these indicators are useful measures that can drive quality improvement for services provided to people diagnosed and treated for prostate cancer in New Zealand
* if you have any feedback on the QPI descriptions and/or data specifications.

**Who are we seeking feedback from?**

Primarily we are seeking feedback from clinicians who provide cancer diagnosis and treatment services for people with prostate cancer in New Zealand. Other DHB staff may also wish to comment on the indicators.

We expect clinicians will assess the indicators in areas that relate to their specialist knowledge. A clinician may review as many indicators as they wish.

You can provide feedback via the Ministry of Health consultation hub using the following link,

https://consult.health.govt.nz/cancer-services/prostate-cancer-qpis

You can also send your feedback, comments and any queries about the indicator development process to Joyce\_Brown@moh.govt.nz.

**When do we need feedback by?**

Please complete your review of the indicators and submit any other feedback by **Friday 7 June 2019.**

**What is the prostate cancer quality performance indicator project about?**

High quality cancer care in New Zealand requires a nationally consistent, coordinated approach that advances equity and is structured to enable DHBs to deliver quality improvement.

Addressing variation in the quality of cancer services is pivotal to delivering quality improvements. This is best achieved if there is consensus and clear indicators for what good cancer care looks like. Developing QPIs to quantitatively measure processes and outcomes is an internationally accepted approach to driving quality improvement in cancer care.

National tumour specific QPIs are being developed by the Ministry in partnership with sector led working groups. Key principles of the process are clinical engagement, consultation and consensus.

QPIs selected are:

* evidence-based (ie, supported by sound, current evidence that the indicator can drive quality improvement)
* important (ie, address an area of clinical importance that could significantly impact on the quality and outcome of care delivered)
* supportive of the goals of achieving Māori health gain, equity and national consistency.

The first set of QPIs have been developed for the diagnosis and treatment of bowel cancer and the Bowel Cancer Quality Improvement Report was published in March 2019.

[*https://www.health.govt.nz/publication/bowel-cancer-quality-improvement-report-2019*](https://www.health.govt.nz/publication/bowel-cancer-quality-improvement-report-2019)

**How did we come up with these indicators?**

The development process for prostate cancer QPIs is aligned with that used to develop an agreed set of QPIs for the diagnosis and treatment of bowel cancer.

The Working Group reviewed a ‘long list’ with more than 200 prostate cancer indicators published and/or utilised internationally. The group considered which indicators are most valuable to drive quality improvements for prostate cancer care in New Zealand, and short listed 22 indicators. This short list was carried forward for further discussion and initial assessment of measurability of data items required for each indicator.

From the short list of 22 indicators and after further discussion, a set of nine QPIs (and stratifying variables) were endorsed by the Working Group for further development. This set was further expanded with the addition of six indicators that the National Bowel Cancer Working Group developed and identified as being applicable to multiple tumour streams.

QPI descriptions were developed by the Working Group clinicians and at their meeting on 25 March 2019, the proposed QPIs descriptions were reviewed and agreed as the final set of proposed QPIs that would be sent out for clinical consultation

This resulted in a list of 15 indicators presented in this document for clinical review and feedback

**What will happen next?**

Your feedback will be presented and considered at the next Working Group meeting on 17 June 2019 and a final set of QPIs will be agreed to develop further. The next phase of the project is to assess whether data is available in national collections to develop and report the QPIs. Where data is not available, we will work with our clinical advisory groups and other groups within the Ministry to identify the best source and method to collect this data. We will also develop the reporting requirements for each indicator.

The stratifying variables and brief descriptions of the national data sources are listed in **Appendix 1** (page 26)**.**

## Indicator 1 Routes to diagnosis

|  |  |
| --- | --- |
| **Good Practice Point** | Patients should be diagnosed prior to the development of symptoms or acute complication of prostate cancer. |
| **Indicator description:** | Proportion of men with prostate cancer who are diagnosed following a referral to a clinic or presentation to an emergency department (with or without surgery). |
|  |  |
| **Rationale and evidence:** | One-year survival is lower for men whose pathway to cancer diagnosis started with an urgent referral or a presentation to the Emergency Department.33 If significant variation in patterns of presentation are found, then this will allow targeted quality improvement programmes to address this variation. |
| **Equity / Māori health gain:** | Māori patients were more likely to be diagnosed following a presentation to an emergency department or urgent referral (13%) than non-Māori (9%) 40. Therefore, identifying DHBs with high emergency presentation rates may allow targeted education for men, their whanau, and general practitioners in those areas.7, 33, 69, 92 |
| **Specifications:** |  |
|  | **Numerator a:** | Number of men with prostate cancer whose diagnosis followed an elective presentation. |
|  | **Numerator b:** | Number of men with prostate cancer whose diagnosis followed an emergency presentation. |
|  | **Denominator:** | Number of all men with prostate cancer. |
| **Data sources:** | NZCR, NMDS *(refer to appendix 1 to for data source descriptions)* |

**References:**

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69. Mahal, B.A., et al., *Racial disparities in prostate cancer outcome among prostate-specific antigen screening eligible populations in the United States.* Ann Oncol, 2017. **28**(5): p. 1098-1104.

92. Obertová Z, L.R., Scott N, Holmes M, Brown C, Lao C, Tyrie L, Gilling P, *Treatment modalities for Māori and New Zealand European men with localised prostate cancer.* International Journal of Clinical Oncology, 2015. **20**(4): p. 814–820.

## Indicator 2 PSA at diagnosis

|  |  |
| --- | --- |
| **Good practice point:** | Prostate Cancer should be diagnosed early to optimise patient outcomes and reduce morbidity. |
| **Indicator description:** | PSA level at time of diagnosis of prostate cancer. |
|  |  |
| **Rationale and evidence:** | Prostate cancer is only curable at its earlier stages, metastatic prostate cancer is rarely curable. PSA level is a surrogate for risk of metastatic disease risk7. Lower PSA levels at diagnosis therefore indicates prostate cancer at a more curable stage49, 69. This indicator will provide visibility of presentation patterns across different regions and ethnic groups.  |
| **Equity / Māori health gain:** | Identification of risk impacts is required to be measured and assessed nationally92. Data is suggestive of later presentation in Māori patients with prostate cancer and this needs confirmation nationally109. |
| **Specifications:** |  |
| **Numerator:** | Number of men with prostate cancer *and*1. PSA < 4
2. PSA 4 to < 10
3. PSA 10 to < 20
4. PSA 20 to < 100
5. PSA ≥ 100
 |
| **Denominator:** | Number of men with prostate cancer. |
| **Data sources** | PCOR |

**References:**

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## Indicator 3 Stage at Diagnosis

|  |  |
| --- | --- |
| **Good practice point:** | Documentation of TNM stage in the medical record. |
| **Indicator description:** | Proportion of men with prostate cancer by stage at diagnosis. |
|  |  |
| **Rationale and evidence:** | Stage at diagnosis is one of three components to enable risk stratification for prostate cancer patients24, 71, 86, 87. People who are diagnosed when their cancer is at an early stage and of low risk have significantly improved survival outcomes25.The clinical stage provides the best initial estimate of the extent of disease. The clinical stage is based on the results of the physical examination including digital rectal examination (DRE), biochemical tests, prostate biopsy, and any imaging tests. Stage is a critical element in determining appropriate treatment9, 79. Opportunistic prostate cancer screening varies by ethnicity and locality7, 69, 115 |
| **Equity / Māori health gain:** | Māori patients appear to present with more advanced disease92, 109, clear assessment of this pattern is required on a national level. |
| **Specifications:** |  |
| **Numerator:** | Number of men with prostate cancer in each overall stage group. |
| **Denominator:** | Number of men with prostate cancer. |
| **Data sources:** | NZCR, PCOR |

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## Indicator 4 MRI during diagnostic phase

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| --- | --- |
| **Good practice point:** | Men receive an MRI in the diagnostic and staging phase of prostate cancer. |
| **Indicator description:** | Proportion of men with prostate cancer receiving an MRI prior to treatment. |
|  |  |
| **Rationale and evidence:** | Multi-parametric MRI is provided to men, if knowledge of the T or N stage could affect management. Pre-biopsy MRI may reduce biopsy rate by up to 27% and reduces the morbidity associated with prostate cancer investigation including septic complications (4% risk after transrectal biopsies). 3, 37, 44, 51, 57, 59, 66, 95, 101, 124 Targeting of suspicious lesions found on MRI may increase rate of diagnosis of clinically significant lesions and decrease rate of diagnosis of non clinically significant lesions. |
| **Equity / Māori health gain:** | Poorer prostate cancer survival for Māori men can be attributed to a series of differences along the prostate cancer care pathway, including less intensive diagnostic investigations. Rate of MRI use stratified across ethnicities enables a focus on improved equity and Māori health gain. |
| **Specifications:** |  |
| **Numerator:** | Number of men with prostate cancer having an MRI in 6 months prior to treatment. |
| **Denominator:** | Number of all men with prostate cancer. |
| **Data sources:** | NNPAC, NMDS |

**References:**

3. Ahmed, H.U., et al., *Diagnostic accuracy of multi-parametric MRI and TRUS biopsy in prostate cancer (PROMIS): a paired validating confirmatory study.* The Lancet, 2017. **389**(10071): p. 815-822.

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## Indicator 5 PSMA scan for men with high risk prostate cancer

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| **Good practice point:** | PSMA scan is the standard of care for staging men with high risk prostate cancer, in the absence of PSMA CT scan and bone scan are an alternative. |
| **Indicator description:** | 1) Proportion of men with high risk prostate cancer having a PSMA scan.2) Pre-salvage scan for patients who are treated with radiation. |
|  |  |
| **Rationale and evidence:** | Men with low risk or favourable intermediate risk disease do not require any staging for metastatic disease. Men with unfavourable intermediate risk and high risk disease should be staged in alignment with national radiological guidelines. Men with unfavourable intermediate risk and high risk disease should have the option of staging with a PSMA PET CT discussed with them as an alternative to CT scan and bone scan. Accurate staging of high risk prostate cancer patients may prevent patients from undergoing futile radical treatment or result in alteration of treatment plans. PSMA testing is regarded as cost effective and the standard of care for staging high risk prostate cancer yet access is variable. 43, 77, 97, 106 |
| **Equity / Māori health gain:** | Poorer prostate cancer survival for Māori men can be attributed to a series of differences along the prostate cancer care pathway, including less intensive diagnostic investigations. Rate of PSMA use stratified across ethnicities enables a focus on improved equity and Māori health gain. |
| **Specifications:** |  |
| **Numerator:** | Number of men with prostate cancer having a PSMA scan (1) within 90 days of diagnosis; (2) within 90 days of salvage treatment. |
| **Denominator:** | (1) Number of all men with prostate cancer(2) Number of men undergoing salvage radiotherapy treatment |
| **Data sources:** | NNPAC, NMDS |

**References:**

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## Indicator 6 Consultation with radiation oncologist and urologist prior to radical prostatectomy

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| **Good practice point:** | All patients being radically treated for prostate cancer should be offered a consultation with both a urologist and a radiation oncologist prior to treatment. |
| **Indicator description:** | Proportion of men with prostate cancer seeing a Urologist and a Radiation Oncologist prior to treatment, including remote consultations. |
|  |  |
| **Rationale and evidence:** | Men with prostate cancer should be given sufficient, balanced, evidence-based and personalised information about all treatment options as part of shared patient-centred decision making and before any treatment is undertaken. Men with localised prostate cancer radical prostatectomy and radical radiation treatment have equivalent outcomes in terms of mortality, disease progression and long term quality of life.26, 27, 42, 55, 60, 80, 96, 105, 126, 129, 131The choice of treatment will mainly be influenced by a patient’s preference for type of treatment and possible side effects. Men are best informed when the information is given and discussed by the relevant specialist. For radiation therapy, this would come from a radiation oncologist and for surgery a urologist who performs radical prostatectomy. Each specialist should be actively involved in treatment of men with prostate cancer. A nurse specialist can be a valuable to assist in the discussion of options with men. Patient-centred care and informed decision making is recognised as an essential component of best-practice cancer care.2, 19, 20, 45, 72, 85, 112, 120MDT meetings cannot be a substitute for a man receiving tailored information from both a urologist and a radiation oncologist. In New Zealand, the number of men being referred to and /or seeing a radiation oncologist prior to radical prostatectomy is not known. This Indicator will assess the equity of access to radiation oncology consultations. |
| **Equity / Māori health gain:** | Stratification by ethnicity enables monitoring of equitable access to specialist consultations. |
| **Specifications:** |  |
|  | **Numerator:** | Number of men with prostate cancer having an appointment with a urologist and an appointment with a radiation oncologist between diagnosis and radical treatment. |
|  | **Denominator:** | Number of all men with prostate cancer who undergo radical treatment. |
|  | **Limit data to:** | Treatment intent = “curative”; if necessary use radiation ≥ 60 Gray as proxy for curative intent |
| **Data sources:** | NZCR, NNPAC, NMDS |

**References:**

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20. Cancer Council Australia, *Optimal care pathway for men with prostate cancer*, C.C. Australian Government, Editor. 2016.

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96. Peinemann, F., et al., *Low-dose rate brachytherapy for men with localized prostate cancer.* Cochrane Database Syst Rev, 2011(7): p. CD008871.

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## Indicator 7 Medical oncology review of patients with advanced disease

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| **Good practice point:** | Men with advanced disease, i.e. metastatic castrate sensitive prostate cancer, should see a medical oncologist within two months of diagnosis. |
| **Indicator description:** | Proportion of men who see a medical oncologist two years or more prior to death from prostate cancer. |
|  |  |
| **Rationale and evidence:** | Men with advanced disease, i.e. metastatic prostate cancer, should see a medical oncologist within two to three months of diagnosis28; however, determining metastatic disease at time of diagnosis is difficult and not always possible. Assessment of whether a man had consulted with a medical oncologist two years or more prior to death is a more available measure.22, 32, 53, 54, 75, 89, 125 |
| **Equity / Māori health gain:** | There are racial and ethnic differences in outcome of advanced-stage prostate cancer50. The mortality rate for Māori men with prostate cancer is higher than for non- Māori, most likely because a higher proportion of Māori men present with advanced, and therefore incurable, disease78. Therefore, Māori should be accessing earlier medical oncology care. |
| **Specifications:** |  |
|  | **Numerator:** | Number of men with advanced disease who have had an appointment with a medical oncologist two or more years prior to date of death. |
|  | **Denominator:** | Number of men with a date of death. |
|  | **Limit data to:** | Cause of death = prostate cancer |
| **Data sources:** | NZCR, NNPAC, NMDS, Pharms, FCT, Mortality collection |
| **Notes:** | NIH-funded study shows increased survival in men with metastatic prostate cancer who receive chemotherapy when starting hormone therapy28. |

**References:**

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## Indicator 8 Surgical margin status of pT2 disease

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| --- | --- |
| **Good practice point:** | T2 positive margin rates are a marker of surgical quality and should be less than 20%. |
| **Indicator description:** | Positive surgical margin rates by pathological T stage. |
|  |  |
| **Rationale and evidence:** | The presence of a positive margin increases the risk of biochemical recurrence, local recurrence, and the need for salvage treatment16. Inversely, a positive surgical margin significantly reduces the likelihood of progression-free survival, including prostate-specific antigen recurrence-free survival, local recurrence-free survival and development of metastases after radical prostatectomy in multivariate analysis6, 15, 29, 98, 100, 119. Moreover, positive margins are associated with a 2.6-fold increased risk of prostate cancer specific mortality132.In the 2011 European Association of Urology guidelines, as well as the National Comprehensive Cancer Network (NCCN) guidelines81, it has been recommended to take into account surgical margin status in the adjuvant treatment decision104. Immediate postoperative external irradiation after radical prostatectomy for men with positive surgical margins improves biochemical and clinical disease-free survival47, in particular in combination with other high-risk features74. In relation to survival, surgical margins are the only factor which could be influenced by the surgeon, contrary to tumour characteristics30, 104, 117, 133. |
| **Equity / Māori health gain:** | Data not available. |
| **Specifications:** |  |
|  | **Numerator:** | All men with pT2 disease having radical prostatectomy with positive surgical margins (recommendation from college must have margin status). |
|  | **Denominator:** | All men with pT2 disease having radical prostatectomy. |
|  | **Limit data to:** | * Treatment modality = surgery
* Stage: men with prostate cancer stage pT2
 |
| **Data sources:** | NZCR, NNPAC, NMDS, PCOR |
| **Notes:** | Recommended by PCOR 793. |

**References:**

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## Indicator 9 Length of stay after surgery

|  |  |
| --- | --- |
| **Indicator description:** | 1. Median length of stay following surgery for prostate cancer.
2. Length of stay for patients not discharged >5days after surgery for prostate cancer.
 |
|  |  |
| **Rationale and evidence:** | Surgery is the cornerstone of treatment for many cancers. Hospital length-of-stay (LOS) following surgery is an indicator of health service efficiency. In some healthcare settings, there have been initiatives aimed at reducing LOS after cancer surgery, such as enhanced recovery programmes. These types of initiatives may confer advantages for patients, including faster recovery and fewer complications. It may also lead to more cost effective patient care.56, 58, 67, 82 |
| **Equity / Māori health gain:** | The Piper Study did not identify significant differences in patient length of stay by ethnic group or socioeconomic deprivation52. |
| **Specifications:** |  |
|  | **Measure:** | 1. Median length of stay after surgery for prostate cancer.
2. Length of stay for patients not discharged >5 days after surgery for prostate cancer.
 |
| **Data sources:** | NZCR, NMDS |

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## Indicator 10 Equitable access to treatment

|  |  |
| --- | --- |
| **Good practice point:** | Men with high-risk localised prostate cancer should not be offered active surveillance and need to be referred to MDM.  |
| **Indicator description:** | Proportion of men in each treatment modality (surgery, radiation therapy, systemic therapy, active surveillance, watchful wait) by risk stratification. |
|  |  |
| **Rationale and evidence:** | Patients should receive treatment which is appropriate to their risk category. Therefore, active surveillance should not be offered to men with high-risk localised prostate cancer12, 87. Equally, men with very low risk and low risk prostate cancer are best managed with active surveillance.  |
| **Equity / Māori health gain:** | Poorer prostate cancer survival for Māori men can be attributed to a series of differences along the prostate cancer care pathway, including less intensive diagnostic investigations, later stage at diagnosis, longer wait times, and differences in treatment modalities for both localised and metastatic prostate cancer91. This measure enables monitoring of treatment modalities across risk categories as well as across ethnicities, and thereby enables a focus on improved equity and Māori health gain10.48, 63-65, 90, 93 |
| **Specifications:** |  |
|  | **Numerator:** | Number of men with prostate cancer diagnosed with prostate cancer treated with surgery, radiation therapy, and/or systemic treatment. |
|  | **Denominator:** | Number of all men with prostate cancer. |
| **Data sources:** | NZCR, NNPAC, NMDS, Pharms |
| **Notes:** | Derived from MOH common indicator of treatment survival.Recommended by PCOR79. |

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## Indicator 11 Timeliness of treatment pathway

|  |  |
| --- | --- |
| **Good Practice Points:** | Patients referred with a high suspicion of cancer requiring immediate or urgent referral, as per prostate cancer management referral guidance, are seen within 14 days of referral72. Patients requiring routine referral should be seen within 6 weeks88, 102.Many factors may delay first treatment in prostate cancer including patient preference, however treatment should be delivered in a timely manner once there is a decision to treat. |
| **Indicator description:** | Time from confirmed diagnosis to decision to treat and first treatment. |
| **Expected quality improvement:** | Patients are managed through the pathway, and experience well-coordinated service delivery. |
| **Rationale and evidence:** | Timely and equitable access to quality cancer management is important to support good health outcomes for New Zealanders and to reduce inequities.Key components of successful cancer management include early recognition and reporting of symptoms, expertise in identifying patients requiring prompt referral and rapid access to investigations and treatment. Patients should receive quality clinical care, and delays avoided as far as possible. Service providers can monitor inequities in timeliness and address these if they occur.A suspicion of cancer or cancer diagnosis is very stressful for patients and family/whānau. It is important that patients, family/whānau and GPs know how quickly patients can receive treatment. Long waiting times may affect local control and survival benefit for some high risk prostate cancer patients, and can result in delayed symptom management for palliative patients13, 35, 41 |
| **Equity / Māori health gain:** | Māori are more likely to experience delay in diagnosis and treatment than other ethnic groups. Visibility of disparity may prompt service providers to develop quality improvement activities to address this disparity48, 103. |
| **Specifications:** |  |
|  | **Measure:** | 1. Median time from confirmed diagnosis to decision to treat stratified by risk category, ethnicity, treatment modality, age at diagnosis and/or deprivation
2. Median time from decision to treat to first treatment stratified by risk category, ethnicity, treatment modality, age at diagnosis and/or deprivation
 |
| **Data sources:** | NZCR, FCT |

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## Indicator 12 Quality of life

|  |  |
| --- | --- |
| **Good practice point:** | Patient’s social, psychosocial and spiritual needs are assessed at each point of care and recorded in their care plan. |
| **Indicator description:** | Proportion of patients whose mental and/or physical quality of life is affected.Measure of patients’ functional outcome by assessing proportion of men in each EPIC category: urinary incontinence, urinary irritation, urinary obstruction, bowel, sexual, hormonal. |
| **Expected quality improvement:** | Quality of life post treatment affected by overtreatment, cure rate, continence and potency plus general distress. Some of these are measured currently. In general: 10-20% improvement in measurable continence post surgery, Reduction in surgery in low risk disease with reduced morbidity and reduced cancer recurrence post surgery with improved surgical technique. |
| **Rationale and evidence:** | There is a high prevalence of depression and anxiety in men with prostate cancer, across the treatment spectrum8, 127. Recovery of sexual and urinary function is time dependent and can continue to improve beyond two years postoperatively68. Individual patients’ responses to surgical results varies greatly, reinforcing the importance of individualised decision making for patients facing a decision about radical prostatectomy for prostate cancer.21, 110 |
| **Equity / Māori health gain:** | Identification of ethnicity will highlight any variance and can suggest management alternatives/ different pathways for care. |
| **Specifications:** |  |
|  | **Numerator:** | Number of men with prostate cancer within each one of six EPIC categories at 6 months, 1, 2, and 5 years after treatment. |
|  | **Denominator:** | Number of men with prostate cancer alive 6 months, 1, 2, and 5 years after treatment. |
| **Data sources:** | NZCR, NNPAC, NMDS, Pharms, PCOR |

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## Indicator 13 Progression-free survival

|  |  |
| --- | --- |
| **Good practice point:** | It is expected that men having undergone Radiation Treatment, Radical Prostatectomy or included in an Active Surveillance programme will have high disease free survival11, 38, 113 at 2, 5 and 10 years from diagnosis. |
| **Indicator description:** | Proportion of men enrolled in Active Surveillance or having undergone Radiation Treatment or Radical Prostatectomy who show no objective evidence of disease progression at 2, 5 and 10 years.  |
|  |  |
| **Rationale and evidence:** | An individual man's prognosis depends on the type and stage of cancer as well as age and general health at the time of diagnosis. In Australia, the 5- 10-, and 15-yr survival rates for men diagnosed with prostate cancer are 92%, 93%, and 77%, respectively20.Prostate cancer is a slow growing tumour and there is much debate as to the risks of treatment versus any survival advantage gained34, 99. |
| **Equity / Māori health gain:** | Identifiable departures from the benchmark/standard will help identify problems with communication or resource provision. |
| **Specifications:** |  |
| **Numerator:** | Number of men alive with prostate cancer that has not progressed 2, 5, and 10, years from diagnosis in men treated with Radiation Treatment, Radical Prostatectomy, or enrolled in Active Surveillance. Progression is defined as (i) biochemical recurrence after Radiation Treatment38, 114 or Radical Prostatectomy23, 36, 46, 62, 73, 76, 94, 108, 118,identified by imaging or PSA testing, and as (ii) “trigger for treatment reached” in men on Active Surveillance1, 17, 39, 42, 61, 70, 83, 114, 116, 121-123, 128. |
| **Denominator:** | Number of all men with prostate cancer treated with Radiation Treatment, Radical Prostatectomy, or enrolled in Active Surveillance 2, 5, and 10, years from diagnosis. |
| **Limit data to:** | Treatment modality: Radiation Therapy, Radical Prostatectomy, and Active Surveillance |

|  |  |
| --- | --- |
| **Data sources:** | NZCR, NNPAC, NMDS, Pharms |

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## Indicator 14 Overall survival

|  |  |
| --- | --- |
| **Good practice point:** | Review of survival rates allows comparison of data and benchmarking against international standards |
| **Indicator description:** | Overall survival for people with prostate cancer at 1, 3, 5, 10 years from diagnosis by stage. |
|  |  |
| **Rationale and evidence:** | An individual patient's prognosis depends on the type and stage of cancer as well as age and general health at the time of diagnosis. In Australia, the 5- 10-, and 15-yr survival rates for men diagnosed with prostate cancer are 92%, 93%, and 77%, respectively79, 86, 87.Prostate cancer is a slow growing tumour and there is much debate as to the risks of treatment versus any survival advantage gained 4, 5.14, 42, 107, 130 |
| **Equity / Māori health gain:** | Identification of equitable survival is required to clarify any need with the Māori community for improvements in prostate cancer care. Ability to address factors that drive inequality in prostate cancer survival18. |
| **Specifications:** |  |
|  | **Numerator:** | Number of people with prostate cancer who survive at 1, 3, 5, 10, years from diagnosis |
|  | **Denominator:** | Number of all men with prostate cancer. |
| **Data sources:** | NZCR |

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## Indicator 15 Reporting to national database collection of key prostate cancer measures

|  |  |
| --- | --- |
| **Good practice point:** | Key prostate cancer measures are reported to national database collections. |
| **Indicator description:** | Proportion of patients reported in a national database |
|  | . |
| **Rationale and evidence:** | Data is required to improve patient outcomes across all indicator groups.31, 84, 111 It is thought that improved ability to assess clinical performance across New Zealand and assessment of patient outcomes will drive quality improvement. |
| **Equity / Māori health gain:** | National improvement of data collection allows more accurate assessment of needs of Māori patients |
| **Specifications:** |  |
|  | **Numerator:** | Patients included on PCOR |
|  | **Denominator:** | Patients diagnosed with prostate cancer |
| **Data sources:** | PCOR, national collections |

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# Appendix 1

## Stratifying Variables

In addition to reporting all indicators by DHB and regional cancer network the following stratifying variables will be applied where possible:

* Age
* Sex
* Ethnicity (Māori, Pacific, Asian, European/Other )
* Social deprivation
* Rurality
* Public / private provider

Other potential stratifying variables for reporting include:

* Gleason Grade
* Grade and stage of tumour
* Comorbidity
* Risk stratification
* PSA at diagnosis
* Treatment modality (Surgery, Systemic Therapy, Radiation Therapy, Active Surveillance, Watchful Wait)

## Data Sources

### National Collections held by the Ministry of Health

**New Zealand Cancer Registry (NZCR)**

The New Zealand Cancer Registry (NZCR) is a population-based register of all primary malignant diseases diagnosed in New Zealand, excluding squamous and basal cell skin cancers.

**National Minimum Dataset (hospital events) (NMD)**

The National Minimum Dataset is a national collection of public and private hospital discharge information, including coded clinical data for inpatients and day patients.

**National Non-Admitted Patient Collection (NNPAC)**

The National Non-Admitted Patients Collection information includes event-based purchase units that relate to medical and surgical outpatient events and emergency department events.

**Mortality Collection**

The Mortality Collection combines death registration and stillbirth registration data with cause of death information which is then collated and coded to create national cause of death statistics.

**Pharmaceutical Collection (Pharms)**

The Pharmaceutical Collection is a data warehouse that supports the management of pharmaceutical subsidies.

Faster Cancer Treatment (FCT)

DHBs provided data re: their waiting times for cancer treatment

Reports published by the Movember Foundation/Monash University (Australia)

**Prostate Cancer Outcomes Registry (PCOR)**

PCOR-ANZ (Prostate Cancer Outcomes Registry - Australia and New Zealand) is a large-scale prostate cancer registry that collects information on the care provided and the outcomes for men diagnosed with prostate cancer in Australia and New Zealand.

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