

Aide-Mémoire

Deep Dive on Cancer and Faster Cancer Targets

Date due to MO: 26 February 2024	Action required by: N/A
Security level: IN CONFIDENCE	Health Report number: H2023034556
To: Hon Dr Shane Reti, Minister of Health	

Contact for telephone discussion

Name	Position	Telephone
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Fionnagh Dougan	National Director, Hospital & Specialist Services, Health New Zealand Te Whatu Ora	s 9(2)(a)

Minister's office to complete:

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| <input type="checkbox"/> Approved | <input type="checkbox"/> Decline | <input type="checkbox"/> Noted |
| <input type="checkbox"/> Needs change | <input type="checkbox"/> Seen | <input type="checkbox"/> Overtaken by events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn | |

Comment:

Deep Dive on Cancer

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Details of Meeting

Wednesday, 28 February 2024
4.15 to 5.15pm
Minister Reti's Office
Beehive EW 6.6

Purpose of Meeting

This meeting has been scheduled to provide the Minister of Health with cross-agency perspectives on challenges and opportunities for improving cancer outcomes and to seek the Minister's direction on topical issues.

Meeting Format

This meeting will be a free-flowing discussion of key issues relating to cancer. Key topics include:

- screening
- early detection
- treatment capacity
- cancer medicines
- data and performance.

Deep Dive on Cancer

Purpose of briefing

1. The briefing provides background information to inform a comprehensive discussion with senior officials from Cancer Control Agency | Te Aho o Te Kahu, Health New Zealand | Te Whatu Ora, and the Ministry of Health | Manatū Hauora on how to improve cancer outcomes in New Zealand.

Summary

2. The key topics covered include:
 - Cancer Action Plan/implementation planning
 - Screening
 - New cancer drugs
 - Faster Cancer Treatment indicators.



Rami Rahal
Chief Executive

Cancer Control Agency
Date: 26 February 2024



Fionnagh Dougan
National Director Hospital
and Specialist Services

Health New Zealand
Date: 26 February 2024

Dr Diana Sarfati
Director-General

Ministry of Health
Date: 26 February 2024

Deep Dive on Cancer

Context

1. Cancer is the leading cause of death and health loss in New Zealand. Each year, around 26,000 people are diagnosed with cancer. Around 9,500 people die from the disease per year, which represents a third of all deaths. Of those, around 1,750 people die of lung cancer, 1,250 of bowel cancer, 650 of breast cancer and a further 650 of prostate cancer.
2. Māori are more likely than non-Māori to be diagnosed with cancer, including breast, liver, lung, pancreatic, stomach and uterine. Non-Māori (primarily New Zealand Europeans) are more likely than Māori to be diagnosed with melanoma and prostate cancers.
3. Cancer is a source of stark inequity in outcomes. Cancer mortality rates per 100,000 population for Māori and Pacific peoples are 165 and 146 respectively compared to 59 and 106 for Asian and European/Other populations. For lung cancer the rates for Māori men and women (57 and 54 per 100,000) are around triple that of non-Māori (19 and 16 per 100,000).
4. The Agency's latest projections estimate 45,000 people will be diagnosed with cancer each year by 2040 – a 75% increase. While most of this increase will be due to the growing and aging population, we predict the age standardised incidence rates will increase based on growing risk factors including obesity, poor nutrition, and sun exposure.
5. While cancer outcomes (measured using survival rates) have steadily improved in New Zealand over the last 30 years, this rate of improvement is slower than comparable countries. This means we are falling behind other countries in providing people equitable access to effective screening, early detection, and advanced treatment modalities.
6. The New Zealand health system takes a collaborative approach to improving cancer outcomes and care across the full continuum, from prevention to palliative care and survivorship. The health organisations working to achieve this vision include Health New Zealand (Health NZ), Pharmac, Cancer Control Agency | Te Aho o Te Kahu (the Agency), and the Ministry of Health (the Ministry).
7. Formal and informal relationships have been established at all levels across these organisations to ensure a shared understanding of the strategic direction for cancer, and to make the most of the combined capabilities of our workforce. This includes regular meetings between Chief Executives, discussions of a shared cancer work programme, and access to the Agency-convened advisory and working groups. A Cancer Clinical Network is also being established within Health NZ in partnership with the Agency to provide an important linkage between organisations and enable a mechanism for implementation and service delivery informed by data, research, policy, clinical experience, and international best practice.
8. Efforts to improve the experience and outcomes of people and whānau affected by cancer are being made in the context of growing demand for services which are already stretched.

The drivers of demand are complex and include a population that is ageing, living longer, often with co-morbidities. Also, more people are surviving their first diagnosis of cancer which requires the health system to provide them and their whānau more long-term, and often more complex support.

Strategic direction

The Cancer Action Plan 2019-2029

9. The New Zealand Cancer Action Plan 2019-2029 provides a pathway to improve cancer outcomes for all New Zealanders. The Cancer Action Plan sets out the four main goals required over 10 years to ensure that New Zealanders:
 - have a system that delivers consistent and modern cancer care.
 - experience equitable cancer outcomes.
 - have fewer cancers.
 - have better cancer survival, supportive care, and end-of-life care.
10. The Plan contributes to all six priorities of the New Zealand Health Strategy 2023 and informs the work programmes of health organisations directly and through the New Zealand Health Plan.
11. You have indicated to the Agency that you support a review and refresh of the national Cancer Action Plan over the next six months to ensure it remains fit-for-purpose and reflects the newly transformed health system environment. The review will involve key cancer stakeholders, including your office and the Associate Ministers, to refine the priority actions, as required. This work will be coordinated with the development of other non-communicable diseases (NCD) plans as part of the 5-5-90 framework and align with Te Pae Tata, the interim New Zealand Health Plan 2022.

Cancer as a government health priority

12. Cancer is one of your priority areas for the health sector due to being one of the five NCDs that have the greatest health burden for people in New Zealand. Appropriately, cancer is also a priority area in Te Pae Tata
13. Health NZ, the Agency, and the Ministry have begun work to develop an integrated implementation plan for cancer. This will include plans for the other four most burdensome NCDs and prevention strategies for most significant modifiable behavioural factors that contribute to them. This plan will also align with the aims of Te Pae Tata and the refreshed national cancer action.
14. All health organisations are also focused on how to effectively implement specific cancer initiatives promised by the Coalition Government:
 - New cancer drugs
 - Faster Cancer Treatment targets
 - Expansions to cancer screening programmes.

15. We are aware you are seeking specific advice on how to improve prostate and ovarian cancer management. We would like to discuss your views on these areas at the Deep Dive to understand how best to progress.

Current pressures

16. There are pressures across the cancer screening, diagnostic and treatment pathways. Cancer diagnosis and treatment services sit broadly in five categories: diagnostics (including screening), systemic therapies and stem cell transplants, radiation oncology, surgery, and coordination and quality of life supports including prehabilitation and rehabilitation. Survivorship supports and palliative and end-of-life care, in hospitals and in the community, are also important aspects of quality care. There are major risks across all categories which we would like to discuss in four broad areas:
- Meeting increased demand
 - Workforce
 - Care pathways
 - Infrastructure.

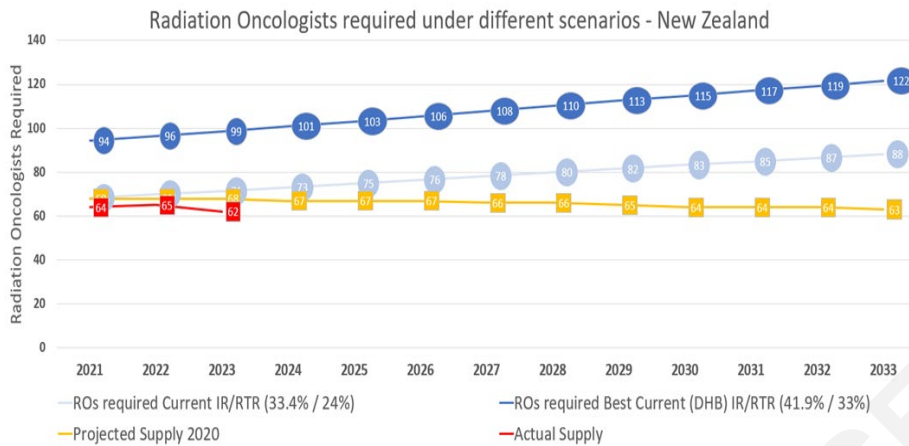
Meeting increased demand

17. Identifying the cause of growing demand for cancer services is complex and not solely due to the ageing population. The increased demand is partially driven by new diagnostic and treatment technologies, medicines and treatments for cancer and public expectations that people in New Zealanders should have public access to what is available in other high-income countries.
18. Capacity to respond to this demand is constrained by ongoing growth in demand for acute care, in the same way the full range of planned care is. For example, currently approximately 85% of New Zealand's radiation therapy is publicly funded. 5-10% of this is delivered in a private facility.
19. Historically, decision making around funding new treatments including medicines have not fully incorporated the costs of administering those treatments. An example of action being taken to better manage this impact is an agreement between Health NZ, Pharmac, the Agency and the Ministry that business cases developed for such investments will include the costs of administering new drugs/treatments. This will help to prevent implementation failure of any new investments due to capacity constraints.
20. There is also ongoing public demand to expand the eligibility ages for the current screening programmes, or new screening programmes to be introduced, such as prostate screening. Any expansions or new screening programmes would require additional capacity (staff and infrastructure) to deliver the screening, analyse the results, carry out investigations of suspect screening results, and provide treatment and care to the people and whānau who are diagnosed with cancer.

Workforce

21. Overall, services do not have enough staff to meet current demand. While there are consistent efforts in recruiting and retaining staff, the increasing service demand is outpacing those efforts. This is having a substantial effect on the wellbeing of the existing workforce, their ability to absorb new initiatives delivering efficiencies and innovations, and their capacity for enabling new models of care such as providing supervision and training for advanced practice nurses, radiation technologists and so on. Even while these solutions would ultimately provide relief.
22. Immediate concerns are radiation oncologists, gynae-oncologists, medical oncologists, diagnostic capacity (radiology, endoscopy, pathology), radiation therapists, transplant therapists and cancer nurses. Some districts are feeling workforce shortages more severely. The South Island, for example, is operating with a 50% vacancy rate for radiation oncologist Senior Medical Officers which is impacting patients. The diagnostic and screening workforce also requires strengthening to ensure the success of screening programmes and achieve equity across the whole of both screening and symptomatic pathways.
23. Consideration is also being given to preparing for a more sustainable workforce in the future. Among other things, 2021 workforce data shows that:
 - 30% of radiation oncologists are over the age of retirement and this workforce is carrying vacancies and often working additional hours
 - 21% of otolaryngology head and neck surgeons are over the age of 65 across the country. 23% of haematologists are over retirement age along with 13% of medical oncologists.
24. Health NZ and the Agency have been working closely on workforce issues. The Agency developed a cancer workforce implementation plan. Several actions identified in this plan are being delivered through various Health NZ workforce workstreams.
25. Workforce planning for 2023/24 involves:
 - growing pathways for Māori and Pacific peoples in health
 - driving local led innovation in training
 - bolstering priority workforce group – international recruitment of Radiation Therapists (RT), Senior Medical Officers (SMOs)
 - offering an additional 4 radiation oncology training positions and 2 fellowship positions during 2024-25 supporting and retaining the current workforce
 - expanding advanced practice models of care for nursing and allied health
 - supporting and retaining the current workforce
 - growing future leaders.
26. As well as addressing succession requirements, workforce planning is developing a training and recruitment pipeline to address future requirements and ensure future models of care can be implemented. Based on current average intervention rates our radiation oncologist workforce will need to increase from the current 62 FTE to 88 in 2033. If we seek to reduce

inequities, by achieving the intervention rate seen in our highest performing cancer centre throughout the rest of the country, this will require 122 FTE radiation oncologists by 2033.



Care pathways

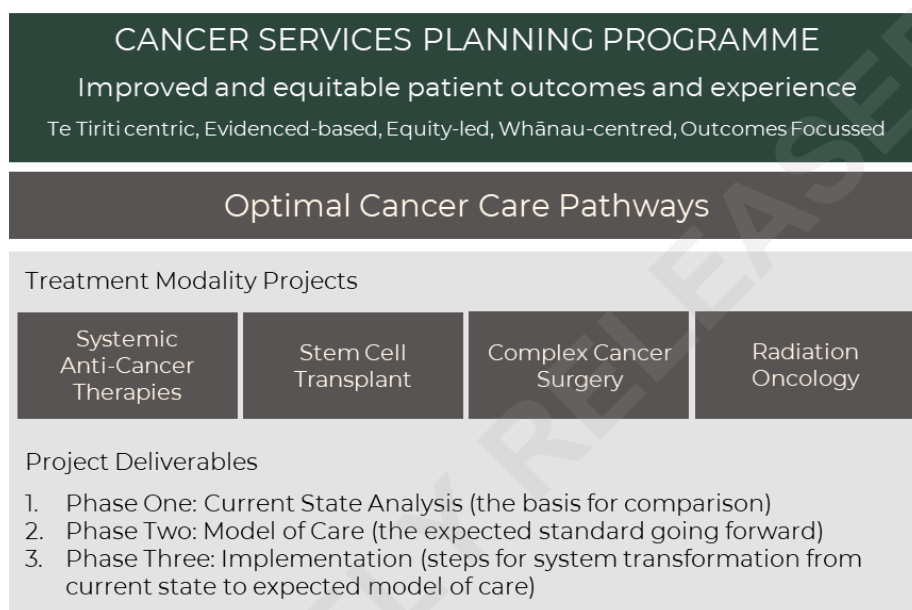
27. A patient journey through cancer detection, diagnosis, treatment, and recovery can be highly complex, involving multiple steps and many health providers and specialties. Currently, these steps are not consistently applied throughout the country. This can lead to different experiences and outcomes across tumour streams, populations, and locations.
28. There is a need for a consistent planning process to support patients and whānau through the full cancer journey. This includes more consistent access to appropriate coordination and support services (such as Clinical Nurse Specialists, Cancer Navigators, and Kaiāwhina) to support patients through a care journey. Other services, such as access to diagnostic imaging, often require travel, reducing patient accessibility.
29. Health NZ is currently developing national clinical pathways to facilitate rapid diagnosis of suspected cancer and eliminate the variation in pathways and service distribution across districts, including pathways for endometrial, lung and colorectal cancers.
 - The lung cancer pathway has been agreed ahead of schedule. Work is underway to commission the changes in access to CT scanning required to implement.
 - The pathway for abnormal uterine bleeding is in development and is scheduled for completion at end of June 2024.
 - Planning towards developing a colorectal symptoms pathway has begun. Schedule yet to be finalised.

Models of care and Optimal Cancer Care Pathways (OCCP)

30. The New Zealand cancer system strives to provide quality care for all people most of the time. But there are unwarranted variations in how services are designed and delivered, resulting in poorer outcomes and experience for some New Zealanders.

31. In response to this the Cancer Agency set up a three-phase programme to develop a suite of detailed guidance that sets a baseline and direction to improve the delivery, efficacy, and equity of cancer treatment services. The outputs of the programme are:
- Models of Care that describe how cancer intervention programs (like radiation treatment or cancer surgery) should be organised and delivered; and
 - Optimal Care Pathways that describe best care within a cancer type (bowel, lung, etc.)

The design of the programme is shown in the diagram below.



32. Models of care describe the resources and systems that should be in place to support effective service delivery and have implications for planning and costs of delivery. Three models of care (radiation oncology, systemic therapy, and stem cell treatments) are nearing completion.
33. They are complimented by the Optimal Cancer Care Pathways, which will map the seven steps of evidence-based practice for each type of cancer: wellness; early detection and screening; presentation, initial investigation, and referral; diagnosis, staging & treatment planning, treatment, care after treatment, palliative care, and end of life. Pancreatic, breast, colorectal and haematological pathways are in progress Each single model of care, or pathway establishes an agreed position on the delivery of equitable, high-quality, and effective care, forming a strong basis from which future planning and ongoing quality improvement can occur. They support, rather than replace, clinical practice guidelines.

Navigation and Care co-ordination

34. The New Zealand health system aims for all New Zealanders who need cancer treatment services to equitably access and complete their treatments. Navigation services are recognised internationally as a crucial enabler for improving patient experiences and outcomes.

35. These services have not been well supported historically in New Zealand, which led to fragmented and inconsistent service delivery. Navigation support is available across the country, but it varies in several critical ways:
- Variation by setting (hospital, primary care, community)
 - Variation by speciality (Cancer Navigator, Health Navigator, Whānau Ora Navigator)
 - Variation by funding mechanism (Vote Health, Social Development, Māori Development, community, philanthropic).
36. The Agency is developing a proposed model of care for navigation services, alongside advice on the changes required to deliver these services consistently and sustainably across multiple settings. This advice will support any future investment and commissioning and will be completed by July 2024.
37. In the interim, the Māori Health Authority - Te Aka Whai Ora has contracted 20 organisations to provide navigation support to Māori affected by cancer and their whānau. This investment has been in place since 1 July 2023 and is not yet confirmed for 2024/25. Health NZ funds hospital-based navigation services, although these vary in scale across districts. The current investments are not sufficient to meet demand now or in future. Health NZ will be considering how it addresses this unwarranted variation in Clinical Nurse Specialists and Kaiāwhina to improve outcomes.

National Travel Assistance (NTA)

38. The NTA Scheme provides financial assistance to people who are referred by their specialist to see another specialist and need to travel long distances or travel frequently. The current process for travel and accommodation assistance is recognised as not being fit-for-purpose for many patients and their whānau. While NTA does not exclusively support cancer patients, they are believed to make up a significant proportion of NTA users due to the location of some cancer treatment services and the number of treatments required.
39. Datasets have been analysed to better understand NTA usage and any potential unmet need among cancer patients and their whānau and other cohorts.
40. The process patients go through to submit an NTA claim was simplified slightly in December 2023.
41. The Agency and Health NZ have been collaborating on a phased proposal to improve NTA. The proposed improvements are late in their development and internal approval is currently being sought. Proposed improvements include strengthened national leadership to ensure consistency, baseline increases to reimbursement rates, changes to eligibility and exceptions to expand and better target people and whānau in need, expanded use of pre-payments to reduce the cash burden on whānau, improved integration with NGOs, Hauora, and Pacific providers, and shifting from paper-based claims to doing more online. Implementation planning is underway for these improvements.

42. Supporting patients and whānau to access NTA funding is an example of a time-consuming function that could be moved away from Clinical Nurse Specialist coordinators. While their clinical advice would be sought when needed, the responsibility for day-to-day NTA support could shift to kaiāwhina and community-based navigators. This option will be detailed in the navigation services model of care (mentioned above).

Infrastructure

43. Physical and data infrastructure is often not fit for purpose which impacts both the quality and quantity of cancer services and can significantly affect the patient experience. For example:
- Capacity constraints (such as infusion chairs and inpatient beds) and ageing facilities across Medical Oncology Units and Linear Accelerators (LINACs). In some cases, patients cannot have a support person present when they undergo chemotherapy due to the physical space not being big enough.
 - Inadequate data infrastructure results in delays within coordination and support, including referrals. This can result in patients travelling to appointments to find the appointment cannot go ahead; or clinicians in emergency departments not always having access to the treatment records of cancer patients who need acute care.
 - Variable access to high-resolution radiology modalities (such as positron emission tomography-computed tomography, or PET-CT) has created significant inconsistency in waiting and travel times for complex imaging radiology, and in the amount of post-treatment follow up patients receive.

Linear Accelerators (LINACs)

44. A strong radiation oncology sector is indispensable for an effective cancer control strategy. Radiation therapy contributes 40% of cancer cures and will remain a vital component of cancer treatment. It uses ionising radiation to destroy or damage cancer cells to stop them multiplying and growing. Radiation therapy can be used to treat almost all cancers, anywhere in the body.
45. Health NZ is planning to expand and replace LINACs across the country in line with demand and need. This is part of longer-term capital programme that includes expanding oncology units. The Agency you with an aide memoire on the currency of LINAC modelling on 21 February 2024. [Refer to HR H2024035643]
46. More LINACs are required to ensure radiation services can meet the care demands of people with cancer across the country into the future. Given the large, fixed capital investment required, and long lead times to establish LINACs as an operational service, substantial planning and forethought is necessary.
47. Modelling estimates that by 2037, 39 LINACs will be required in the New Zealand public health system to meet demand. Currently 24 LINACs are available for the public system,

with 3 additional units expected in the phase of expansion This means 12 additional LINACs will be required in the next 13 years at an estimated cost of \$4m per machine.

48. In addition to this, approximately 20 LINACs across the country will require replacement between 2024-2034, at a cost of approximately \$4million per machine.
49. In 2019, the Government of the day committed to replacing 9 existing LINACs and placing 3 LINACs in new sites – a new LINAC in Northland, and LINACs in Taranaki and Hawke’s Bay and replacing existing machines in Palmerston North.
50. Assuming there is available funding, the biggest opportunity to accelerate the approval and construction of new LINACs would be to begin planning for LINACs and cancer centres where projects have not yet been initiated. These would be Nelson, Manukau Health Park, and Burwood in Christchurch.
51. Where new LINACs are planned, it is preferable to invest in facilities that integrate the construction of the LINAC bunkers with other cancer care services so patients can access medical oncology, radiation oncology, and support services in one location. While these projects take longer to complete, they do ultimately provide a more coordinated pathway for patients and build operational efficiencies into the system.
52. Funding will be sought through the Infrastructure Investment Plan for future new and replacement LINACs. Health NZ has developed estimates of the cost required to accelerate the rollout of these LINACs. The operational costs of running a new LINAC vary widely depending on the context within which it is operating, including whether the LINAC substitutes for capacity previously provided elsewhere or is entirely new capacity, how staff capacity may be shared with other facilities and other factors. One early estimate for operating a new LINAC is slightly above \$5million per year with the majority for workforce costs (between 23 and 29 staff).
53. You have asked about the new LINAC to be installed in Whangarei: The project will redevelop the Jim Carney Cancer Centre and build a new bunker to house the LINAC. Opportunities to accelerate this construction are limited. Work is underway to procure the main contractor and completion is forecast for May 2026. The unit will be run as a satellite site from the Auckland service. Budgeting for operational costs, including staff, will be incorporated in 2025/26 Budget and recruitment will commence to enable a timely opening.

Data and digital

54. The absence of integrated data infrastructure in the health system hinders information sharing between clinicians, which then impacts care pathways and overall cancer outcomes. To combat this, Health NZ is implementing nationally consistent data capture, analytics, and intelligence systems. This will improve the interoperability of data and digital systems across care settings, including those that support cancer patients.
55. Te Aho o Te Kahu and Health NZ are collaborating on a programme of work called CanShare to provide a single platform for data and information across the cancer continuum of care. Te Aho o Te Kahu is leading work on data standardisation to enable accurate, shareable, and timely data that is vital for:
- informing all aspects of cancer system planning and monitoring
 - enabling clinical decision making which can improve health outcomes for people and whanau
 - giving individuals access to their health information.
56. CanShare will link multiple cancer data sources to support:
- standardised, efficient frontline clinical care
 - rapid and accurate monitoring of cancer care delivery and outcomes
 - development of a healthcare-wide clinical informatics system.
57. Initial CanShare data flows will be established in 2025, with consolidation and expansion in 2026 which will support the integration and development of a range of applications to best utilise data.
58. Budget prioritisation processes may compromise the ongoing development of CanShare. The Agency and Health NZ are exploring solutions to continue to deliver on this critical enabling function.

PET- CT scan

59. The Agency led a piece of work with Health NZ and the National Radiology Advisory Group to develop a process to help ensure people have the same access to publicly funded PET-CT scans, regardless of where they live. As these scans are more sensitive than more conventional imaging tests, they are becoming an increasingly useful diagnostic tool, especially when looking for small cancers that have spread from the original location in the body (cancer metastases).
60. There have always been varying levels of access, but recently we have seen larger discrepancies in some areas or cancer types - the largest being for PMSA PET-CT scans for prostate cancer. In some parts of the country, these are publicly funded, but not in others. This means some patients are self-funding the scan at a cost of several thousand dollars.

61. The Agency has worked through the implementation plan with Health NZ, and this process has begun. Health NZ has provided advice to support the Minister's in announcing this initiative.
62. Standardising access will cost about \$3million and allow for about 1,000 more scans, the majority of which will be for prostate scans to remove inconsistency in access around the country.

Future proofing

63. Health NZ and Te Aho o Te Kahu are building a national 'Cancer Service Delivery Improvement Programme' to improve service delivery. Immediate objectives include:
 - developing a Cancer Production Plan for 2024-27 including LINAC capacity
 - reviewing opportunities to work effectively with the private sector whilst ensuring robust public delivery
 - reviewing opportunities to shift models of care, such as using ambulatory radiology to expand access and improve community connection to diagnostic services
 - reviewing remuneration and employment packages for radiation oncologists
 - implementing a Cancer Clinical Network to improve collaboration and consistency across service delivery and consider service improvements.
64. As well as building the capacity in the health system to meet growing demand, we also need to focus on cancer prevention strategies to reduce the incidence of cancer, and ways to identify and commence treatment on cancer at earlier stages in its progression.

Prevention

65. We understand and support your application of the 5/5/90 framework and its stronger focus on addressing the modifiable risk factors that account for the five NCDs (including cancer) that are responsible for the vast majority of health loss. Fully effective prevention measures have the potential to avoid up to half of all cancers diagnosed. Prevention saves lives, reduces strain on the health system and is cost-effective. Addressing the social determinants of health through whole of government approach is important to the success of cancer prevention efforts, particularly in achieving equity. Additionally, many prevention activities provide health benefit across a range of health issues, including cancer.
66. Cancers that are more common for Māori (including liver, lung, stomach, and pancreas) tend to be highly preventable. Pacific peoples in Aotearoa are also more likely to develop several cancers which can in some cases be prevented (including liver, lung, stomach, and uterus). For example, Pacifica women living in New Zealand have among the highest endometrial cancer rates in the world which are continuing to increase. The pattern of preventable cancers is similar for those living in deprived areas, to the extent that poverty has been described as a cancer-causing risk factor or carcinogen.

67. The major risk factors for cancer are:
- tobacco
 - alcohol
 - poor nutrition and excess body weight
 - insufficient physical activity
 - excessive exposure to ultraviolet (UV) radiation (sun)
 - chronic infections (Helicobacter pylori, human papillomavirus, hepatitis B and hepatitis C, human immunodeficiency virus).
68. Generally, prevention interventions that focus on populations and environmental influences on health have a larger impact, greater potential for equity and tend to be more cost-effective (or even cost-saving) than interventions focused on particularly high-risk individuals. However, action at multiple levels and by multiple stakeholders is necessary and valuable and a reliance solely on population-based prevention efforts will not be fully effective, using the right mix of interventions is important.
69. In 2022 Te Aho o Te Kahu published Pūrongo Ārai Mate Pukupuku | Cancer Prevention Report. This report outlines evidence-based, internationally accepted, best-practice interventions to address six cancer risk factors: tobacco exposure, alcohol use, poor nutrition and excess body weight, physical inactivity, excessive exposure to ultraviolet (UV) radiation and chronic infections – and assesses how well Aotearoa is doing in each of these areas. It aims to identify ways we can create environments that support people to stay well. This Report is available on the Agency's website at teaho.govt.nz/publications/prevention-report.
70. The Public Health Agency, Health NZ, and Te Aho o Te Kahu collaborate on a broad range of activities that have an impact of the prevention of cancer. There are opportunities to achieve better health outcomes by using all available levers, from regulation to health promotion, to address the modifiable risk factors that contribute to cancer.

Early detection and diagnosis

71. Early detection and diagnosis of cancer is critical for optimal cancer outcomes. Current indicators of early diagnosis in New Zealand do not tell a positive story. For example, New Zealand has a high level of cancer diagnoses following admission to hospital via emergency department compared to other comparable countries.
72. Effective screening programmes, timely diagnosis and referral through primary care, and public symptom awareness are crucial for early detection. Early detection, diagnosis and treatment is more cost-effective for the health system and less intrusive for patients in the long term.
73. Health organisations are working together to eliminate the variation in pathways and service distribution that were in place under the previous DHB system. Examples include a national model of care through Health NZ, national clinical and care pathways, national service planning and improved monitoring.

74. Pathways for timely cancer diagnosis in the community are being formed, which will ensure patients across the country have equitable access to cancer diagnostic services – initiated via visits to general practitioners.
75. Increased access to diagnostic imaging in the community is a key goal for Health NZ. This is better for patients, leading to more timely diagnosis, potentially avoiding more complex care and improving health outcomes for all New Zealanders.
76. To support this work, the Agency, working with Health NZ, is scoping a comprehensive early cancer detection programme of work. This will examine opportunities for advancing enablers across the diagnosis pathway from increasing symptom awareness by the public to supporting primary care in symptom identification and referrals, to organised community diagnostic pathways and models (including capacity) to future planning for emerging diagnostic modalities and technologies (including role of AI).

Breast screening

77. BreastScreen Aotearoa (BSA) offers publicly funded mammography to eligible women aged 45 - 69 years. The programme aims to screen 70% of eligible women. As of December 2023, national programme coverage was:
 - Māori – 60.5%
 - Pacific – 64.7%
 - Other – 69.0%
 - All – 67.7%.
78. The key priorities within the breast screening programme are to:
 - support the Government’s commitment to extend the age of breast screening to eligible women up to 74 years
 - deliver the 26 recommendations in the BSA Quality Improvement Review
 - revise the BSA breast density position statement
 - implement the BSA Critical infrastructure - Information and Communication technology (ICT) systems replacement project.
79. On 15 February 2024, as part of the Government’s 100-day plan, you announced a phased rollout to expand free breast screening to women aged 70 to 74. The proposed extension to 74-year-olds will result in around 60,000 additional women who will be eligible for the programme each year (once the age expansion is fully implemented). This means that, on average, women can have an additional two to three mammograms as part of the free national breast screening programme.
80. We understand a budget proposal for Budget 2024 has been prepared by Health NZ for funding necessary to deliver the extension. This is particularly related to funding increases in workforce capacity and capability, and facilities across the screening, treatment, and symptomatic pathways.
81. Wāhine Māori and Pacific women have a higher need as they are more likely to get breast cancer, and more likely to die from breast cancer. Wāhine Māori in the screening age-group

are 45% more likely to develop breast cancer and have a 68% higher breast cancer mortality rate than non-Māori-non-Pacific women. Pacific women's breast cancer incidence rate is 26% higher and breast cancer mortality rate is 72% higher than non-Māori-non-Pacific women.

82. Research also shows that when wāhine Māori are diagnosed with breast cancer via screening, their outcomes are comparable with non-Māori women. Raising the participation rates of wāhine Māori will have positive benefits for the individual patients involved, their whānau, and the system.
83. The embedding of a new national breast screening register, anticipated to be completed by mid-2024, is also critical to the success of the implementation.

Cervical screening

84. The National Cervical Screening Programme (NCSP) provides cervical screening to people with a cervix, aged between 25 and 69. The programme aims to screen 80% of the eligible population. As of December 2023, national programme coverage was:
- Māori – 57.3%
 - Pacific - 58%
 - Asian - 64.4%
 - Other - 75.5%
 - All - 69.5%.
85. These rates have seen a marked uplift since the transition to HPV primary screening in September 2023. HPV self-sampling was funded from Budget 2022 and has been commenced with priority groups.
86. Key priorities within cervical screening are:
- full implementation of HPV (including workforce expansion, completing register build and rollout, providing primary care direct access to screening information, enabling centralised notifications and regionalised campaigns)
 - developing the action plan to implement the Parliamentary Review Committee recommendations (including implementing zero fees cervical screening, greater access to colposcopy services and an elimination strategy).
87. Two Parliamentary Review Committee reviews of NCSP have recommended free cervical screening for all eligible people. Interim funding was introduced to enable free screening for high-risk populations including:
- Māori and Pacific
 - unscreened and under-screened patients
 - patients who can least afford a co-payment
 - patients requiring follow up testing.

This funding has not been confirmed beyond 30 June 2024.

88. Health NZ is seeking to extend the completion of the HPV rollout from June 2024 to December 2024 to ensure quality and integrity of the programme. This includes supporting IT systems, transitioning participants to the new clinical pathway, supporting new/existing providers, and investigating and potentially implementing other delivery methods that were not part of the original project.
89. Effective cervical cancer screening through HPV primary testing is one of the three key strategies that are part of the Elimination of Cervical Cancer commitments in the World Health Organization declaration – which New Zealand has endorsed. The other two are HPV Immunisation and access to colposcopy and effective and prompt treatment. We have an opportunity to support a coordinated response on all three interventions and commit to a New Zealand target year for elimination.

Bowel screening

90. The National Bowel Screening Programme (NBSP) provides bowel screening to people, aged between 60 and 74. It aims to screen 60% of the eligible population. As of December 2023, the national programme coverage was:
 - Māori – 47.9%
 - Pacific – 36.7%
 - Other – 60.9%
 - All – 56.7%.
91. The key priorities within bowel screening are:
 - lowering the age of eligibility for bowel screening
 - increasing participation by Māori and Pacific peoples
 - microsimulation modelling to inform colorectal cancer (CRC) screening recommendations
 - improving IT infrastructure.
92. New Zealand has one of the highest rates of bowel cancer in the world. Bowel screening every two years saves lives by detecting bowel cancer at an early stage, when it can often be successfully treated. The bowel screening rollout began in July 2017 and was completed in June 2022. To date, more than 2,300 bowel cancers have been detected via screening. More than one third were stage one cancers. People who are treated following diagnosis of early-stage bowel cancer have a 90 percent chance of long-term survival.
93. You will be receiving a briefing from Ministry of Health on 29 February 2024 with advice on lowering the age of eligibility for bowel screening as per your Government's post-election commitments.

New cancer screening programmes being considered

94. The National Screening Advisory Committee (NSAC) oversees major changes to existing screening programmes and reviews the evidence for potential new screening programmes, including whether they meet the former National Health Committee's screening criteria.
95. The next potential national cancer screening programme is for lung cancer. A New Zealand research programme is providing local data to inform national planning. Early indications show there may be benefit in scaling it up nationally, so the research programme is being expanded to test this. National planning work will provide a high-level assessment of potential options and costs in 2024.
96. NSAC regularly reviews evidence on other cancer related screening interventions, including recent reviews for prostate cancer and hepatitis C screening. NSAC also considers some screening programme related activity/innovations including topics such as artificial intelligence, cancer biomarker blood tests and risk stratification approaches.
97. We understand that you would like the Cancer Agency to explore opportunities for initiatives in prostate cancer and ovarian cancer early detection. We will discuss some preliminary ideas with you and put together a detailed plan accordingly.

New cancer medicines

98. Systemic treatments are used with an aim of curing cancer or providing symptom relief and palliation. It is commonly given in conjunction with other treatments such as radiation therapy or surgery. Administration may occur in the inpatient setting, outpatient area or at home. The patient may receive a singular medication or a combination of drugs.
99. Te Aho o Te Kahu's 2022 Cancer Medicines Availability Analysis report described the medicines with clinical benefit that are funded to treat cancer in Australia, but not in New Zealand. A number of these medicines formed the basis of the coalition government's commitment to help more New Zealanders fight cancer by funding 13 specific cancer treatments for solid tumours. You can read the report online at teaho.govt.nz/publications/cancer-medicines
100. The Ministry developed options to implement this cancer medicines commitment, with advice from Te Aho o Te Kahu, Pharmac and Health NZ. Further options are now being explored, following your feedback on the initial proposals.
101. The Cancer Agency is currently working on a funding gap analysis for haematological cancer medicines. This work and resultant report are expected by the end of June 2024.
102. There are challenges associated with the decision to fund new medicines and implement their related treatments, including:
 - large implementation burden
 - may create more access inequities – i.e. new treatments only available in locations with capacity
 - may result in unintended outcomes of delay in delivery of other cancer treatments and increasing waiting times.

- there is increasing cost of new cancer medicines, exacerbated by the fact many are used in combination with others.

103. There is a large implementation burden on the sector beyond the administration of new cancer medications. This includes staffing and follow-up care. This is particularly because new therapies are more commonly add-ons or additional lines of care. Health organisations have not previously collaborated on advice about costs and logistics of administration of new medicines and this new collaboration is expected to improve decision making and implementation of decisions.
104. The health system is currently implementing two new immunotherapy drugs pembrolizumab (brand name Keytruda), for the treatment non-small cell lung cancer as first-line treatment and atezolizumab with advanced non-small cell lung cancer as second or later line treatment. These new medicines are placing significant strain on the capacity of service providers.

Stem Cell Transplant Capacity

105. There are five transplant centres throughout New Zealand which treat patients needing either autologous or allogeneic transplants.
106. Autologous transplants involve infusion of a patient's stem cells back to themselves after they received a period of conditioning to destroy cancer cells. They are provided as either a curative measure or to extend a person's period of remission. Autologous transplants are provided at Hamilton and Palmerston North.
107. Allogeneic transplants involve infusion of stem cells from another person following the patient receiving intense conditioning to destroy cancer cells. These are more complex, carry higher risk, and usually provided with curative intent. Both allogeneic and autologous transplants are provided at Auckland, Wellington, and Christchurch Hospitals.
108. There has been a 24% growth in transplants provided nationally between 2017 and 2021 (286 to 354) which is forecast to increase by 47% growth between 2021 and 2030 (354 to 521).
109. Growth has been driven by improved management which has increased the number of people who can receive benefit from transplant along with increasing the pool of potential donors. This growth has not been accompanied with matching investment in the services and has led to extended waiting times at the three major centres – currently around 9 months. As a result, some patients are receiving multiple rounds of maintenance chemotherapy and a small number do not live to receive a transplant. Further investment in these services would provide for past growth, mitigate risks to safe care of patients, reduce long waits and improve outcomes.

Driving performance

110. To improve cancer outcomes we need to be able to regularly assess what is or is not working and track progress. This relies on collecting and sharing accurate data at a high level on

cancer incidences, experiences, and outcomes – as outlined in the Te Aho o Te Kahu State of Cancer report. This includes data on operational volumes, treatment lengths and so on, to monitor performance and variations – between populations, regions/districts, so we can work together on plans to address them. You can read the Report on the Agency's website at: teaho.govt.nz/publications/cancer-state.

111. The Ministry, Te Aho o Te Kahu, and Health NZ each play a different role and provide a different part of the picture.
112. The Ministry is currently developing a monitoring framework and working with Te Aho o Te Kahu to provide advice including in relation to FCT measures.
113. This monitoring relies on accurate and consistent data collection. The system is working to improve data quality in relation to cancer through digital projects such as CanShare, and updates to the FCT business rules.

Faster Cancer Treatment Indicators

114. While not perfect, the Faster Cancer Treatment (FCT) indicators are the best measure of access to cancer services for national and regional levels currently available. Health NZ districts collect standardised information on the time for patients who have been referred urgently with a high suspicion of cancer to see a specialist (62-day target) and the time to receive treatment once a 'decision to treat' is made (31-day target). Te Aho o Kahu has been supporting process improvements with the Health NZ teams who collect this data. This has improved the quality and consistency of data collected across the country.
115. Te Aho o Te Kahu has been managing the collation and reporting of this data, which is in the process of being transferred to Health NZ.
116. FCT is only one measure of cancer care performance and provides identify systematic areas for improvement. The 31-day target measures the proportion of people that receive their first treatment within 31 days of a decision to treat. It is retrospective and there is a lead time of several weeks between activity and reporting. FCT can be reported regionally and by ethnicity which aligns with the direction Health NZ is taking to develop a more regionalised focus on improving health services.
117. It is important to note that FCT only covers the part of the cancer pathway between the decision to treat and the person's first treatment. It does not reflect the timeliness of all cancer treatment activity and the capacity required within the system to deliver the care required. Many other measures are used in the system, both locally and nationally, to effectively manage the system.

Status of FCT targets

118. Nationally, the 85% target for the 31-day indicator was met until December 2022. However, it has declined since then, although there are signs of some improvement in last two quarters. While many districts are already meeting the 85% target, some districts regularly do not meet this target.

119. There are large pressures on workforce and infrastructure which means that the continued achievement of the 31-day indicator is almost always at risk. This is because it is reliant on both health system and patient factors. It may be prudent to implement targets in stages as capacity in the system increases, along with patient supports to enable them to attend treatment.
120. The 90% target for the 62-day measure has not been achieved nationally and began trending down from mid-2022. Māori and Pacific peoples are most affected by delays in receiving treatment. We are also seeing a downward trend for Pacific people in 31 Day from Q4 2023 who are below target. A limitation of the 62-day measure is that it reflects the experience of a minority of patients entering cancer treatment journey.
121. Health NZ districts use FCT information to identify activity which can improve performance. Te Aho o Kahu regional teams continue to work with hospital teams to identify and address local issues leading to increased wait times and treatment. While opportunities remain for better leveraging existing capacity to delivery faster access, most persistent barriers are structural and relate to workforce and diagnostic/therapeutic capacity constraints.
122. As FCT is currently collected and analysed regularly and has been a publicly reported health target in the past, it will not be difficult to reinstate as health target in the future. However, more planning needs to be done to ensure that the mechanisms are in place to turn target results into drivers for improvement action.
123. The table below shows the latest reported performance against the 31-day FCT target:

District	District Achievement		District deficit to meet 85%		Regional Achievement		Regional deficit to meet 85%	
	Apr - Jun 2023 (three months)	July- Sept 2023 Tracking (quarter)	Apr - Jun	Jul - Sep	Apr - Sep 2023 Tracking (six months)	July- Sept 2023 Tracking (quarter)	Apr - Jun	Jul - Sep
Auckland	85.0%	84.8%	0	1	84.6%	83.6%	-	22
Counties Manukau	82.2%	81.1%	14	18				
Northland	83.0%	78.7%	5	16				
Waitemata	89.7%	87.4%	-	-	83.1%	84.6%	33	4
Bay of Plenty	80.3%	80.0%	12	13				
Lakes	86.8%	92.2%	-	-				
Tairāwhiti	91.9%	100.0%	-	-	84.4%	83.9%	2	9
Waikato	79.2%	83.8%	28	5				
Taranaki	86.9%	86.5%	-	-				
Capital and Coast	89.8%	81.9%	-	8	84.8%	86.5%	21	-
Hawkes Bay	70.5%	62.5%	9	13				
Hutt Valley	91.6%	93.8%	-	-				
MidCentral	81.4%	79.3%	10	12	84.3%	84.6%	48	17
Wairarapa	91.4%	93.1%	-	-				
Whanganui	76.1%	87.7%	10	-				
Canterbury	84.2%	87.7%	3	-	84.8%	86.5%	21	-
Nelson Marlborough	81.7%	86.8%	7	-				
South Canterbury	74.5%	90.2%	5	-				
Southern	84.6%	85.1%	2	-	84.3%	84.6%	48	17
West Coast	74.4%	83.8%	5	0				
National total	84.0%	84.6%	48	17	84.3%	84.6%	48	17

Noting that where a district has a result of <0 required to meet 85% achievement in any particular month these serve to reduce the total required nationally and over the six-month period. Thus, adding the various cells as seen here will not replicate the totals shown.

Also note that achievement of FCT is reported on a six-monthly rolling basis following the end of each quarter with a significant lead time (around 80 days) before measures are available.

Palliative care and supporting survivors

124. Planning is needed in supporting survivors (often who have with multiple cancers); palliative and end-of-life care – this area has not had a lot of policy attention over the last decade.
125. In partnership with the Māori Health Authority – Te Aka Whai Ora, Health NZ has developed a national palliative care work programme (refer to Aide-Mémoire, Palliative Care and Hospice Services, ref HNZ00036856)
126. Health NZ will work in partnership with government agencies, providers of palliative care services (primary and specialist), consumers, and communities to ensure palliative and end-of-life care meets the needs of all New Zealanders and their whānau.
127. A National Palliative Care Steering Group was established in August 2023 to oversee this programme. The key deliverables will be achieved by a series of fixed term working groups. The first two working groups (Equity and Models of Care – Paediatric) were established in late 2023. The Models of Care - Adult Working Group is currently being established.
128. This work programme will provide advice to the Health NZ Board on appropriate funding requirements for hospices and specialist paediatric palliative care. These requirements will be informed by new models of care and the associated workforce, reporting, and contracting requirements.
129. It will also provide recommendations to ensure palliative care services are better networked and supported across primary care, ARC, home and community support services and hospital services.

Next steps

130. The Ministry, Health NZ and Te Aho o Te Kahu will develop an implementation plan for improving cancer outcomes. This will include short term to medium term initiatives to improve performance and build sustainability and resilience in the health system, along with medium-term to long-term initiatives to drive transformative change.

ENDS.