Community and Public Health Advisory Committee / Disability Support Advisory Committee

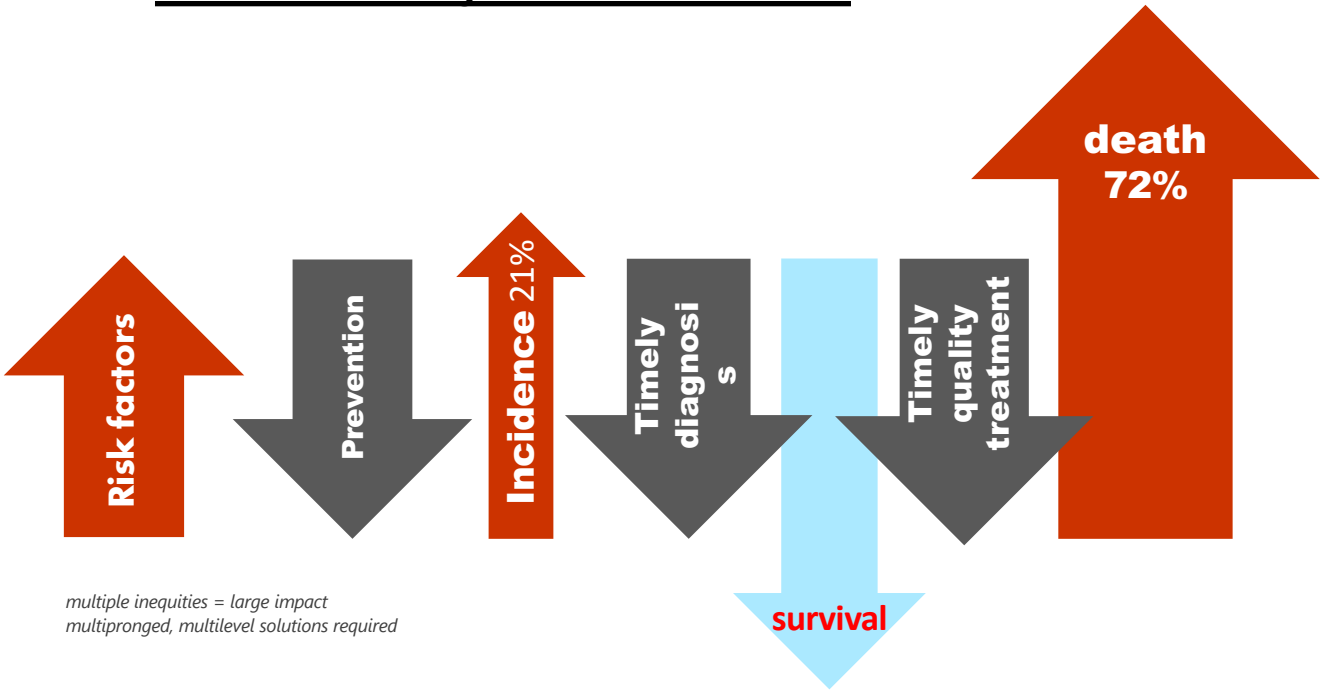
23 September 2020

Cancer in New Zealand

- Cancer is the leading cause of premature mortality in New Zealand
- 29% of the population die of cancer, whilst a further 13% of the population are living with cancer
- Historically cancer affected 1 in 4 New Zealanders, now 1 in 3 will be diagnosed and by 2030 it is expected that 1 in 2 will face such a diagnosis
- Māori are generally diagnosed at a later stage, are 20% more likely to get cancer and are twice as likely to die of cancer

Equity Lens on Cancer

Māori **are more likely to get cancer**
less likely to survive cancer
<u>much more likely to die from cancer</u> *than non-Māori*

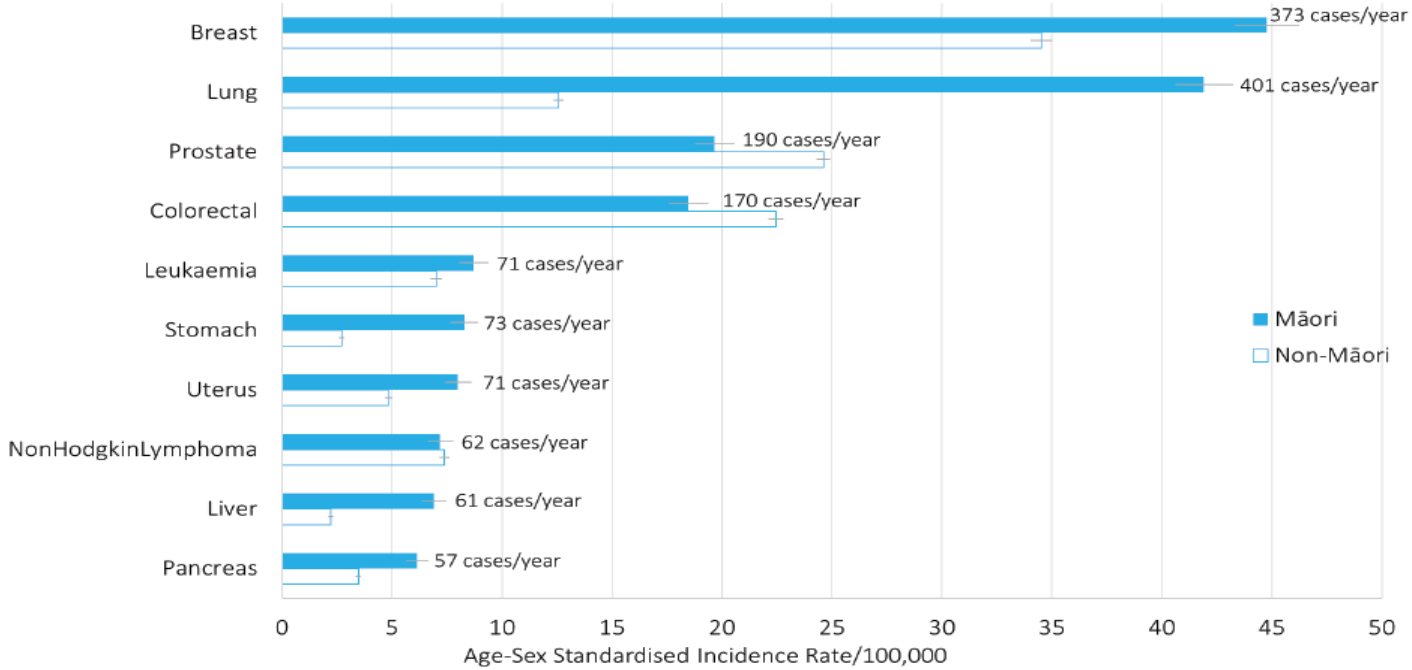


Drivers/root cause – lack of Māori equity focussed cancer control, leadership , decision making, resourcing + action = institutionalised racism = colonisation

Ministry of Health. 2014. *Cancer: New registrations and deaths 2011*. Wellington: Ministry of Health. Age-standardised

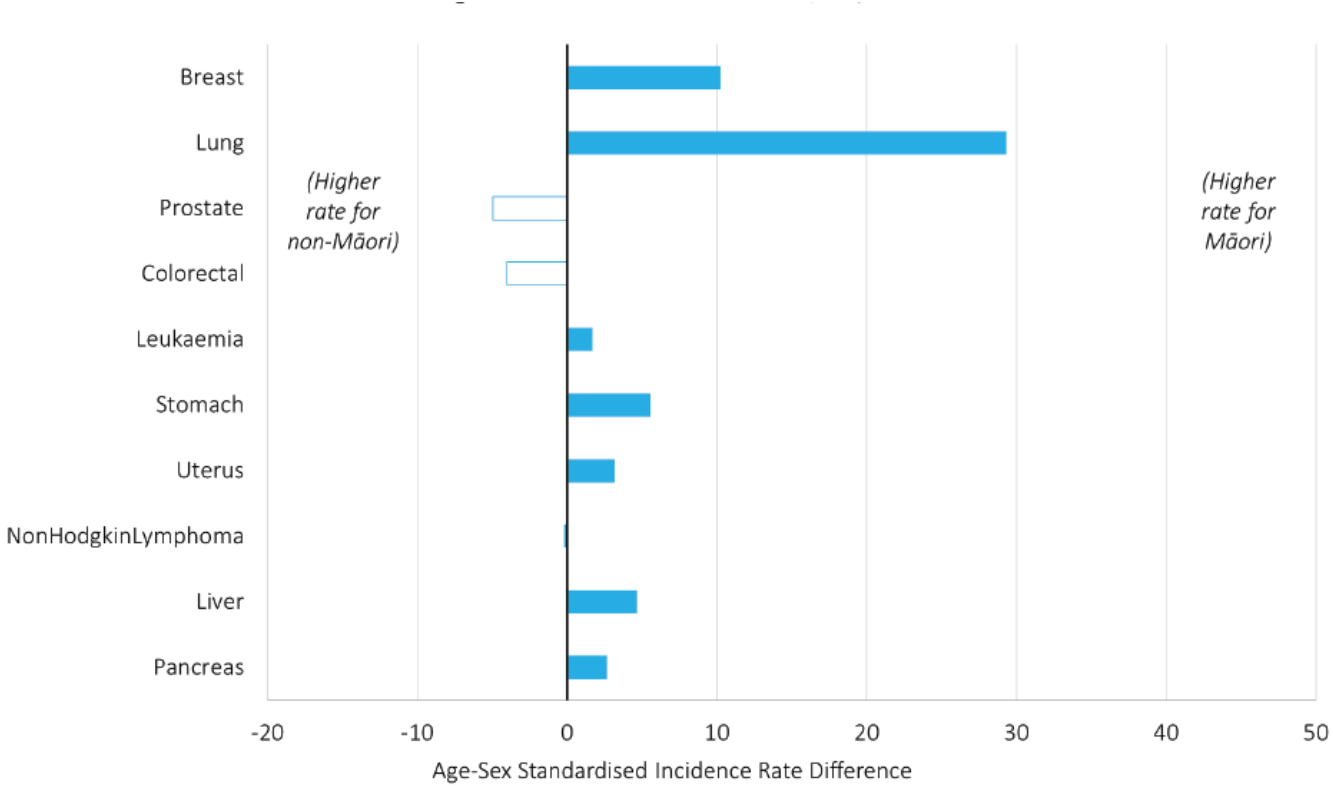
Māori more likely to get cancer

Lung and breast most commonly diagnosed cancers for Māori.



The most commonly diagnosed and most common causes of cancer death for Māori New Zealanders. Jason K Gurney, Bridget Robson, Jonathan Koea, Nina Scott, James Stanley, Diana Sarfati. NZMJ 4 September 2020, Vol 133 No 1521

Lung and breast highest incidence equity gap



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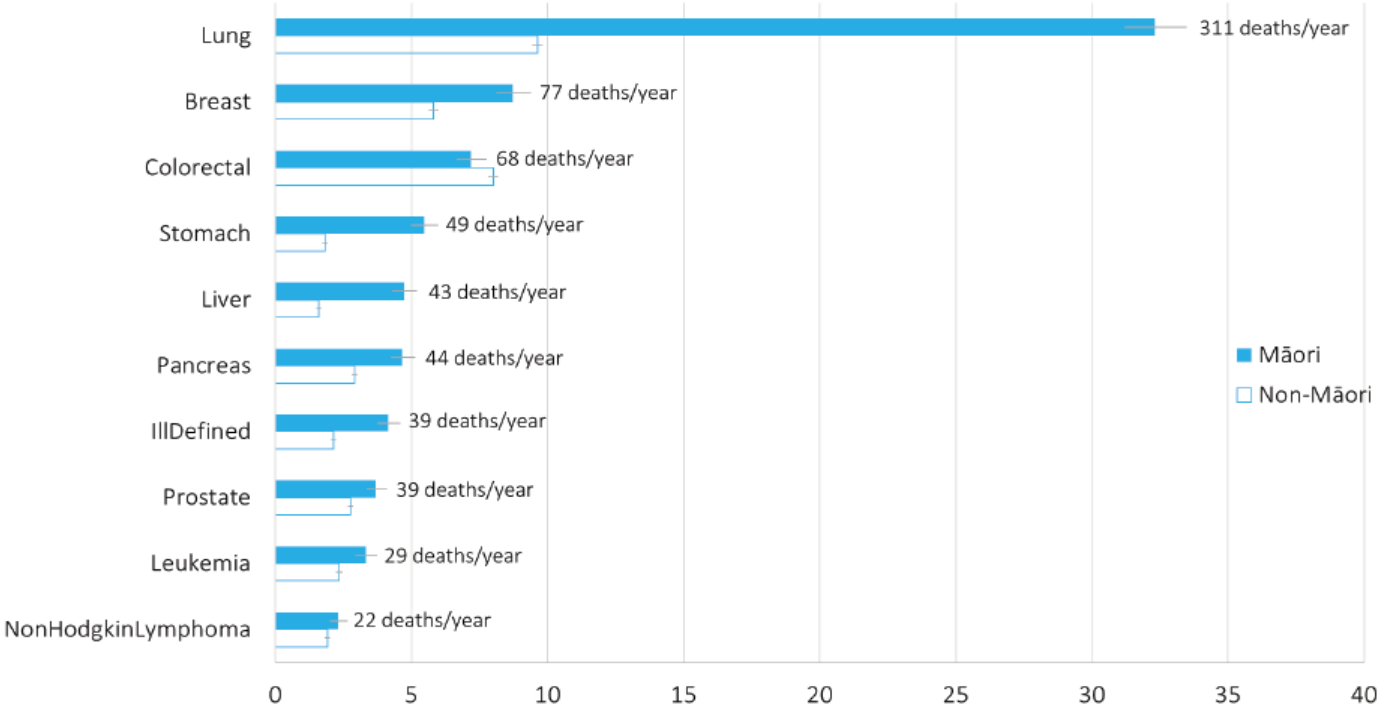
Māori more likely to die from cancer

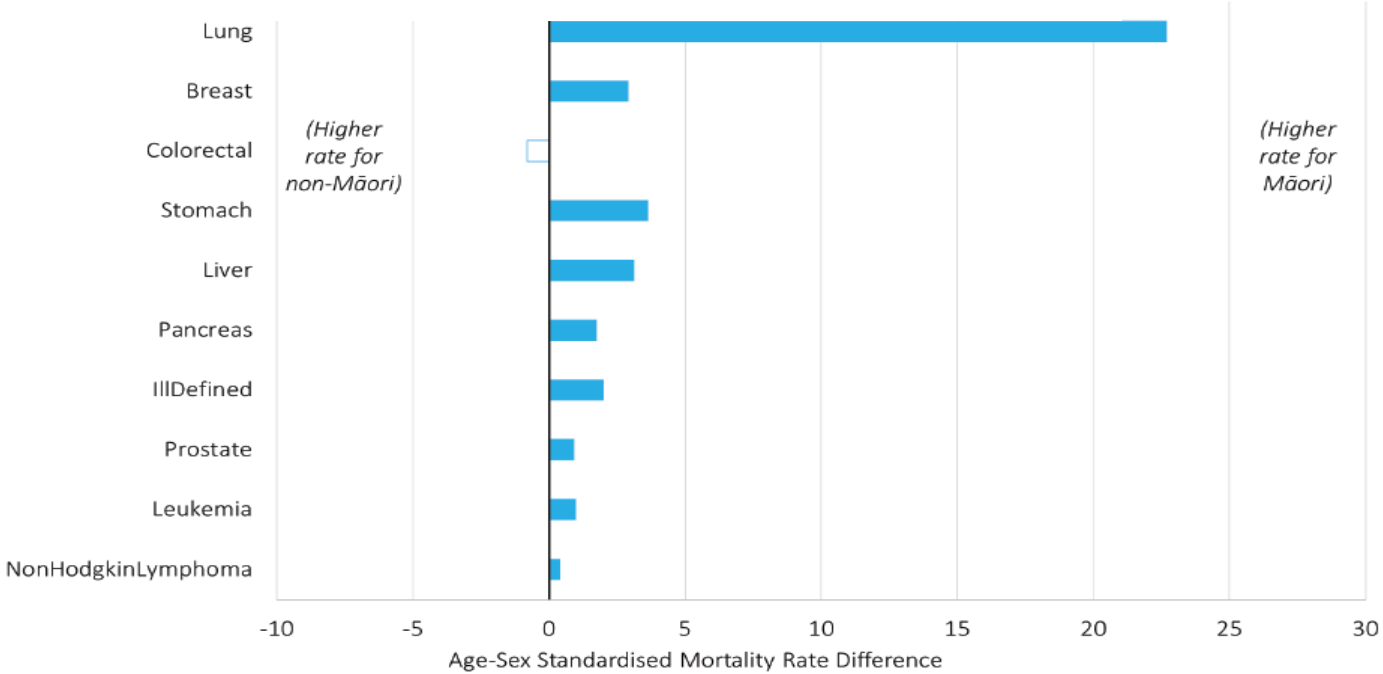
Lung and breast most common causes of cancer death for Māori



Age- and sex-standardised mortality rate 2007–2016

The most commonly diagnosed and most common causes of cancer death for Māori New Zealanders. Jason K Gurney, Bridget Robson, Jonathan Koea, Nina Scott, James Stanley, Diana Sarfati. NZMJ 4 September 2020, Vol 133 No 1521

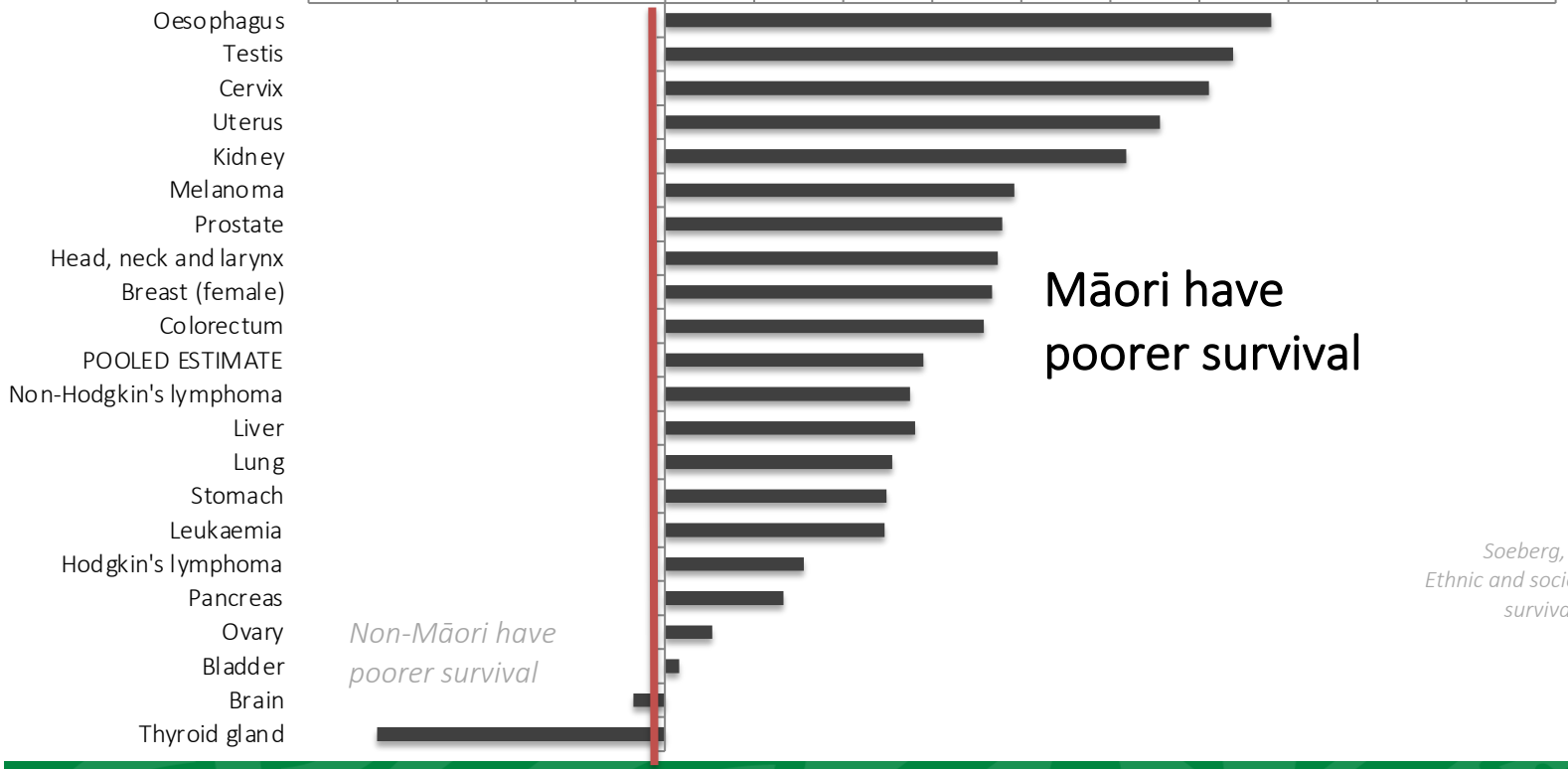
Lung highest mortality equity gap by far



The most commonly diagnosed and most common causes of cancer death for Māori New Zealanders. Jason K Gurney, Bridget Robson, Jonathan Koea, Nina Scott, James Stanley, Diana Sarfati. NZMJ 4 September 2020, Vol 133 No 1521

Māori have worse survival rates for almost all cancers

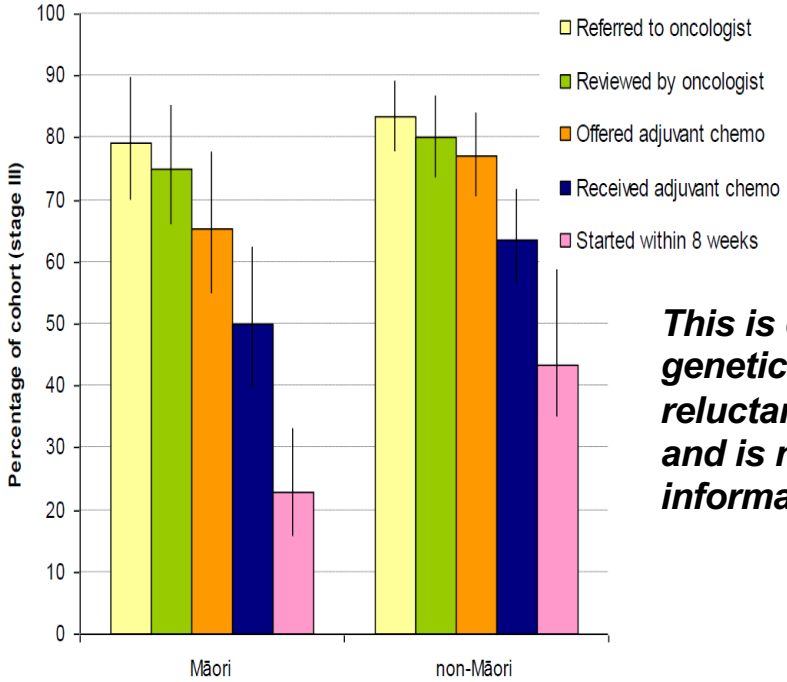
Percentage difference in cancer survival between Māori and non-Māori, 1991-2004



Soeberg, Blakely, Sarfati et al. 2012. Ethnic and socioeconomic trends in cancer survival, New Zealand, 1991-2004

Inequity at every treatment step

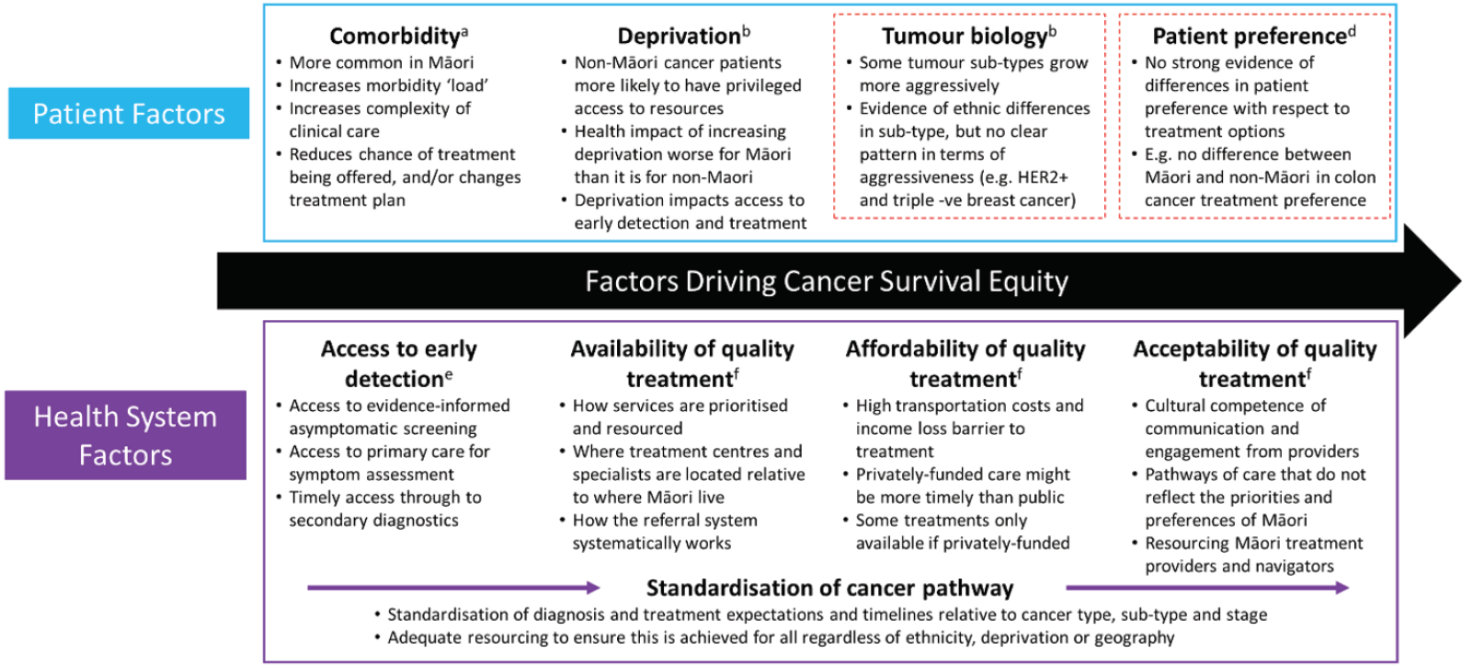
Patients with Stage III Colon Cancer: Treatment Pathway



This is clearly not due to genetics or a cultural reluctance to present for care and is not fixable by information pamphlets

Source: Hill, Sarfati, et al. (2010). Cancer, 116(13), p3205-3214.

Better access and availability to diagnosis and treatment for Māori crucial for achieving survival equity



Boxes with dashed lines indicate factors with limited or conflicting evidence

http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2019/vol-132-no-1506-29-november-2019/8061 Equity by 2030: achieving equity in survival for Māori cancer patients. Jason Gurney, Shelley Campbell, Chris Jackson, Diana Sarfati. NZMJ 29 November 2019, Vol 132 No 1506.

Screening done well can

- Reduce cancer deaths
- Eliminate survival inequities
- Reduce cancer death inequities
- Produce equitable health gain

Not done well can

- Do more harm than good
- Increase inequities

Some priorities

Bowel – age extension to age 50

Lung – ground work for a Māori led national lung screening programme

Breast – increase screening rates ++ especially in the Waikato

Cervical – replace smears with self HPV swabbing

Stomach – ground work for a Māori led H Pylori screen and treat programme

Prostate – decrease screening harm, eliminate treatment inequities

All screening – establish mechanisms 4 **Māori leadership**, value add – holistic e.g. smoking cessation, whanau inclusive, community engagement

The bowel screening programme **will increase inequities**

Unless;

Create a screening participation gap 73% M 58% n-M *or,*
Drop age by 10 yrs for Māori 50-74 M 60-74 n-M

Decrease blood level in screening test for M
Create extra health gain along screening pathway

Breast cancer

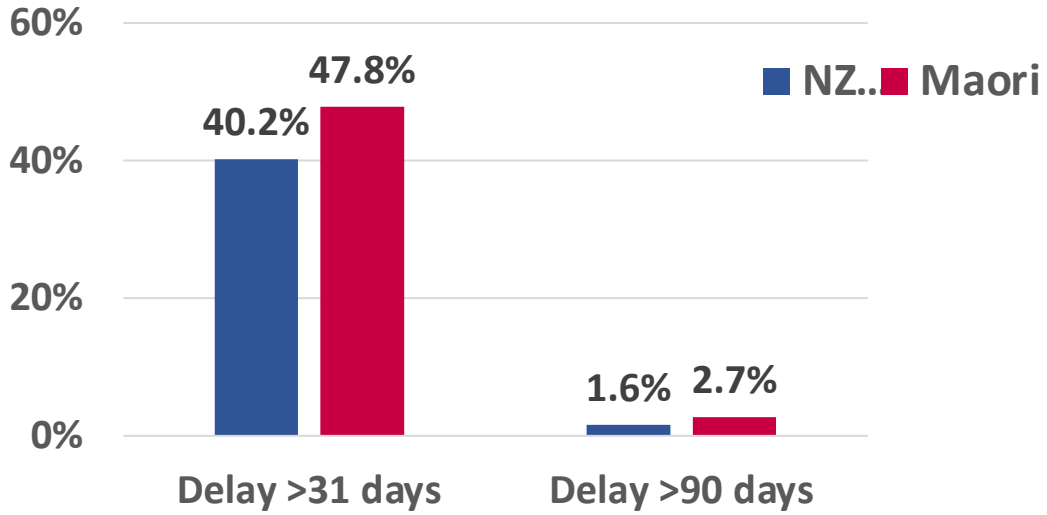
Breast cancer priorities #1 Increase screening rates

Waikato DHB is doing very poorly

- Māori 49.4% non-Māori 63% screening rates over last 24 months
- There is no formal Māori leadership over breast screening in the Waikato
- Māori kaimahi phoning wahine Māori on hospital clinic lists who were unenrolled or overdue for screening works – a Waikato pilot resulted in successful enrolment and booking of mammograms;
- 65% of women were contacted
  - 30% of these were unenrolled – 100% were then enrolled over the phone
  - 100% had a mammogram booked (12% DNA)

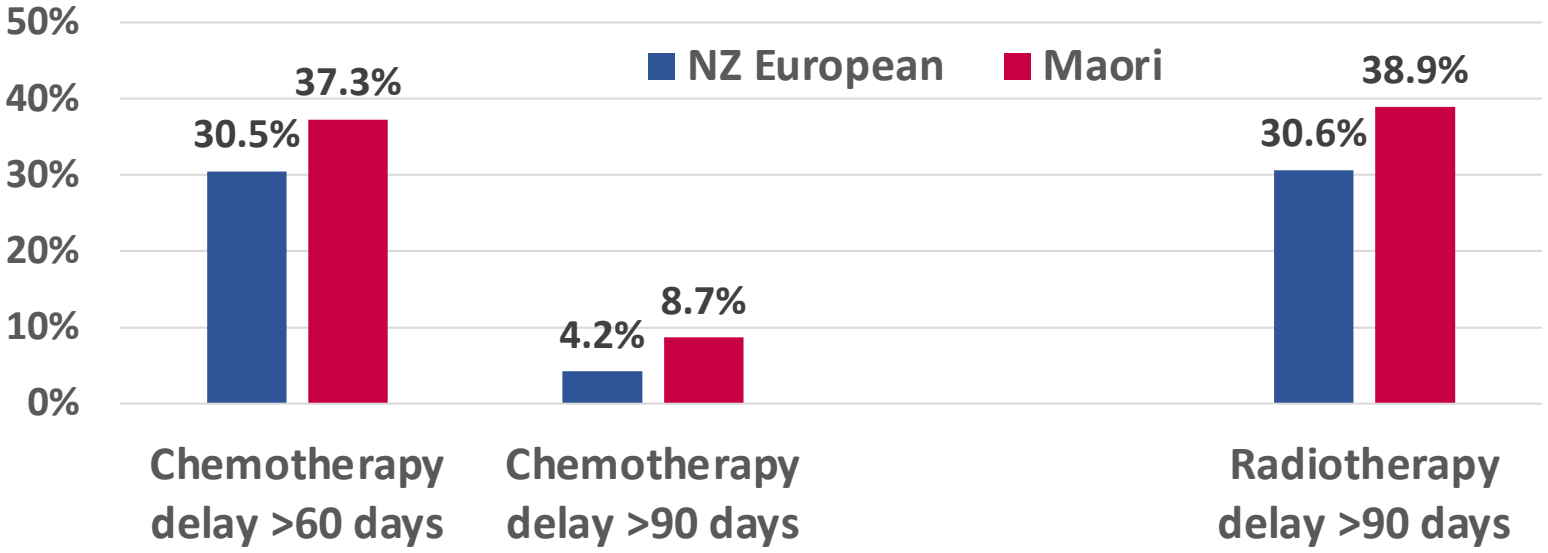
2 improve treatment timeliness for non screen detected wahine

Waikato based research showed that Māori women diagnosed with non screen detected breast cancer have delayed access to first treatment



Seneviratne S, et al (2015) Treatment delay for Māori women with breast cancer. *Ethnicity and Health* 20: 178-193.

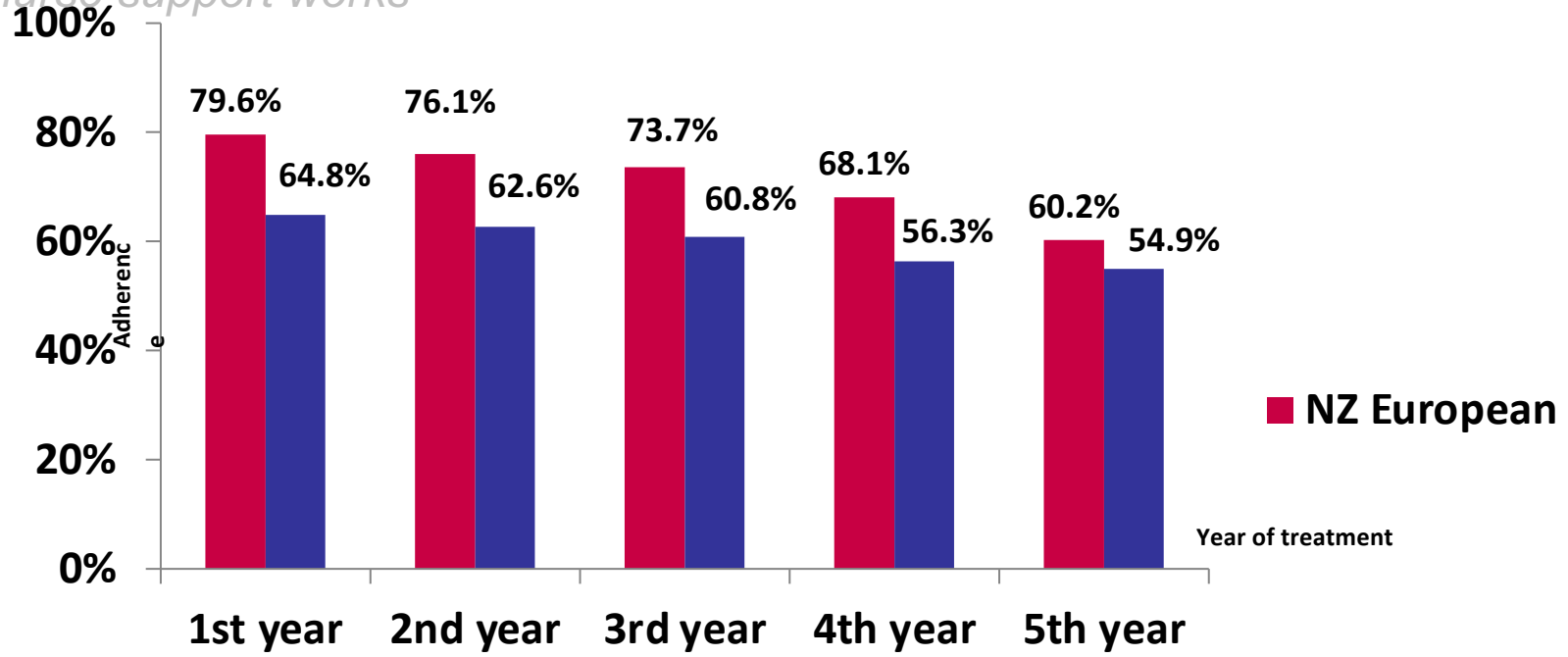
. . . Māori women with breast cancer have to wait longer for chemo and radiotherapy treatment



Seneviratne S, et al (2014) Ethnic differences in timely adjuvant chemotherapy and radiation therapy for breast cancer. BMC Cancer 14: 839.

#3 . . . support Māori women with breast cancer to continue long term endocrine treatment

nurse support works



Seneviratne S, et al (2015) Adherence to adjuvant endocrine therapy: Is it a factor for ethnic differences in breast cancer. The Breast 24: 62-67.

Lung cancer

Accounts for nearly **a third of all cancer deaths for Māori**

A well organized national lung screening programme will be cost effective, save lives and be equity positive

Screening will detect cancer early when it can be cured

- 84% of lung cancer cases in our region are stage 3 or 4 at diagnosis
- Over a third of lung cancer patients present directly to ED as the first presentation, without evidence of a GP referral

Lawrenson R, Lao C, Brown L, Wong J, Middleton K, Firth M, Aitken D. N Z Med J. 2018 Jul 27;131(1479):13-23.

Lung Screening Aotearoa – ducks are lining up . . . .

1. Māori-led research programme
   - Endorsed by national DHB CEOs as **the national pilot programme**
   - Ground work to establish essential evidence base for Aotearoa specific comprehensive clinical programme and pathways to minimize risk and maximize Māori health gain for the entire screening pathway

2. Midland DHB consortium – mobile CT proposal
3. Iwi-DHB focus groups MidCentral DHB
4. Lots of support and small scale interventions

All screening does harm. Managing lung screening harms:

- Develop procedures to manage false-positive screening results
- Implement rigorous nodule management and investigation pathways
- Over-diagnosis and anxiety
- Reassurance from negative CT (esp for current smokers)
- Radiation exposure from low-dose CT scan
- Loss to follow up (supportive diagnostic and treatment pathways)

Lung Screening Pilot Programme

- Māori-led, Auckland & Waitematā DHBs and University of Otago
- Partnership with the International Lung Screening Trial
- Aligned study with Aboriginal and Torres St Islander populations
- Using established protocols and risk assessment tools
- Plan to establish wider DHB involvement once clinical programme and pathways tested in a pilot early in 2021

United Nations Declaration on the Rights of Indigenous Peoples

Māori have the right to equity and development

maintain, control, **protect and develop** their cultural heritage, **traditional knowledge**

develop and determine health programmes
+ administer programmes through their own institutions

. . + ***financial and technical assistance from States*** *. . . for the enjoyment of the rights contained in this Declaration*

enjoyment of the highest attainable standard of physical and mental health. **States shall take the necessary steps** with a view to achieving progressively the full realization of this right.

Waikato District Oncology Funding Overview

Oncology Funding Overview

- Total investment into Waikato DHB cancer/oncology specific related services for 2020/21 is in excess of $64m
  - Cancer services $37.5m (includes 25% of haematology as cancer volumes)
  - Screening $5.5m
  - IDF outflow $2m (Oncology only)
  - Cancer Pharmaceutical $19m
  - Cancer Lodge $900k
- Primary and community care – included in capitation
- Funding into Waikato DHB secondary and tertiary services has increased by 14% from 19/20 to 20/21 (volume growth)
- Waikato DHB population funds 85%, with the balance coming from Midland DHBs

Oncology Funding Overview

- Screening Services (directly funded contracts with MOH)
  - Breast Screening Aotearoa $4m
  - National Cervical Screening Programme $1m
  - National Bowel Screening Programme (new) – growing from $500k 2020/21 to $2m ongoing

- Services provided by other DHBs in New Zealand for Waikato's domiciled population:
  - Most of our IDF outflow is to ADHB
  - Small flows to other DHBS – based on complexity of patients

Waikato DHB Oncology Services

Whakataukī

Mā tāu rourou, mā taku rourou, ka ora ai te iwi

By your food basket, and by my food basket, the people will survive

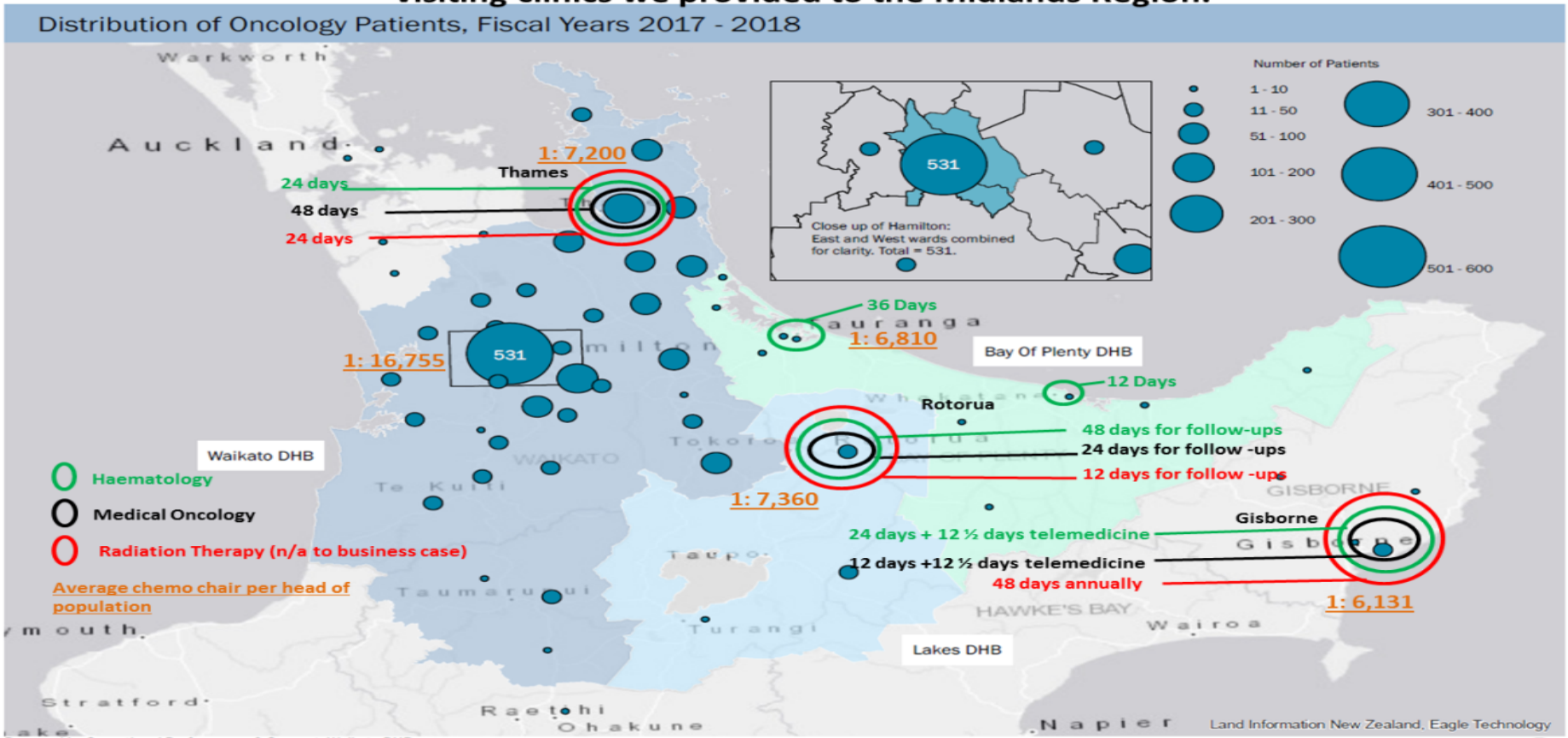
Topics to be covered in today's presentation

- The Oncology services we provide to the Waikato and to the wider region
- Waiting time performance
- Performance during Covid lockdown period
- Health Round Table benchmarking
- Linac and Radiation Therapy provision – thoughts on next steps
- Accommodation issues
- Summary

Services provided by the Oncology Directorate

- Waikato Hospital serves the Regional cancer hub, providing radiotherapy, medical oncology, haematology and palliative medical specialist services to the Waikato District
- We provide Haematology, Radiation Oncology and Medical Oncology services to both Lakes and Tairawhiti DHBs
- We provide specialist Haematology services only to Bay of Plenty DHB, as they have their own Medical Oncology service and commission their Radiation Oncology service from by the Katherine Kilgour Centre (KCC)

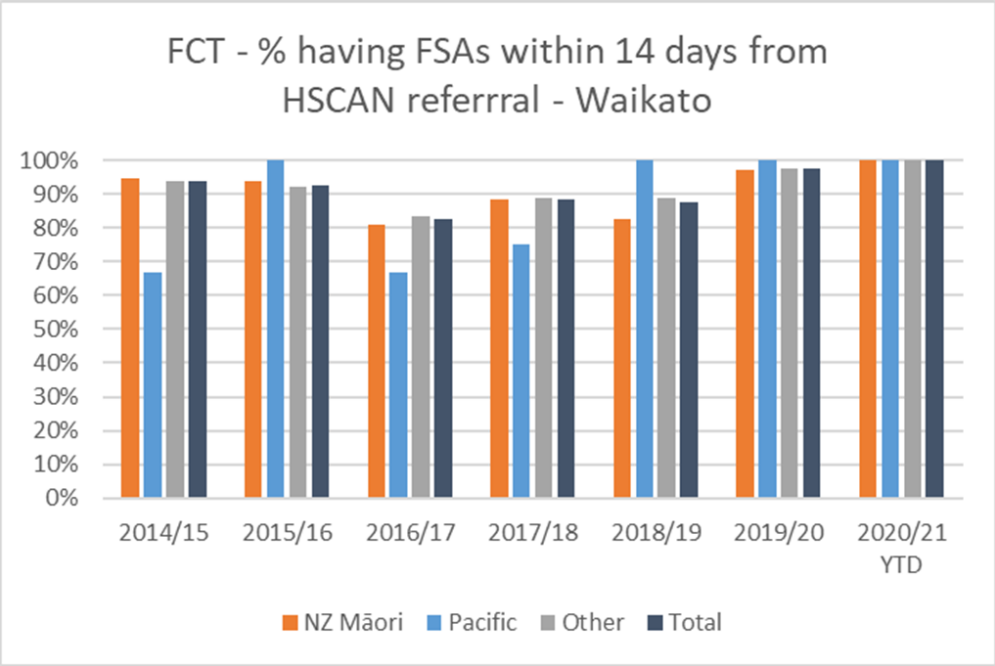
Distribution of domicile of Oncology patients in 2017-18 and information on the number of visiting clinics we provided to the Midlands Region.



Prepared by Operational Performance & Support, Waikato DHB.
Source of administrative boundaries: Statistic NZ, Ministry of Health, Koordinates
Source of all other data: Waikato DHB

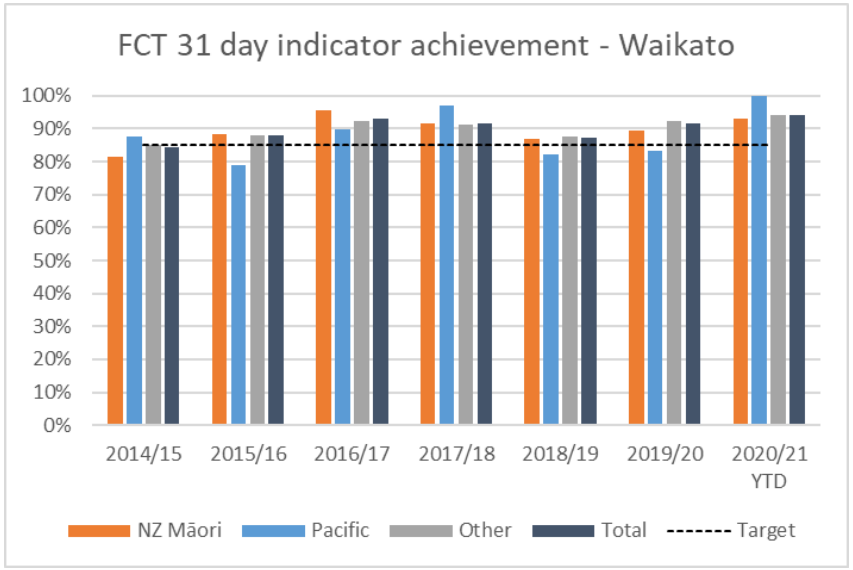
FCT – FSAs within 14 days for 62 day pathway patients

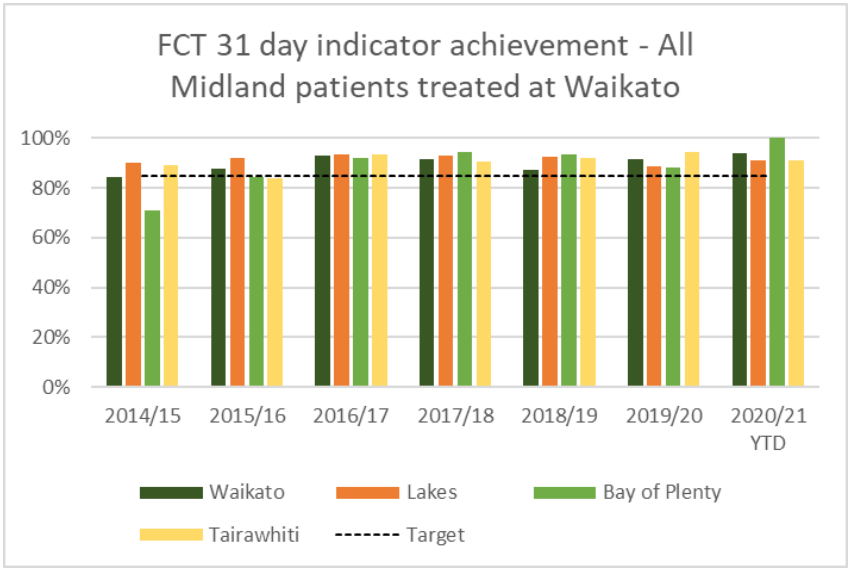
No set target



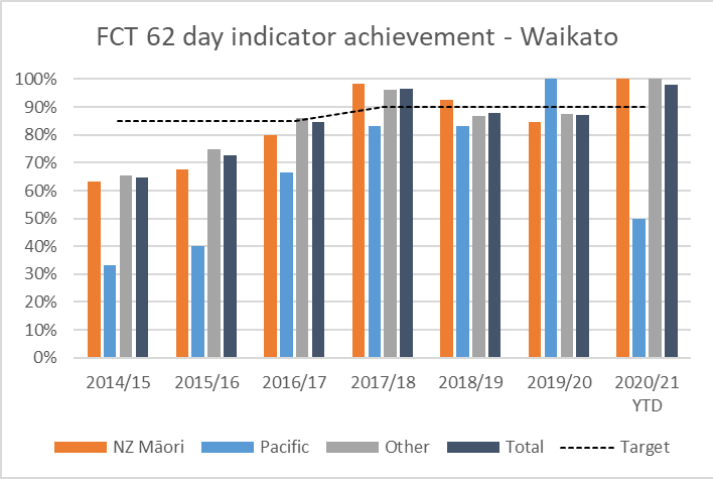
FCT 31 day target achievement

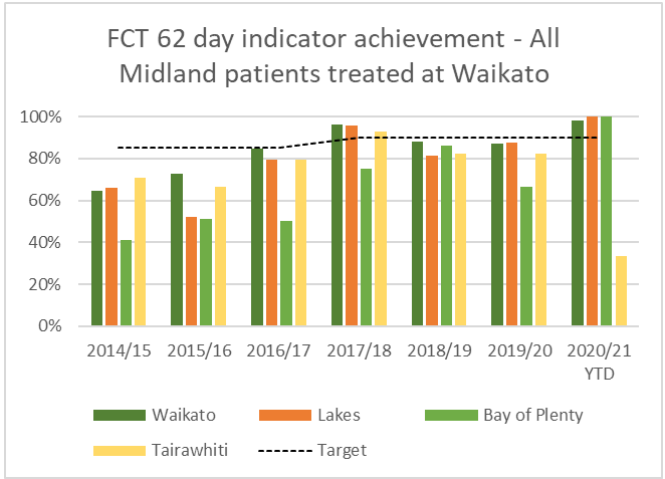
Patients receiving first treatment within 31 days from decision to treat date. Target – 85%





FCT 62 day target achievement

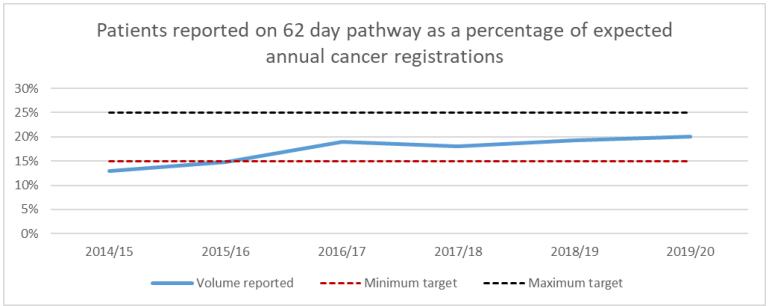




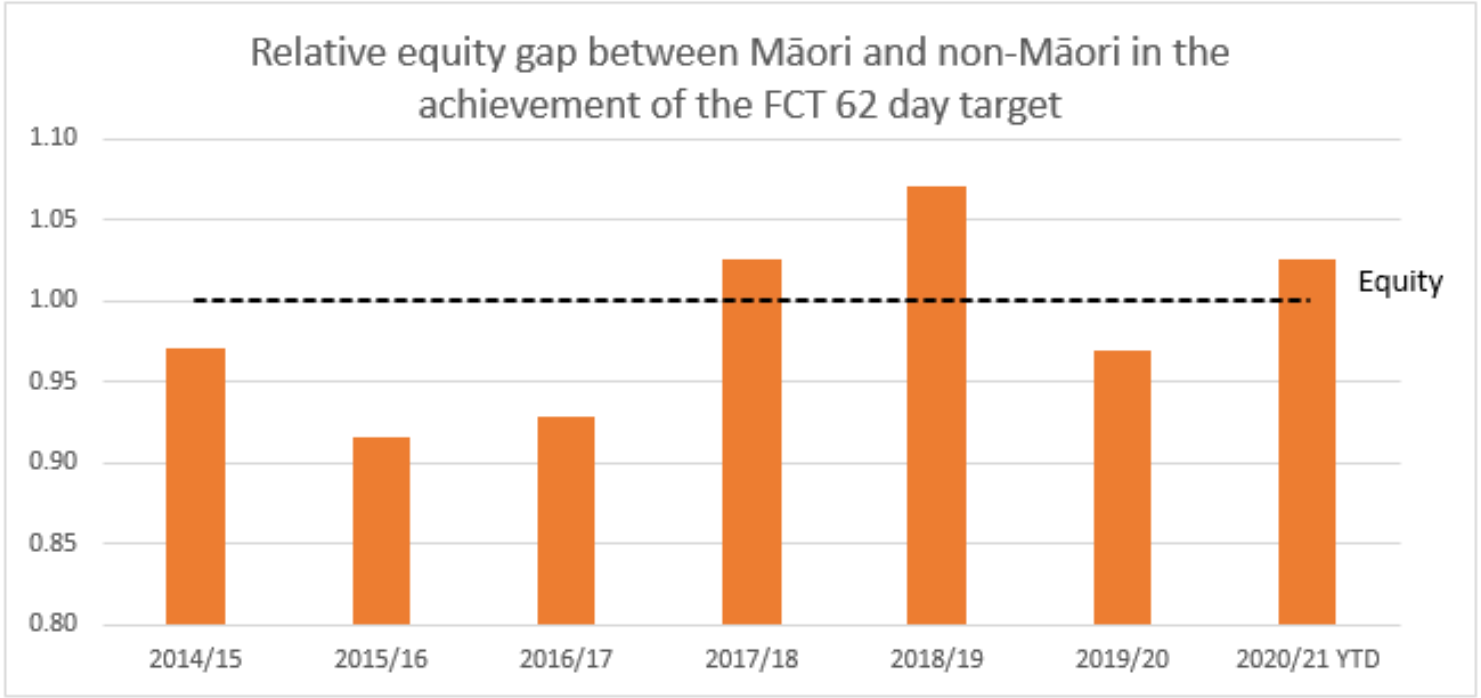
Patients referred in and triaged as high suspicion of cancer and a need to be seen within 2 weeks, receiving first treatment within 62 days of referral received date.

Target – up to 2016/17 - 85%

from 2017/18, revised business rules and target moved to 90%

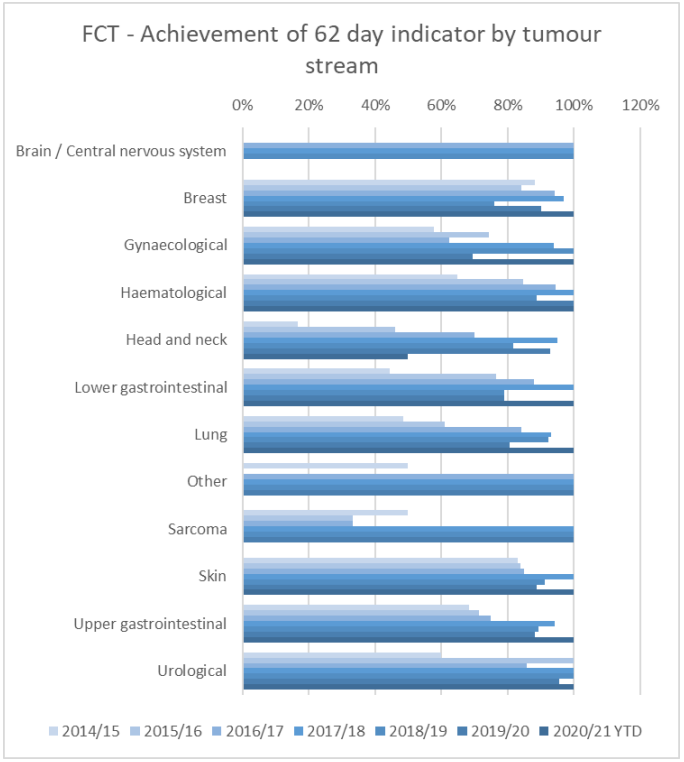


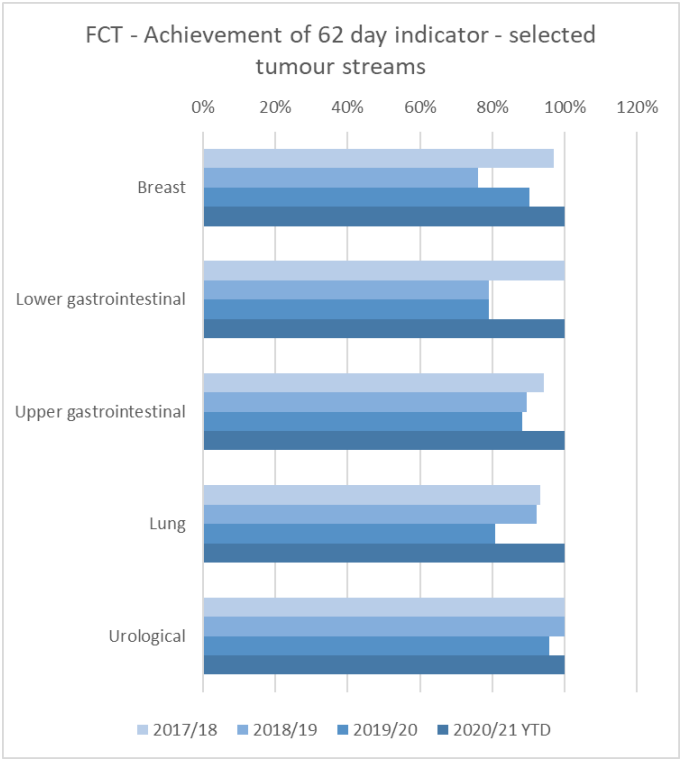
FCT 62 day target – equity gap



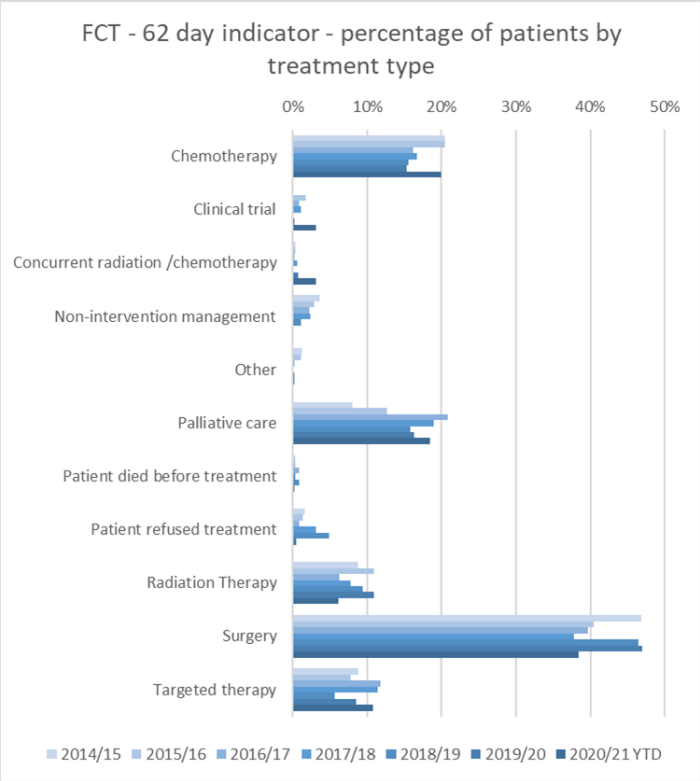
Māori achievement of 62 day target better than non-Māori in 2017/18, 2018/19 and 2020/21 YTD. Slight drop in equity (by 3%) in 2019/20

FCT – Tumour Streams

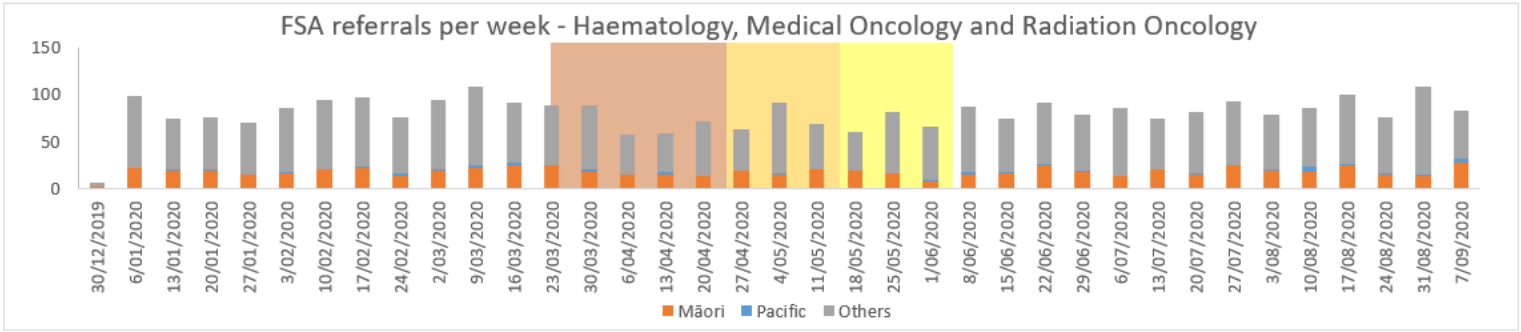


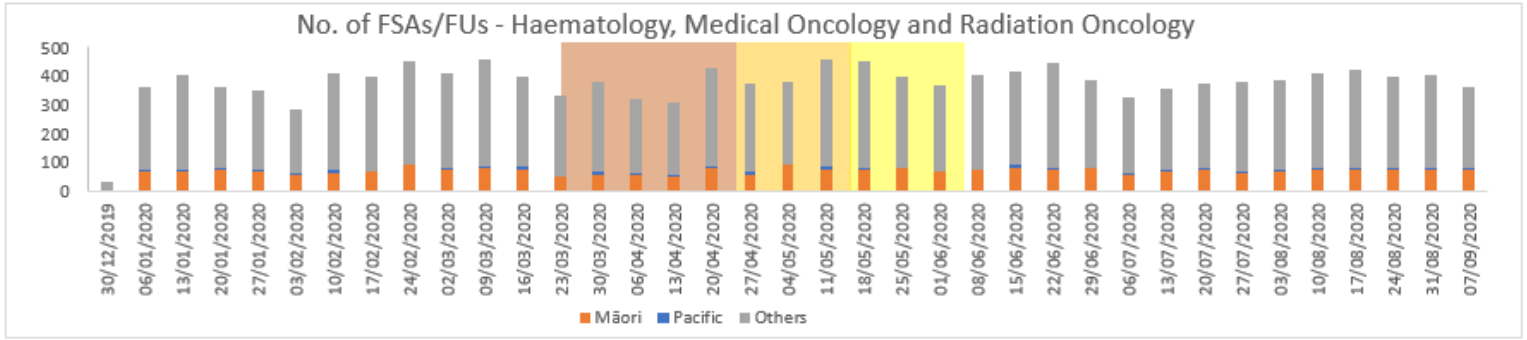


FCT – Treatment Types



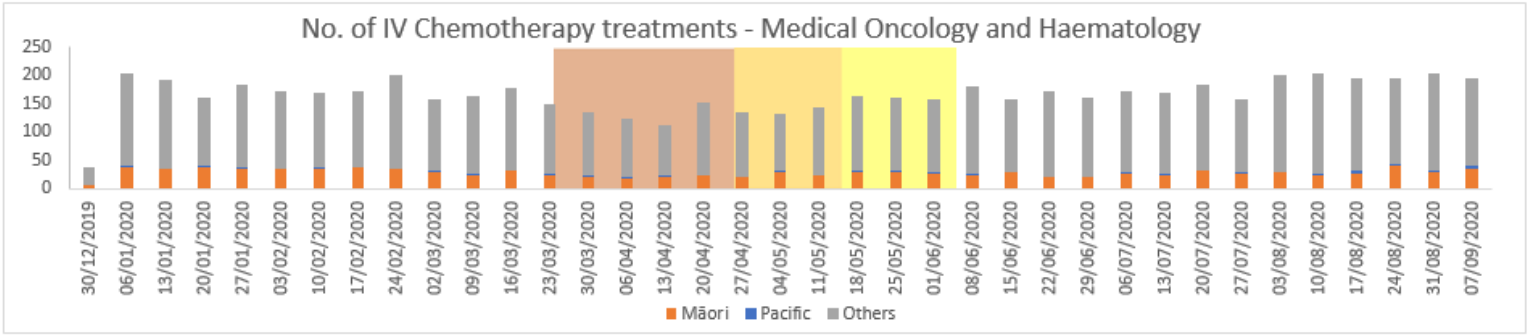
Delivery during COVID lockdown period

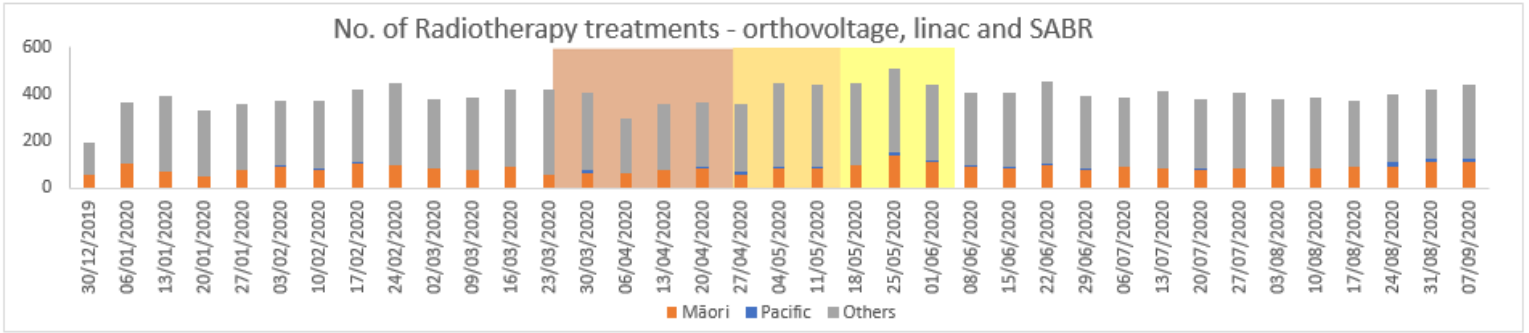




Level 4 - 25 March to 27 April
Level 3 - 28 April to 13 May
Level 2 - 14 May to 8 June

Delivery during COVID lockdown period





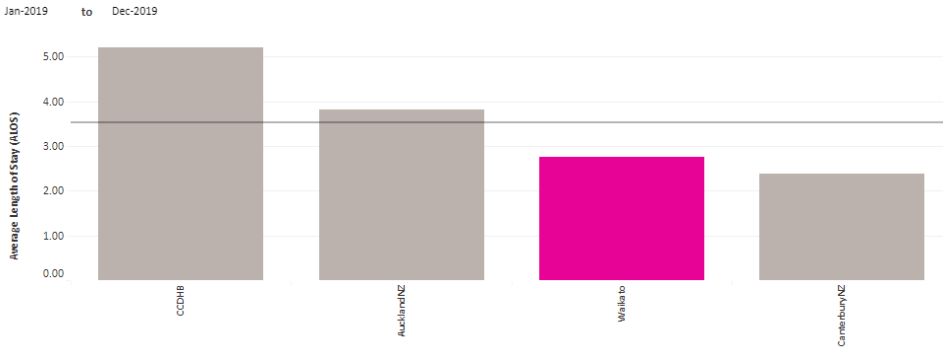
Level 4 - 25 March to 27 April
Level 3 - 28 April to 13 May
Level 2 - 14 May to 8 June

Waikato Cancer Services

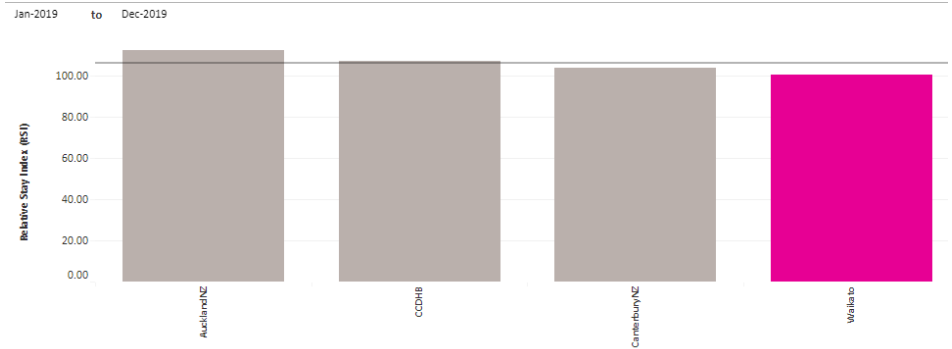
- Treated almost as many in-patients as planned (overall only 4 less than plan); saw very slightly more FSAs and follow ups than planned (+3 & +16 respectively)
- The service treated more SABR patients than was put in the plan
- Chemotherapy and IDFs were slightly down against plan
- Haematology bucked the national trend, seeing more FSAs and follow ups than planned
- Radiation Oncology also bucked the national trend by treated a higher proportion of Māori during COVID-19 (21% pre-COVID & 24% during COVID)

HRT benchmarking - 2019 calendar year

Average Length of Stay – Haematology and Oncology



Relative Stay Index – Haematology and Oncology

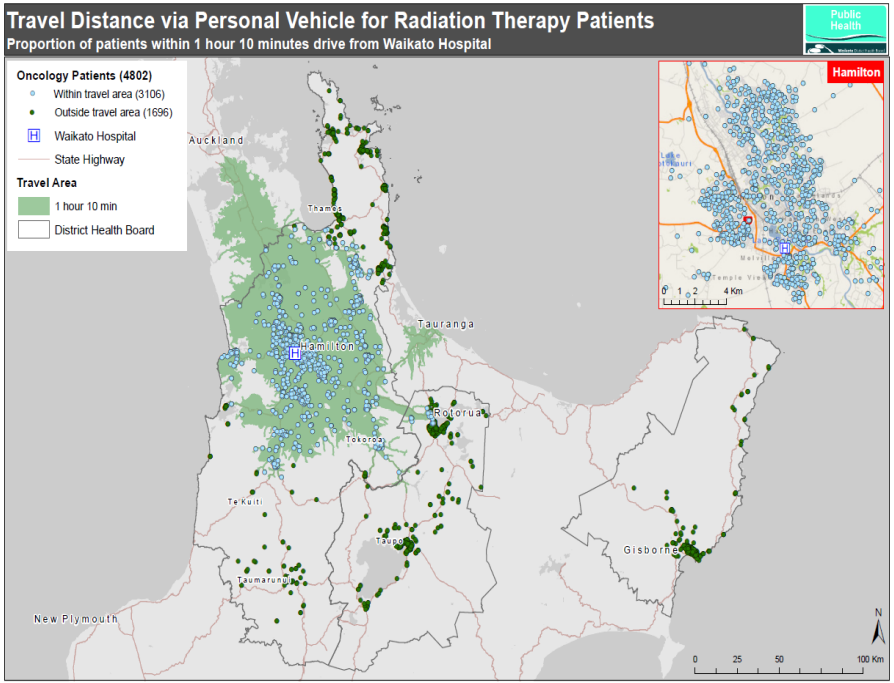


Relative Stay Index (RSI) is a risk adjusted measure for length of stay. RSI uses the total sum of length of stay divided by the sum of the expected length of stay across some set of episodes. A result less than 100% means the length of stay is less than expected.

What is the service doing to reduce inequity?

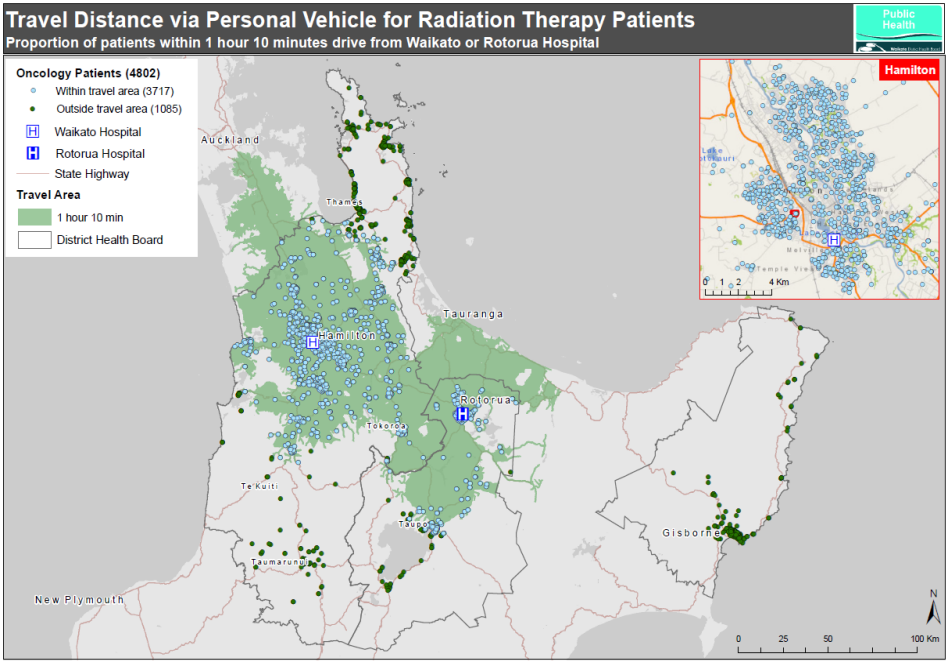
- Employing a CNS whose work it is to improve the patient journey and improve access to services for Māori diagnosed with cancer – this has ensured that the DNA rate is very low
- Planning to take more of our services to patients living rurally, through the development of increased outreach services to the rural hospitals
- Working with the Transformational Model of Care team and Māori Health to identify and implement projects that will reduce inequity in cancer and those who do not attend appointments
- Created a Radiation Oncology Health Equity and Improvement working group
- Using targeted interview questions that improve applicants' understanding of the way we need them to work to reduce inequities eg going the extra mile for our Māori patients

Regional Access to Radiation Therapy Treatment



- 65% of all Rad Onc patients treated live within 70mins of Waikato Hospital.
- 54% of Māori and 72% of Pacific Island patients live within 70mins compared to 67% of others.

Potential impact of establishing a RT Treatment service at Lakes



- 77.5% of all Rad Onc treated patients now live within 70mins of Waikato or Rotorua Hospital.
- 19% increase in access for Māori to 73%
- 8.4 % increase for Pacific Island to 81% patients

Drivers for change

- **Outcome 2: New Zealanders experience equitable cancer outcomes –**
  Te huanga 2: He taurite ngā huanga
  Māori are 20 percent more likely to get cancer and nearly twice as likely to die from cancer as non-Māori.
  Rural access to health care services, including cancer services, is an issue for people living in rural communities.

- Radiation Therapy treatment capacity will be reached at Waikato by 2026.

- It is estimated that a linac at Lakes would be viable at about 70% capacity when opening, based on an 8hr operation day and 5% downtime.

- By working in partnership with Lakes and the MoH this project could proceed to the benefit of Te Manawa Taki patients.

Current Equipment

4 Linac service: most expensive ‘pieces of kit’ in the hospital @ circa $5 million each

Range from 2 new (2019 & 2016) to 2 old (2011 & 2007)

- 2019’s “Yellow” machine enabled us to be the first in the country to deliver HyperArc technology
- 2011’s “Pink” machine is the oldest in the country

Accommodation concerns

- Concerns over the configuration and physical space available to treat Oncology patients in the Lomas Building (the Regional Cancer Centre) have existed for over a decade.
- Various attempts to increase capacity have not been successful.
- Main issue is the lack of space to treat patients, with current capacity – for both chemo chairs and clinic rooms - expected to be exceeded in 2021.

DHB	Population	Chemotherapy chairs	Average chemo chairs: head of population
Bay of Plenty	238,880	35	1: 6,811
Lakes	110,410	15	1: 7,361
Tairawhiti	49,050	8	1: 6,131
Waikato	419,980	35 (25 in Hamilton + 6 in Thames)	1: 13,545

Oncology Services priority areas

- The main area of focus will be to develop solutions to address the current cramped infrastructure in ageing buildings, with capacity for Chemotherapy and OPD clinics predicting to be exceeded next year
- Gain Commissioner & then CCA/ Te Aho o Te Kahu and Ministry of Health approval for a future-proofed cancer build solution
- Work with Lakes' DHB on the potential for developing a Radiation Oncology service at Rotorua Hospital
- Review of current Palliative Care service provision across the district, in collaboration with Strategy and Funding and Waikato Hospice
- Work with Strategy and Funding on developing a localities model of care