TE AHO O TE KAHU
CANCER CONTROL AGENCY

COVID-19 and cancer services

Working report on the impact of COVID-19 on cancer services for the period ending March 2022

Released June 2022

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SUMMARY OF FINDINGS

Impact of COVID-19 on cancer services
This is the second report to include data from the Omicron outbreak, and covers the period up to March 2022. For this report, March 2022 data is compared with March 2018/19. In contrast to earlier in 2022, cancer registration data for March show an increase across all ethnicities compared to 2018/19. There was a decrease in cancer surgeries in March 2022 compared with 2018/19, however this decrease was less pronounced than observed earlier in 2022. There were increases in the provision of medical oncology treatment in March 2022 compared with March 2018/19. The decrease in first specialist assessments for haematology in January 2022 compared with January 2018/19 has resolved in March for the total population, but requires further monitoring for Māori. There were small decreases for radiation oncology attendances which will continue to be monitored. Overall, the impact of the COVID-19 Omicron community outbreak on cancer services in 2022 is not as substantial as that seen during the initial outbreak and lockdown in 2020. Te Aho o Te Kahu continues to work with the sector and will monitor and further investigate as necessary. Te Aho o Te Kahu recognises the hard work of the cancer sector as the Omicron outbreak is navigated.

Background and data

- The purpose of this report is to provide a rapid assessment of the impact of COVID-19 on cancer services. It includes data up until 31 March 2022. This is the second report to include the Omicron outbreak.
- The report focuses on the aspects of the cancer care pathway for which we have readily available data and does not capture all aspects of cancer care.
- We acknowledge individuals with cancer may have been impacted in significant ways by COVID-19, including by changes to the way care has been delivered and that these may not be captured within the available data.
- This report compares 2022 with an average of 2018/19 data, and provides additional graphs comparing 2022 data with that from 2021, 2020 and 2018/2019. The previous report used 2021 as a comparator, however we reverted to comparing to 2018/19 for consistency, to overcome 2021 data variation, and to compare to a pre-pandemic time period.
- For the purposes of this report, we have not adjusted for expected changes in incidence over time (e.g. due to population growth).
- There may be some backlogs in data entry with pandemic-related impacts on staffing across the health sector. This may result in future data updates altering the current results.

Cancer diagnosis

Registrations

- For March 2022 compared to the average of March 2018/19 there was a 9% increase in cancer registrations. For Māori, there was a 1% increase, and for Pacific peoples a 6% increase, when comparing the two time periods.
- Cumulatively, for 2022 thus far there has been an increase of 5% in cancer registrations compared to the average of 2018/19 and a 2% decrease for Māori.

Diagnostics

- **Gastrointestinal endoscopies:** there was an increase of 9% in gastrointestinal endoscopies performed in March 2022, compared to March 2018/19. For Māori, this increase was 27% compared to 2018/19. For 2022 to date there were a similar number of gastrointestinal endoscopies performed as for the same time period in 2018/19.
- **Bronchoscopies:** March 2022 showed a 7% decrease in the number of bronchoscopies performed compared to March 2018/19. For Māori there was an increase of 2% using the same comparison. For 2022 to date there were fewer bronchoscopies performed as over the same time period in 2018/19.

Cancer Treatment

Faster Cancer Treatment

- For the number of referrals with a high suspicion of cancer, volumes in February and March 2022 are similar to the preceding two quarters, suggesting that people who presented to their GP with signs/symptoms highly suspicious of cancer are still being referred through to secondary care.
- The proportion of referrals meeting the 62-day target (patients receiving their first treatment within 62 days of receipt of referral) has remained stable overall with a decrease in proportion for the total population in February 2022 that was not seen in March 2022.

Surgery

- In March 2022, there were 2% fewer cancer surgeries (prostate, lung and colorectal) compared to March 2018/19. For 2022 to date there were 4% fewer surgeries performed compared to 2018/19.
- For Māori there was a 17% increase in combined cancer surgeries for January, February and March 2022 (cumulative) compared with 2018/19, and for Pacific peoples this increase was 15%, noting small numbers.

Chemotherapy and radiotherapy

- **Medical oncology:** attendances for medical oncology first specialist assessments (FSAs) increased by 16% (41% increase for Māori) in March 2022 compared to March 2018/19. Attendances for intravenous (IV) chemotherapy increased by 16% (40% increase for Māori) in March 2022 compared to March 2018/19.
- **Radiation oncology:** attendances for radiation oncology first specialist assessments (FSAs) increased by 13% (32% increase for Māori) in March 2022 compared to March 2018/19. Radiation therapy attendances decreased by 6% (1% decrease for Māori) in March 2022 compared to March 2018/19. Radiation therapy courses decreased by 11% (6% decrease for Māori) in March 2022 compared to March 2018/19.
- **Haematology:** there was a 5% increase in attendances for haematology first specialist assessments (FSAs) in March 2022 compared to March 2018/19. For Māori, there was a 2% decrease in FSAs in March 2022 compared to March 2018/19. Attendances for haematology intravenous (IV) chemotherapy increased by 17% in March 2022 compared to March 2018/19. For Māori, there was no change in haematology IV chemotherapy in March 2022 compared to March 2018/19, while for Pacific peoples there was an 4% increase over this time period.

INTRODUCTION

Background

In 2020, Te Aho o Te Kahu released a series of reports outlining the impact of COVID-19 on cancer services in New Zealand[1]. The 2020 reports showed that cancer treatment services – surgery, medical oncology, radiation oncology and haematology – continued during the start of the COVID-19 pandemic. Following an initial drop in new cancer registrations during the April 2020 lockdown, the number of cancer registrations in 2020 increased steadily in the following months and, by the end of September, had caught up to the number seen in 2019. As the COVID-19 situation and disruptions to health care settled, Te Aho o Te Kahu stopped regular COVID-19 and cancer reporting at the end of 2020.

Te Aho o Te Kahu re-instated COVID-19 monitoring with the re-emergence of COVID-19 in the community in August 2021 (Delta strain), and during the Omicron outbreak.

Purpose

This is the sixth report looking at the impact of COVID-19 on cancer services since the reporting was reinstated in August 2021. As this report includes data up until the end of March 2022, this is the second report that includes the Omicron outbreak. The aim of this work is to collate evidence on delays to cancer diagnosis and treatment to support policy development and response planning.

The report focuses on the aspects of the cancer care pathway for which we have readily available data and does not capture all aspects of the care. Critical aspects of cancer care, including access to primary health care, radiology, palliative care and patient experience are not measured in this report. While the report focuses on the impact of COVID-19 on overall cancer diagnosis and treatment, we acknowledge that individuals with cancer may have been impacted in significant ways by COVID-19, including by changes to the way care has been delivered, and that this may not be captured within the available data.

Data and analysis

The data in this report comes from the Ministry of Health's national data collections. Each section of the report includes information on where the data is from and any limitations associated with the data. Numbers in this report may not match the previous report, due to exclusion of incomplete data in the previous reports and delayed coding/submission of data.

There may be some backlogs in data entry due to pandemic-related impacts on staffing across the health sector. This may result in future data updates altering the current results and may mean any disruption to services is less severe than is reported here.

The purpose of the analysis is to rapidly measure the impact of COVID-19 and the response on cancer services; therefore, the analysis does not consider pre-existing unmet need. The report also makes direct comparisons between 2022 and previous years and does not consider any increase in cancer diagnoses or population size over time.

[1] Reports available here: https://teaho.govt.nz/reports/cancer-care

Comparator for this report

The first set of COVID-19 and Cancer reports, published in 2020, compared 2020 data directly with 2019 data. For reports looking at 2021 data, the main comparison used was an average of 2018 and 2019 data, due to 2020 not being considered an appropriate comparator given the disruption to health services in 2020 due to COVID-19. For the previous report we used 2021 as a comparator to 2022.

For the current report we have moved back to the previous methodology of comparing to the 2018/19 average, for consistency, to account for the variation seen in 2021 data, and to enable comparison to a pre-pandemic time period. For example, for several measures in this report, there were notably higher volumes for March 2021 compared with March in other recent years, including years presented in this report (2018, 2019, and 2020). The reasons for this data spike in March 2021 may include a catch-up period following lockdowns of the previous year. This has meant that the comparison between March 2022 and March 2021 does not provide an accurate reflection of overall changes over time. We note that the 2018/19 time period will become less useful as a comparator the further away we move from this period, and we are currently exploring further comparator options for future reports.

Appendix 1 outlines key dates for COVID-19 restrictions in Aotearoa that may be of use when reviewing this report.

Ongoing reporting

Te Aho o Te Kahu will continue to monitor the impact of COVID-19 and lockdowns on cancer services. The next report is planned for release in late June, looking at data to the end of April 2022.

CANCER REGISTRATIONS

Notes on data

- The data below comes from laboratory reports to the New Zealand Cancer Register (NZCR). Cancers diagnosed without haematology or pathology, for example radiology alone, will not be counted in this analysis. Further information on these data is included in Appendix 2.
- The data below are provisional, and exact numbers will change as data are finalised. Data were extracted from NZCR on 02 May 2022.
- 'Date' is date of diagnosis on the NZCR – usually the date the specimen was taken from the person and sent to the laboratory. Analyses include all new provisional and registered cancer events based on pathology and haematology reports.
- The extract used for this report excludes carcinoma in situ for breast and cervical, meaning the numbers are lower than in the 2020 COVID-19 and Cancer reports.
- There may be some backlogs in laboratory reports with impacts on staffing across the health sector. This may result in future data updates altering the current results.

Key points

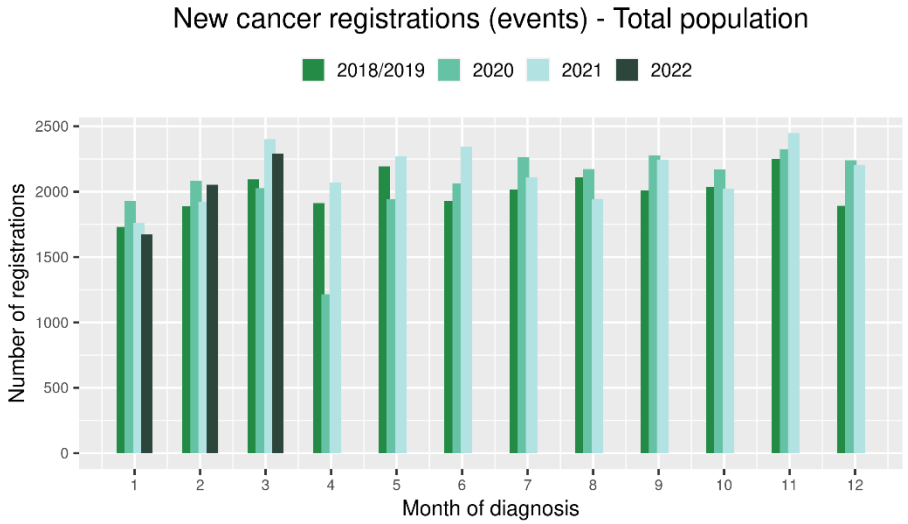
- For March 2022 compared to the average of March 2018/19 there was a 9% increase in cancer registrations. For Māori, there was a 1% increase in registrations in March 2022 compared with March 2018/19. For Pacific peoples there was a 6% increase comparing the same time periods. For people of Asian ethnicity there was a 23% increase in registrations in March 2022 compared with 2018/19.
- Cumulatively, for 2022 thus far there has been an increase of 5% in cancer registrations compared to the average of 2018/19 and a 2% decrease for Māori.

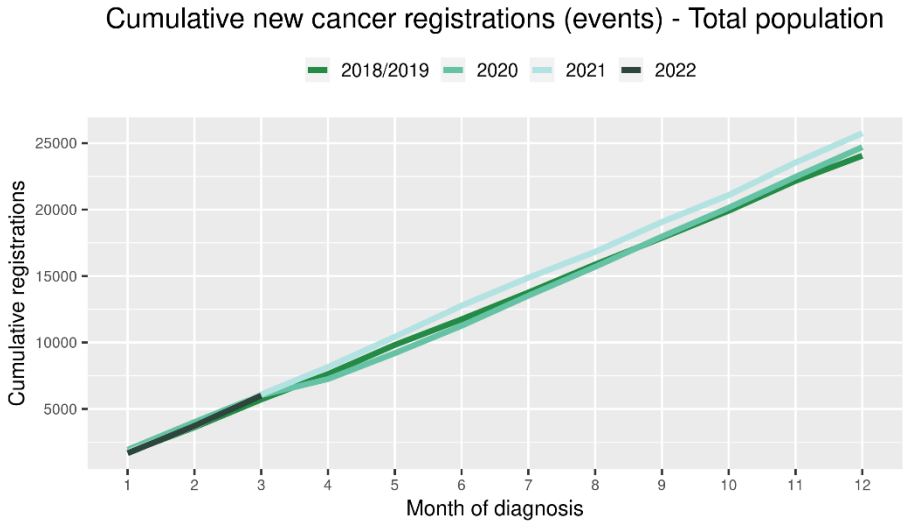
Results

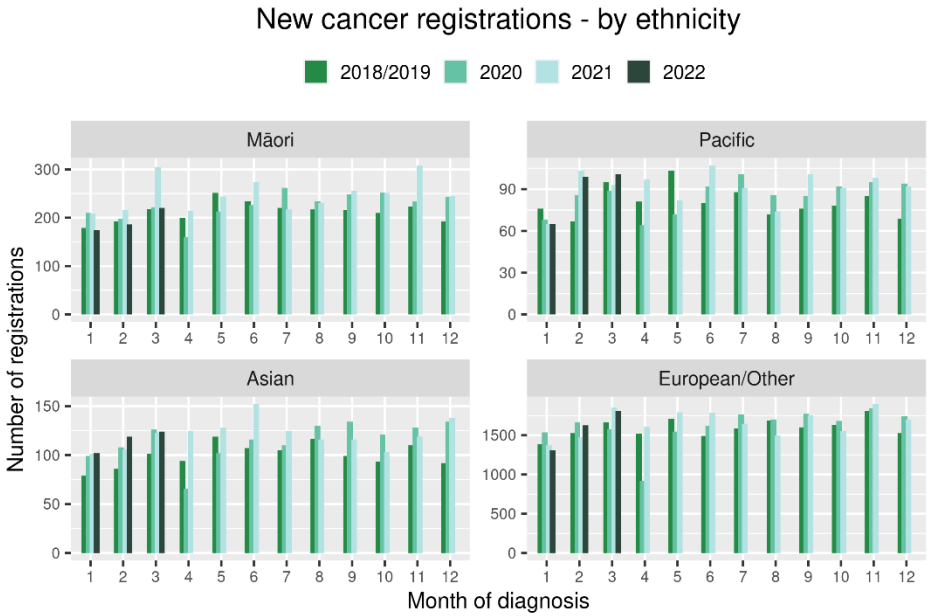
Table 1: Number of provisional cancer registrations and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January-March		
	2018/19	2022	%change	2018/19	2022	%change	2018/19	2022	%change	2018/19	2022	%change
Māori	179	175	-2%	193	186	-4%	218	220	1%	590	581	-2%
Pacific Peoples	76	65	-14%	67	99	49%	95	101	6%	238	265	12%
Asian	79	102	30%	86	119	39%	101	124	23%	265	345	30%
European/Other	1,398	1,330	-5%	1,544	1,649	7%	1,682	1,846	10%	4,623	4,825	4%
Total population	1,731	1,672	-3%	1,889	2,053	9%	2,095	2,291	9%	5,715	6,016	5%

Figure 1: Number of cancer registrations by month, 2018/19 average, 2020, 2021 and 2022, total population and by ethnicity







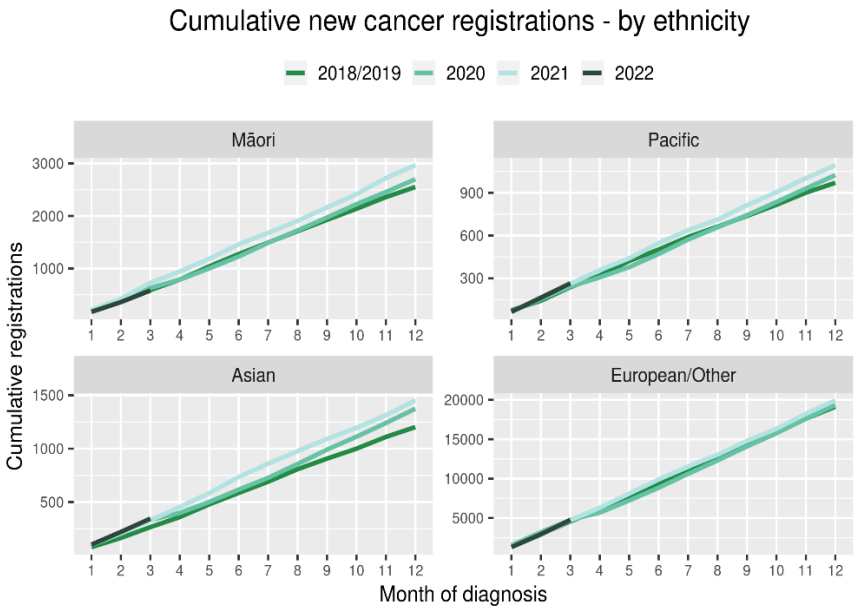
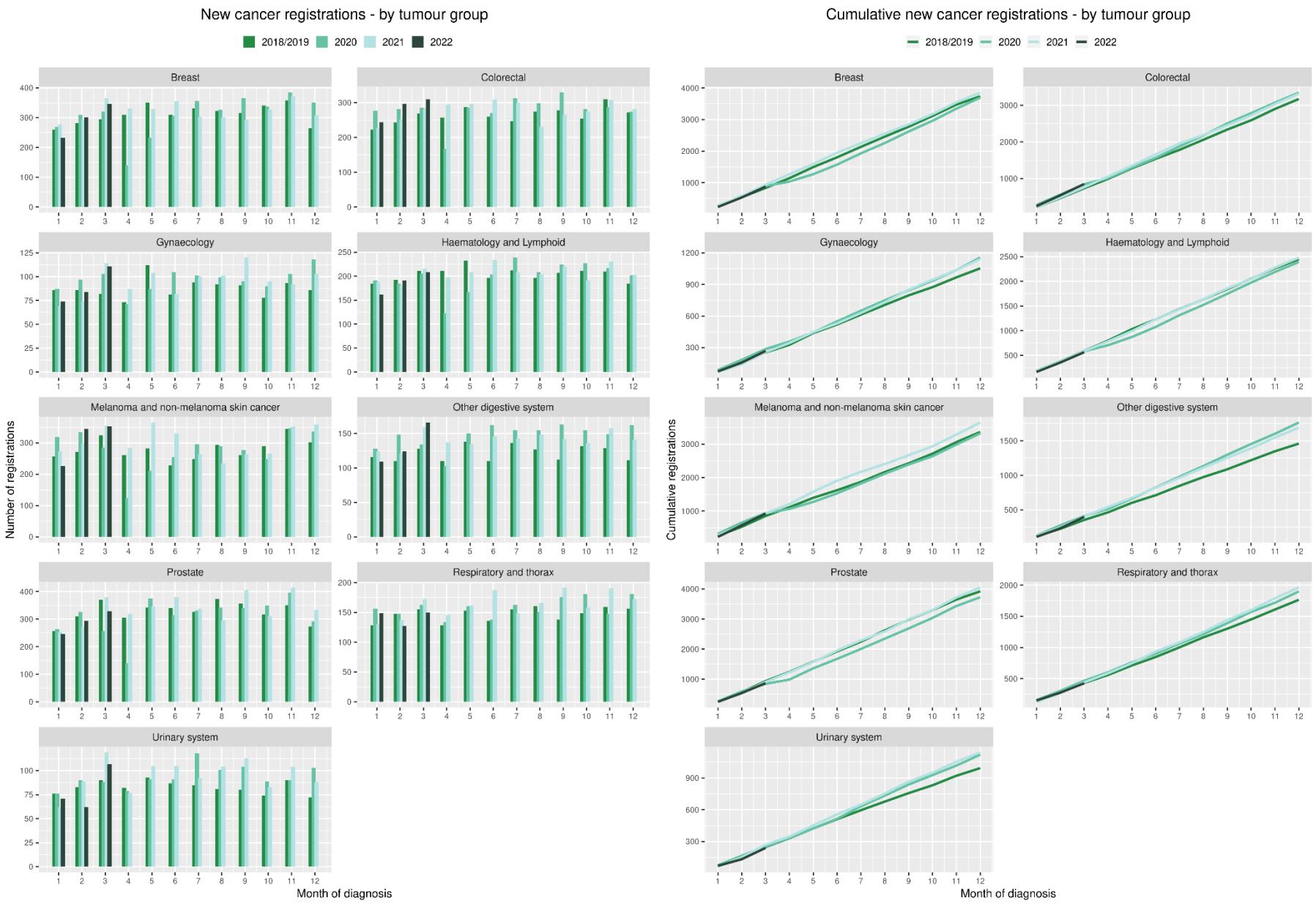


Table 2: Number of provisional cancer registrations* and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by tumour group

	January			February			March			Cumulative January-March		
Tumour group	**2018/19**	**2022**	**%change**	**2018/19**	**2022**	**%change**	**2018/19**	**2022**	**%change**	**2018/19**	**2022**	**%change**
Breast	259	232	-10%	282	301	7%	295	346	17%	835	879	5%
Colorectal	222	244	10%	243	297	22%	269	310	15%	734	851	16%
Gynaecology	86	74	-13%	86	84	-2%	82	111	35%	254	269	6%
Haematology and Lymphoid	184	162	-12%	192	191	-1%	211	209	-1%	586	562	-4%
Melanoma and non-melanoma skin cancer	256	226	-12%	272	345	27%	324	353	9%	851	924	9%
Other digestive system	116	109	-6%	110	124	13%	128	166	30%	354	399	13%
Prostate	256	246	-4%	310	293	-5%	370	328	-11%	936	867	-7%
Respiratory and thorax	128	149	16%	148	127	-14%	155	150	-3%	431	426	-1%
Urinary system	76	71	-6%	83	62	-25%	90	107	19%	248	240	-3%

*This analysis uses provisional data for the 2021 registrations, some cancers may initially be classified as 'non-specified' and subsequently be re-classified into one of the cancer groups as more information becomes available.

Figure 2: Number of cancer registrations by month, 2018/19 average, 2020, 2021 and 2022, by tumour group



GASTROINTESTINAL ENDOSCOPY

Notes on data

- Gastrointestinal endoscopy data were extracted from the National Non-admitted Patient Collection (NNPAC) and National Minimum Dataset (NMDS) on 05 May 2022.
- Includes colonoscopies and gastroscopies for all indications – not just cancer.
- Technical information: gastroscopies (Purchase Unit Code: MS02005), colonoscopies (Purchase Unit Code: MS02007), combined gastroscopies and colonoscopies (Purchase Unit Code: MS02014).

Key points

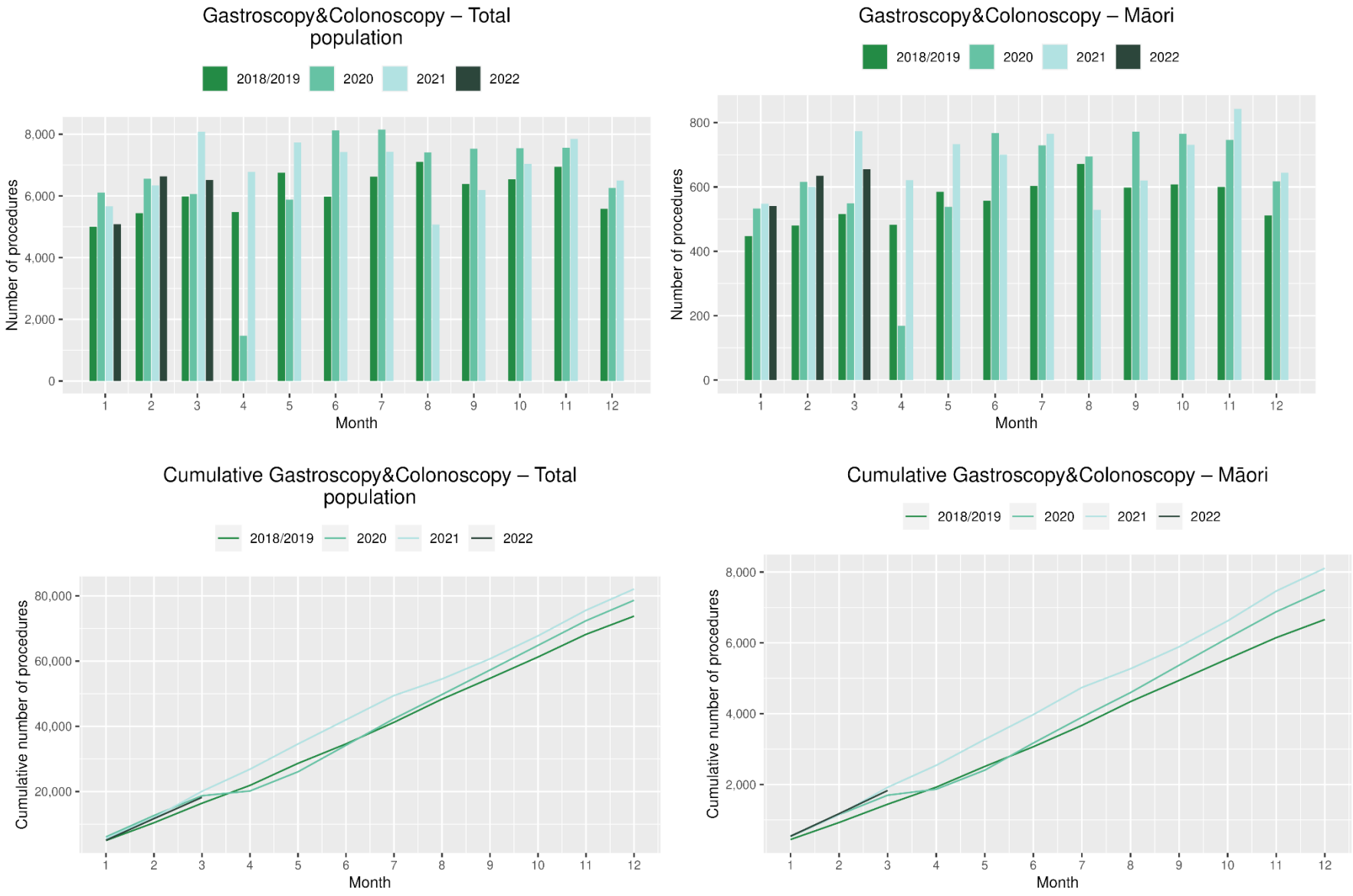
- There was an increase of 9% in gastrointestinal endoscopies performed in March 2022, compared to March 2018/19. For Māori, this increase was 27% compared to 2018/19.
- For 2022 thus far, there is an 11% increase in gastrointestinal endoscopies compared with 2018/19.

Results

Table 3: Number of colonoscopy and gastroscopy procedures and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	447	541	21%	480	635	32%	516	655	27%	1,442	1831	27%
Pacific Peoples	159	198	25%	188	258	38%	203	234	16%	549	690	26%
Non-Māori/Non-Pacific	4,392	4,341	-1%	4,774	5,741	20%	5,265	5,624	7%	14,430	15,706	9%
Total Population	4,998	5,080	2%	5,441	6,634	22%	5,983	6,513	9%	16,421	18,227	11%

Figure 3: Number of gastrointestinal endoscopy procedures by month, 2018/19 average, 2020, 2021 and 2022 total population and Māori



BRONCHOSCOPY

Notes on data

- Bronchoscopy and CT Lung Biopsy data were extracted from NNPAC and NMDS on 05 May 2022.
- These data include bronchoscopies for all indications, not solely cancer related procedures.
- Technical information: bronchoscopies (Purchase Unit Code: MS02003) and CT Lung Biopsy (Procedure code: 3841808)

Key points

- March 2022 showed a 7% decrease in the number of bronchoscopies performed compared to March 2018/19. For Māori there was an increase of 2% using the same comparison. For 2022 to date, there was an 11% decrease in bronchoscopies compared with 2018/19.
- Te Aho o Te Kahu has discussed the potential reasons for the overall decrease in bronchoscopy volumes with respiratory physicians in the sector. It has been highlighted that due to the risks of COVID-19 transmission, logistical challenges and other factors, there has been a shift in modes of diagnosis for lung cancer away from bronchoscopy (noting that bronchoscopy is performed for a number of reasons, not just cancer diagnosis). These modes are thought to include Endobronchial Ultrasound Bronchoscopy (EBUS), Positron Emission Tomography - Computed Tomography (PET CT) scans and CT lung biopsy. We have not reported PET CT and EBUS data are not reported here because the clinical coding of these procedures is not anatomically specific, meaning that we would not know whether they were performed on the lung. CT lung biopsy data were examined and are presented below (figure 5); however, although due to limited availability of pre-pandemic data, it is difficult to interpret whether any changes in the volume of these procedures have occurred.

Results

Table 4: Number of bronchoscopies and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	33	35	8%	33	30	-9%	32	32	2%	97	97	0%
Pacific Peoples	9	7	-18%	9	12	33%	9	10	18%	26	29	12%
Non-Māori/Non-Pacific	172	131	-24%	158	146	-7%	169	152	-10%	498	429	-14%
Total Population	213	173	-19%	200	188	-6%	209	194	-7%	621	555	-11%

*Due to small numbers, monthly figures have not been included for Māori and Pacific peoples

Figure 4: Number of bronchoscopies by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori

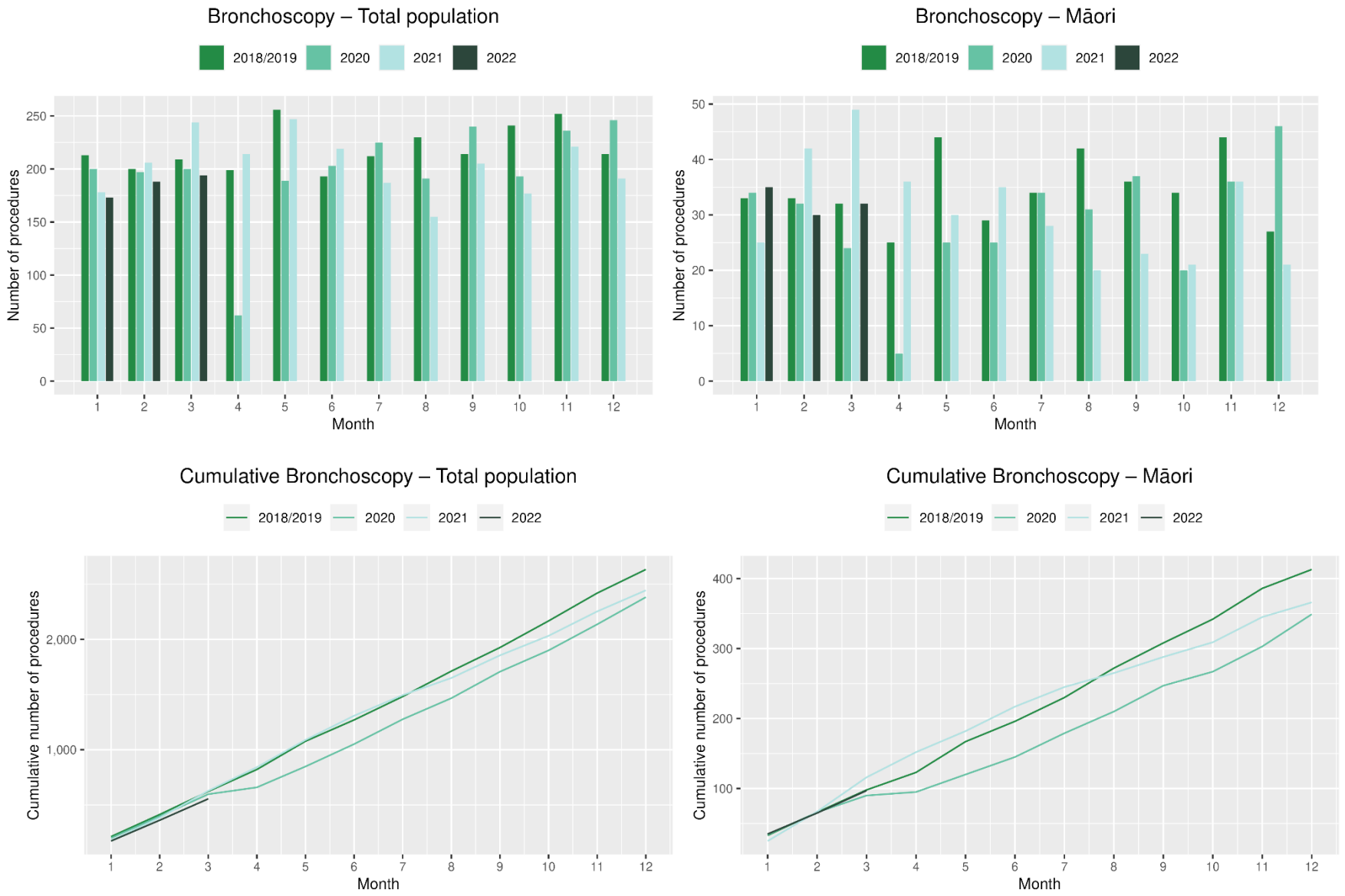
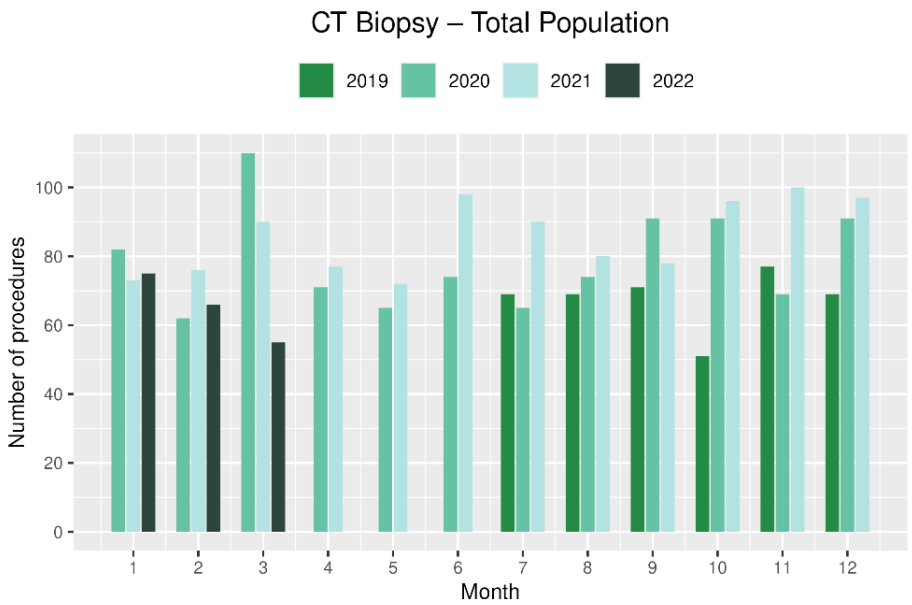
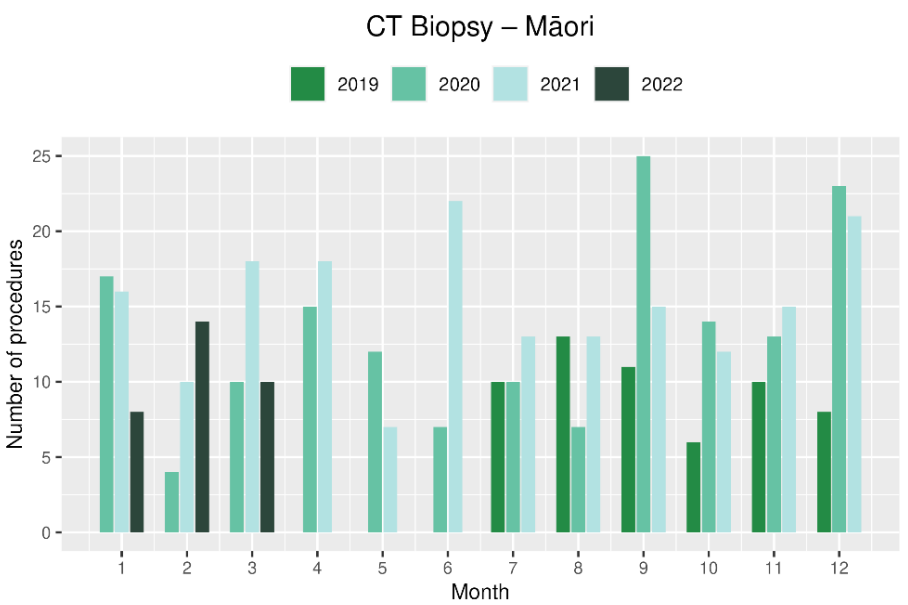


Figure 5: Number of CT lung biopsies by month, July 2019 to March 2022, total population and Māori





FASTER CANCER TREATMENT

Notes on data

- The data were extracted from the Faster Cancer Treatment (FCT) database on 9 May 2022. Fast Cancer Treatment Data is reported quarterly.
- These data aim to capture a broader part of the diagnostic and referral pathway; however, they only include a subset of people being investigated for cancer.
- Data relate to the 62-day pathway and includes patients with a high-suspicion of cancer and a need to be seen within two weeks. These patients should receive their first treatment within 62-day of receipt of referral. The target is 90% and Te Aho o Te Kahu has an escalation pathway for monitoring the performance of DHBs against the 62-day measure. Escalation includes regular meetings with service teams and CE to CE discussions against recovery planning and actions.
- Analysis includes all referrals onto the 62-day pathway and does not include comparisons with the same time period in 2018/19.

Key points

- For the number of referrals with a high suspicion of cancer, volumes in February and March 2022 are similar to the preceding two quarters.
- The proportion of referrals meeting the 62-day target (patients receiving their first treatment within 62 days of receipt of referral) has remained stable overall with a decrease in proportion for the total population in February 2022 that was not seen in March 2022. For January and March 2022 there was a decrease in proportion of Māori patients with a high suspicion of cancer who received their first treatment within 62 days (noting smaller numbers), however this was not the case in February 2022 where there was an increase for Māori.
- The FCT data suggest that people who presented to their GP with signs/symptoms highly suspicious of cancer are still being referred through to secondary care.

Results

Table 5: Number of referrals for patients with a high suspicion of cancer, by month, and cumulative from October 2021 to date

	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	Total October 2021 to March 2022
Māori	68	68	55	61	52	52	356
Non-Māori/Non-Pacific	306	443	387	291	371	395	2,193

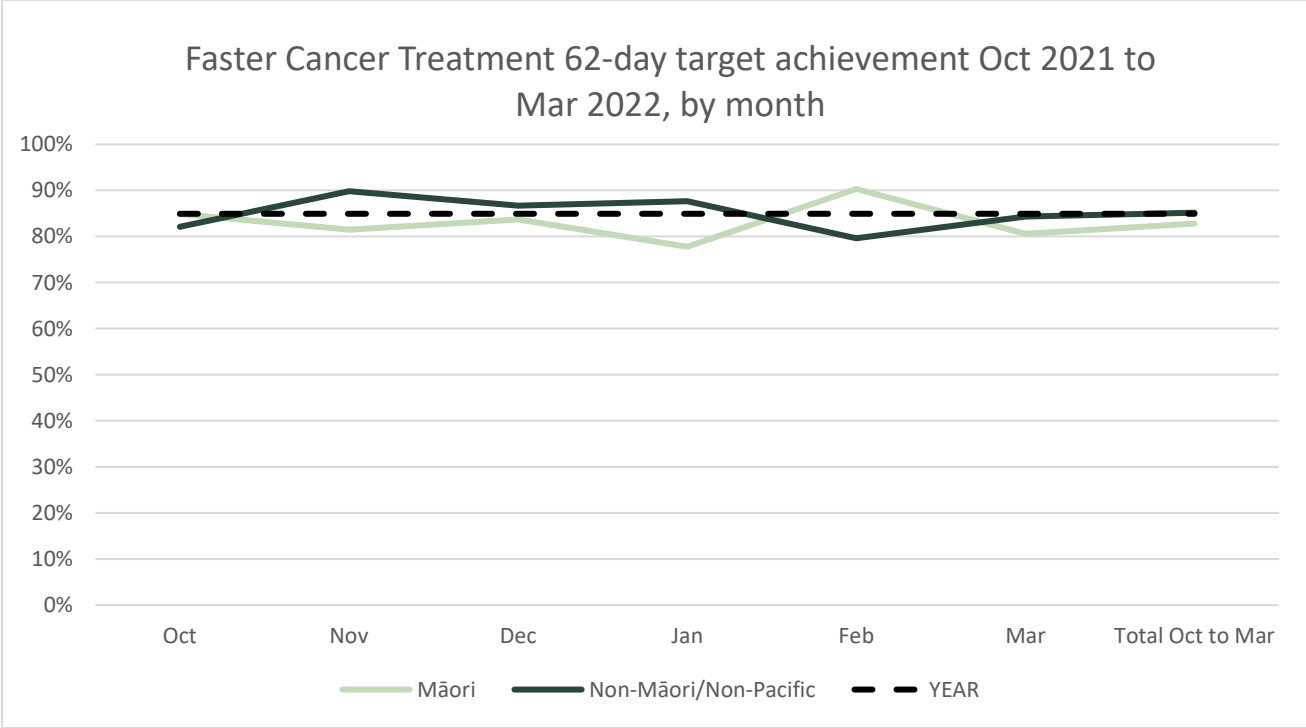
*Due to small numbers, volumes have not been included for Pacific peoples and total population

Table 6: Proportion of patients with a high-suspicion of cancer and a need to be seen within 2-weeks receiving their first treatment within 62 day of receipt of referral, by month, and average from October 2021 to date

	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	Total October 2021 to March 2022
Māori	85%	81%	84%	78%	90%	81%	83%
Non-Māori/Non-Pacific	82%	90%	87%	88%	80%	84%	85%
Total Population	83%	89%	87%	86%	80%	84%	85%

*Due to small numbers, percentages have not been included for Pacific peoples

Figure 6: Proportion of patients with a high-suspicion of cancer and a need to be seen within 2-weeks receiving their first treatment within 62 day of receipt of referral, by ethnicity, in 2021 by month



COMBINED CANCER SURGERY

Notes on data

- This report includes data on surgery for colorectal, lung and prostate cancer. These cancers were chosen because Te Aho o Te Kahu already has a pre-validated list of surgical procedure codes for these cancers, agreed on as part of the quality performance indicator (QPI) work programme[2]. These three cancers are therefore used as case studies for cancer surgery more generally. The surgical procedure codes are listed in Appendix 5.
- The data were extracted from the NMDS on 05 May 2022.

Key points

- In March 2022, there were 2% fewer cancer surgeries (prostate, lung and colorectal) compared to March 2018/19. For 2022 to date there were 4% fewer surgeries performed compared to 2018/19.
- For Māori there was a 17% increase in combined cancer surgeries for January, February and March 2022 (cumulative) compared with 2018/19, and for Pacific peoples this increase was 15%, noting small numbers for both these groups (and particularly for Pacific peoples).

Results

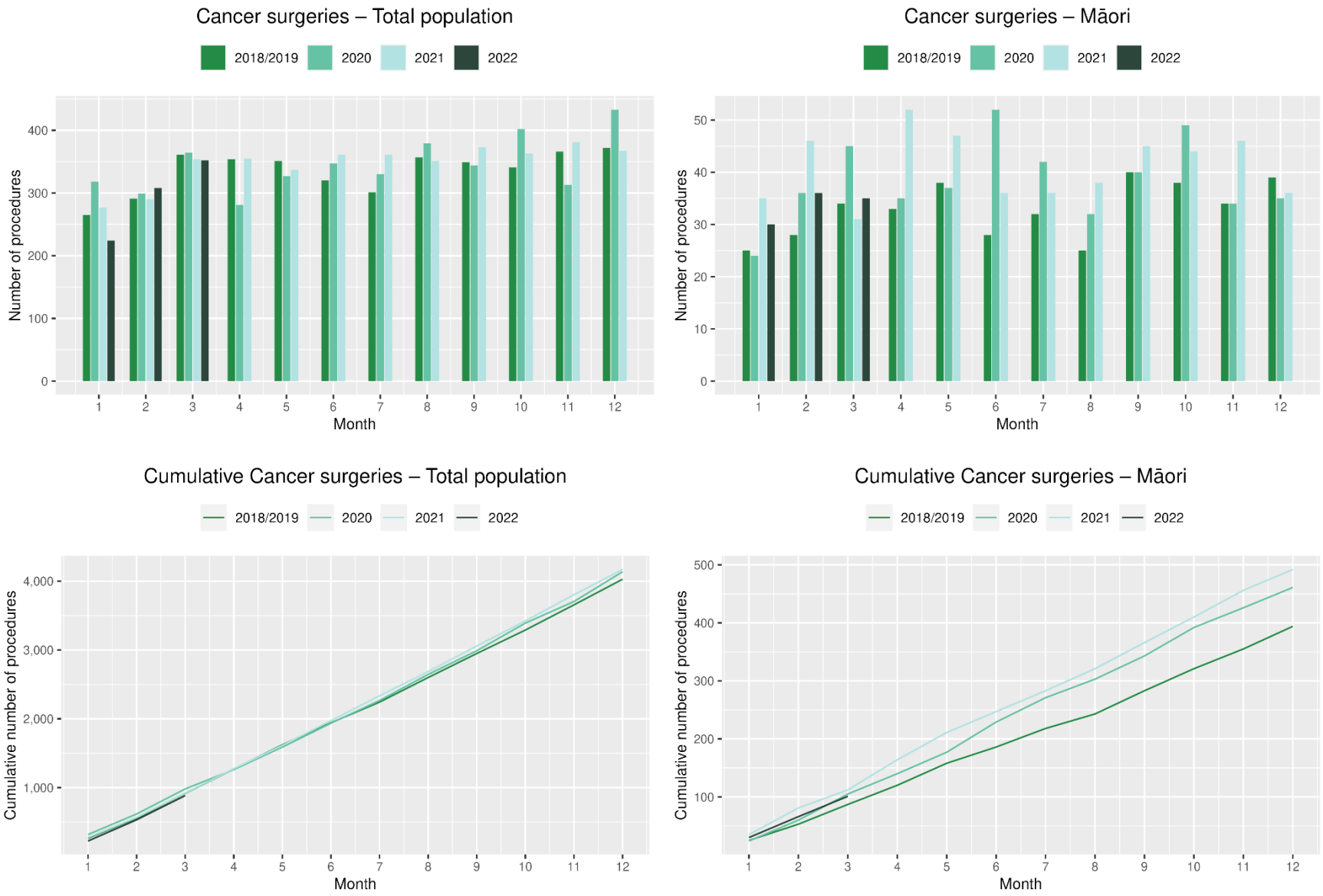
Table 7: Number of cancer surgeries (prostate, colorectal, lung) and percentage difference in 2022 compared to the average of 2018 and 2019 by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/19	2022	% change	2018/19	2022	% change	2018/19	2022	% change	2018/19	2022	% change
Māori	*	*	*	*	*	*	*	*	*	87	101	17%
Pacific Peoples	*	*	*	*	*	*	*	*	*	20	23	15%
Non-Māori/Non-Pacific	235	190	-19%	259	265	2%	317	305	-4%	811	760	-6%
Total Population	265	224	-15%	291	308	6%	361	352	-2%	917	884	-4%

*Due to small numbers, monthly figures have not been included for Māori and Pacific peoples

[2] These lists were developed to focus on procedures that were more likely to be curative, however it is noted that there are palliative indications for these surgeries therefore we have removed the word curative from this report. The list of procedure codes remains the same, therefore comparisons with previous reports are unaffected.

Figure 7: Number of cancer surgeries (prostate, colorectal, lung) by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori



COLORECTAL CANCER SURGERY

Notes on data

- The surgical procedure codes used for analysing colorectal cancer are listed in Appendix 5.
- The data were extracted from the NMDS on 05 May 2022.

Key points

- There were 9% fewer colorectal cancer surgeries performed in March 2022 compared with March 2018/19.
- For 2022 to date (cumulative), there were 8% fewer colorectal cancer surgeries performed in total, 4% fewer for Pacific peoples (noting small numbers) and a 22% increase for Māori compared with 2018/19.

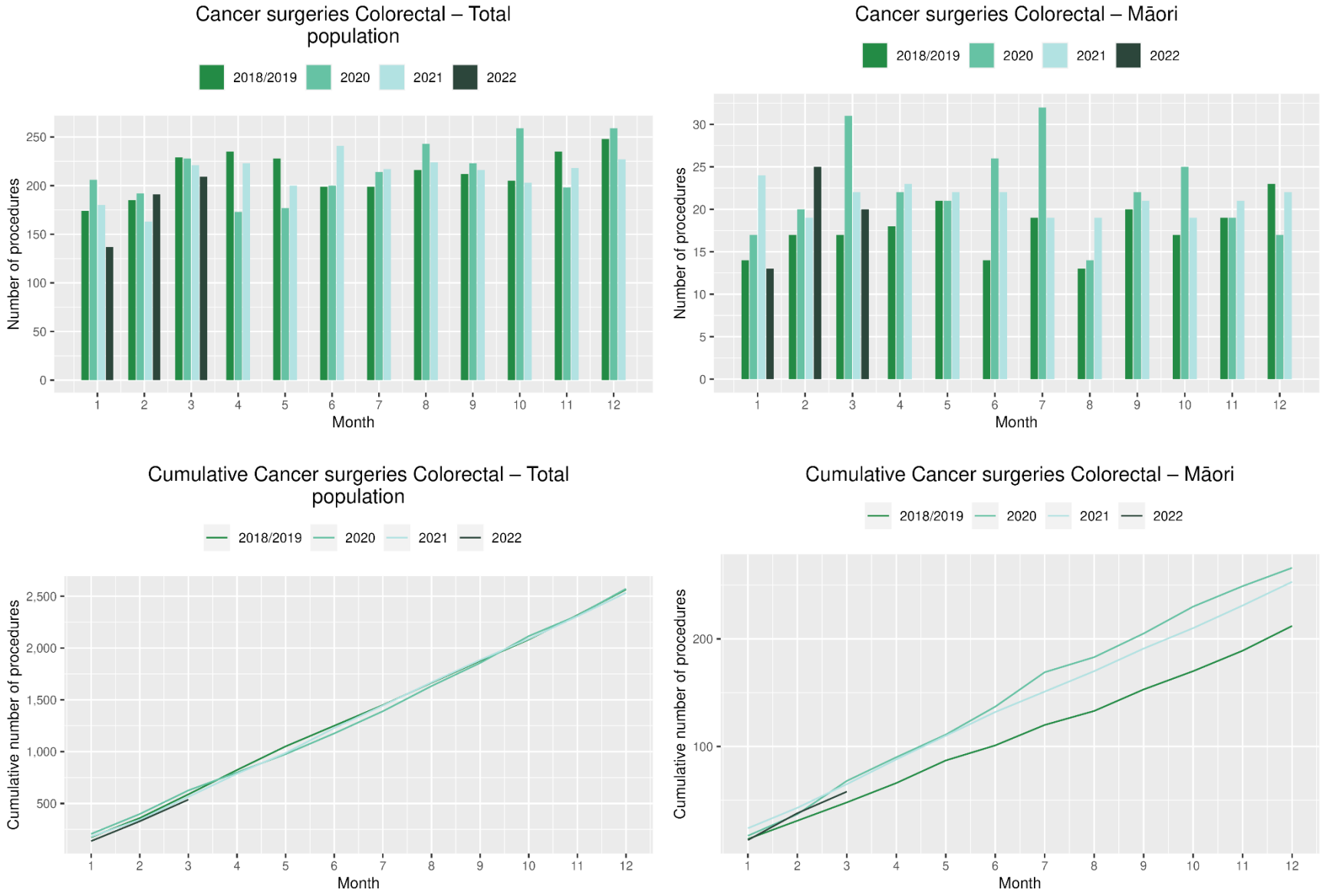
Results

Table 8: Number of colorectal cancer surgeries and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	*	*	*	*	*	*	*	*	*	48	58	22%
Pacific Peoples	*	*	*	*	*	*	*	*	*	12	11	-4%
Non-Māori/Non-Pacific	158	122	-23%	165	163	-1%	206	183	-11%	528	468	-11%
Total Population	174	137	-21%	185	191	4%	229	209	-9%	587	537	-8%

*Due to small numbers, monthly figures have not been included for Māori and Pacific peoples

Figure 8: Number of colorectal cancer surgeries by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori



LUNG CANCER SURGERY

Notes on data

- A list of the surgical procedure codes used for analysis are included in Appendix 5.
- The data were extracted from the NMDS on 05 May 2022.
- The number of lung cancer surgeries performed each month is relatively small, so caution is needed when comparing data by month.

Key points

- There was no change in the number of lung cancer surgeries performed in March 2022 compared with March 2018/19.
- For 2022, cumulatively, there was a 4% decrease in surgeries performed, reflecting the lower numbers of surgeries seen in January 2022 compared with January 2018/19.

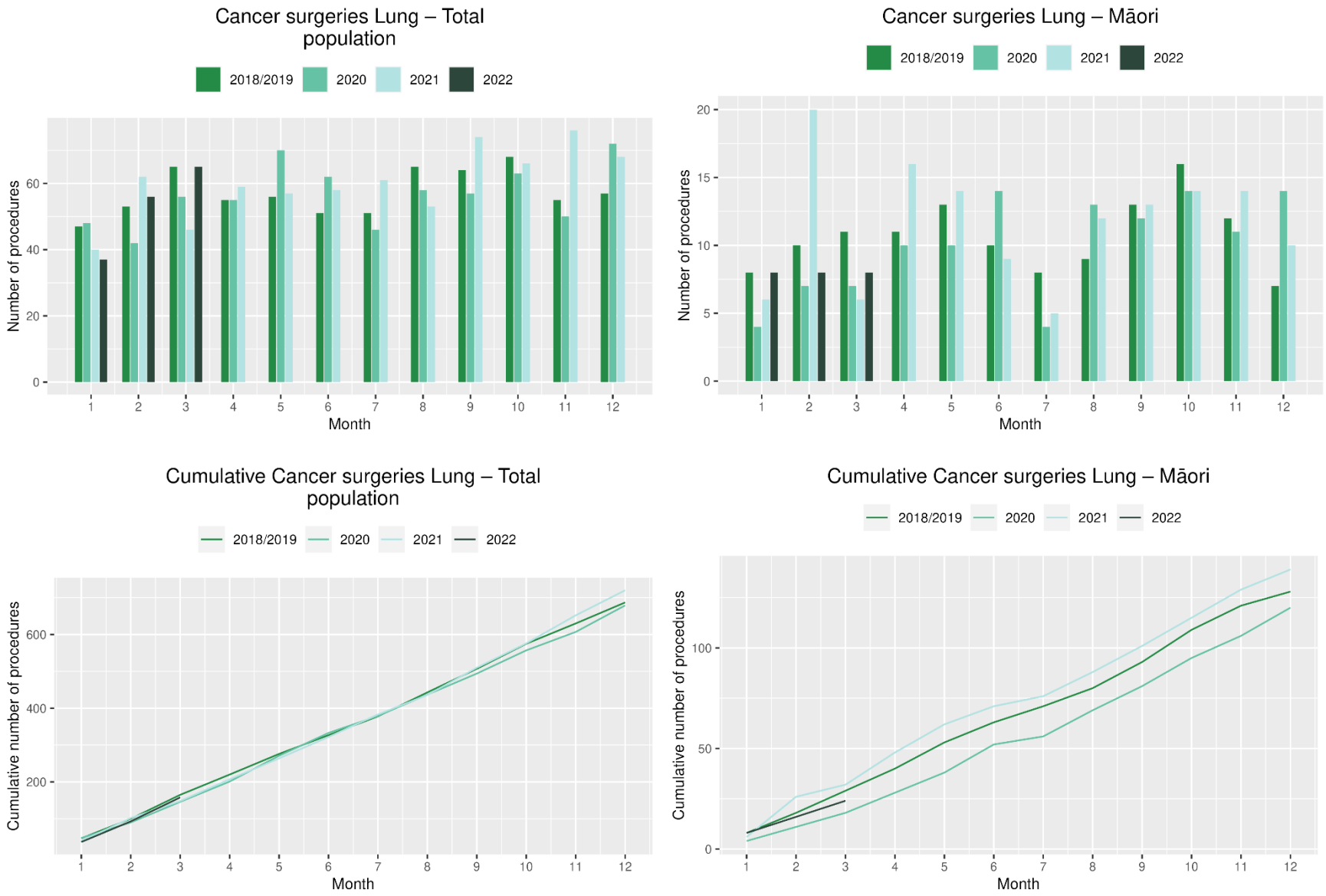
Results

Table 9: Number of lung cancer surgeries and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	*	*	*	*	*	*	*	*	*	*	*	*
Pacific Peoples	*	*	*	*	*	*	*	*	*	*	*	*
Non-Māori/Non-Pacific	38	27	-28%	43	45	6%	52	54	5%	132	126	-4%
Total Population	47	37	-21%	53	56	6%	65	65	0%	165	158	-4%

* Due to small numbers, monthly figures have not been included for Māori and Pacific peoples

Figure 9: Number of lung cancer surgeries by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori



PROSTATE CANCER SURGERY

Notes on data

- A list of the surgical procedure codes used for analysis are included in Appendix 5.
- The data was extracted from the NMDS on 05 May 2022.
- The volumes for prostate surgery are higher in this report than previously reported due to the inclusion of data from a private provider who provides publicly funded surgery.
- The number of prostate cancer surgeries performed each month is relatively small, so caution is needed when comparing data by month.

Key points

- There was a 16% increase in prostate cancer surgeries performed in March 2022 compared with March 2018/19.
- For January, February and March 2022 combined there were 14% more prostate cancer surgeries compared with cumulative figures from 2018/19.

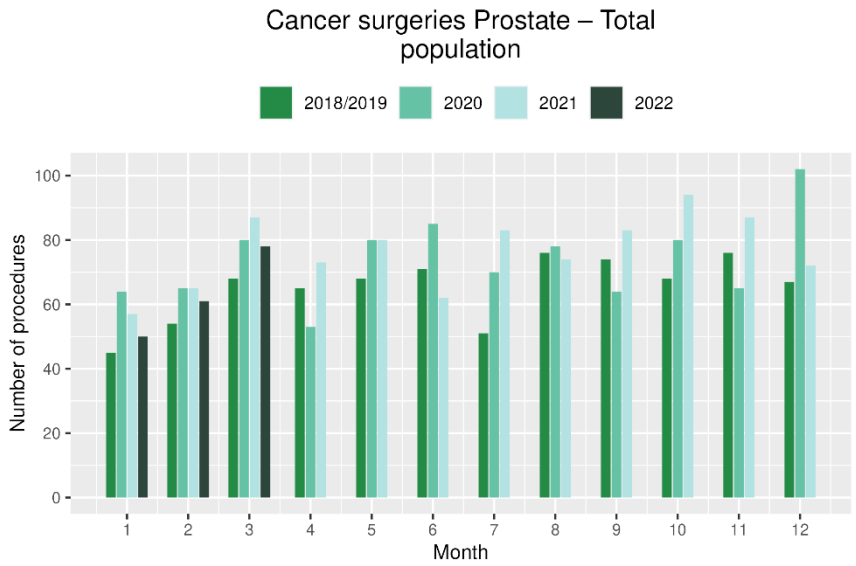
Results

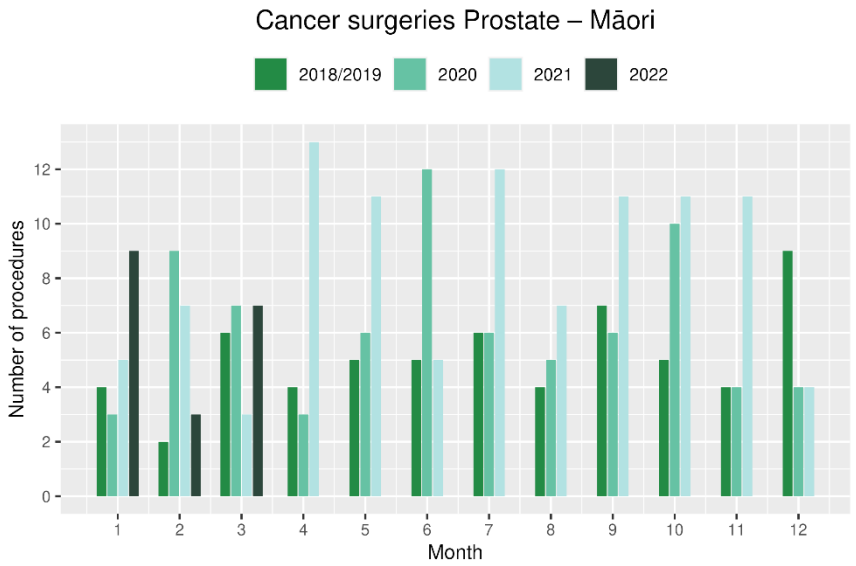
Table 10: Number of prostate cancer surgeries and percentage difference in 2022 compared to the average of 2018 and 2019 by month and cumulative year to date

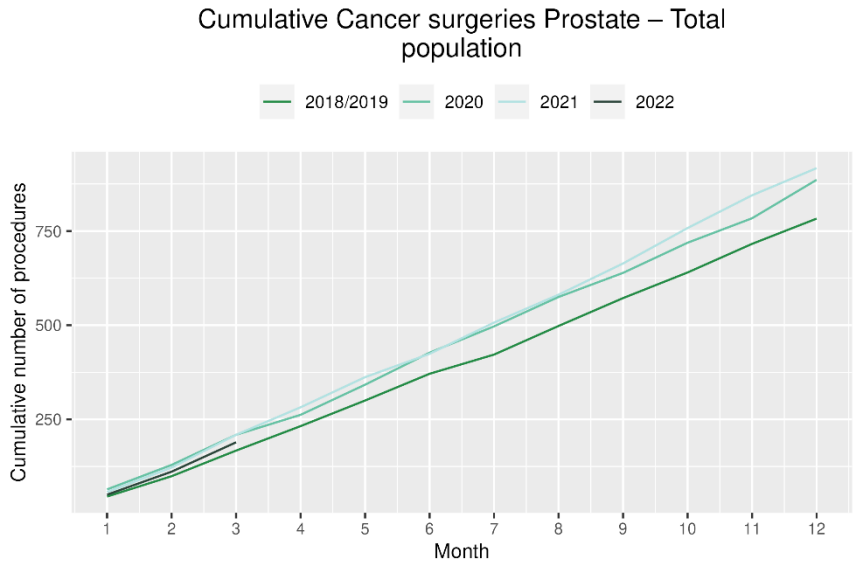
	January			February			March			Cumulative January -March		
	2018/19	2022	% change	2018/19	2022	% change	2018/19	2022	% change	2018/19	2022	% change
Total Population	45	50	12%	54	61	14%	68	78	16%	166	189	14%

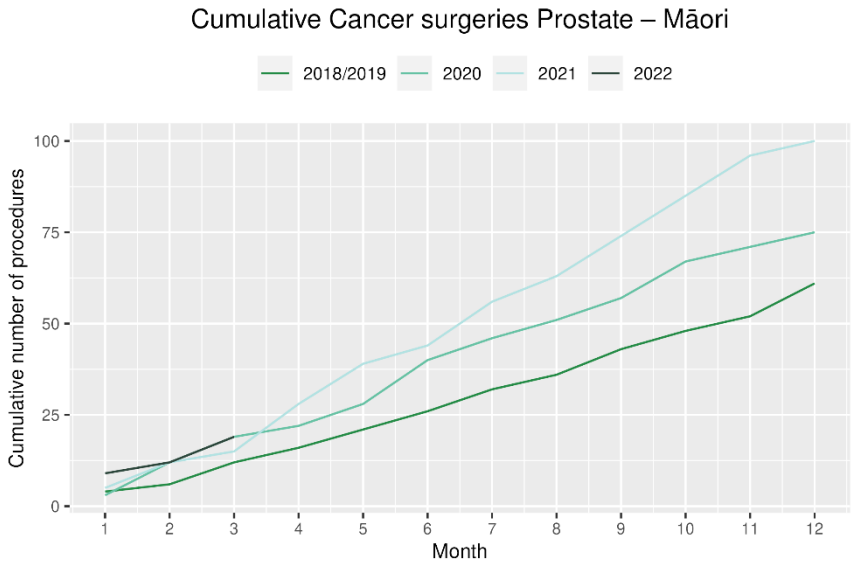
* Due to small numbers, monthly figures have not been included by ethnicity

Figure 10: Number of prostate cancer surgeries by month, 2018/19 average, 2020,2021 and 2022, total population and Māori









MEDICAL ONCOLOGY

Notes on data

- Data were extracted from NNPAC 05 May 2022.
- First specialist assessment (FSA) reflects counts of first attendance for specialist medical oncology assessment.
- Intravenous (IV) chemotherapy reflects appointments for outpatient and inpatient IV chemotherapy for non-haematological indications.
- Technical information: medical oncology FSA (Purchase Unit Code: M50020) and IV chemotherapy (Purchase Unit Code: MS02009).

Key points

- Attendances for medical oncology first specialist assessments (FSAs) increased by 16% in March 2022 compared to March 2018/19. For Māori, there was a 41% increase in FSAs in March 2022 compared to March 2018/19. For 2022 to date, there was a 9% increase in medical oncology FSAs compared with 2018/19.
- Attendances for intravenous (IV) chemotherapy increased by 16% in March 2022 compared to March 2018/19. For Māori, there was a 40% increase in IV chemotherapy in March 2022 compared to March 2018/19. For 2022 to date, there was a 10% increase in IV chemotherapy compared with 2018/19.

Results

Table 11: Number of medical oncology first specialist assessments and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/19	2022	% change	2018/19	2022	% change	2018/19	2022	% change	2018/19	2022	% change
Māori	86	81	-6%	97	123	27%	97	136	41%	280	340	22%
Pacific Peoples	27	37	37%	28	35	25%	33	42	27%	88	114	30%
Non-Māori/Non-Pacific	581	515	-11%	572	629	10%	615	738	20%	1,768	1,882	6%
Total Population	694	633	-9%	697	787	13%	745	916	23%	2,135	2,336	9%

Figure 11: Number of medical oncology first specialist assessments by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori

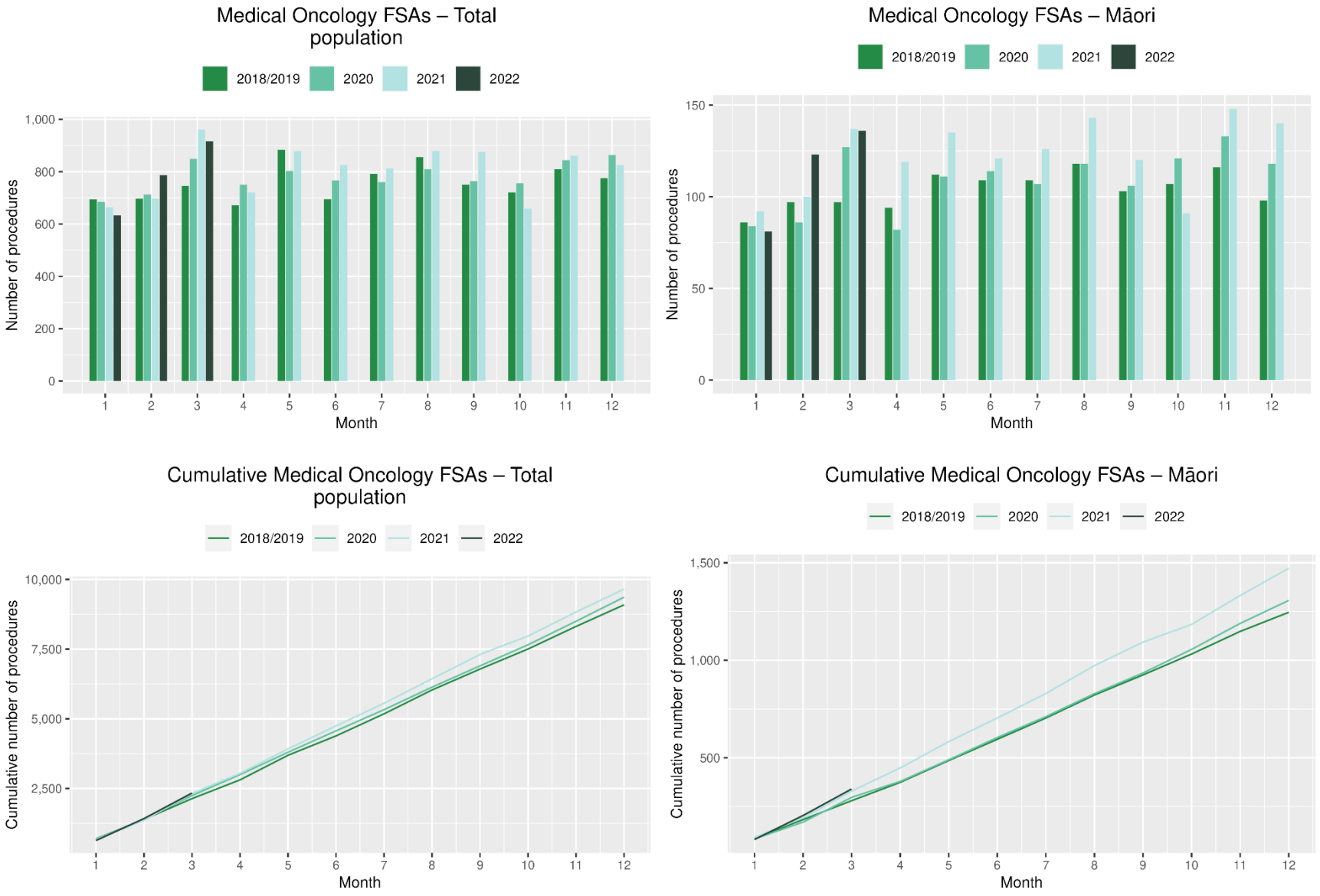


Table 12: Number of IV chemotherapy attendances and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	724	935	29%	664	877	32%	709	994	40%	2,097	2,806	34%
Pacific Peoples	274	345	26%	240	337	40%	264	365	39%	777	1,047	35%
Non-Māori/Non-Pacific	4,935	4,709	-5%	4,429	4,779	8%	4,765	5,324	12%	14,128	14,812	5%
Total Population	5,932	5,989	1%	5,333	5,993	12%	5,738	6,683	16%	17,002	18,665	10%

Figure 12: Number of IV chemotherapy attendances by month, 2018/19 average, 2020 and 2021, total population and Māori

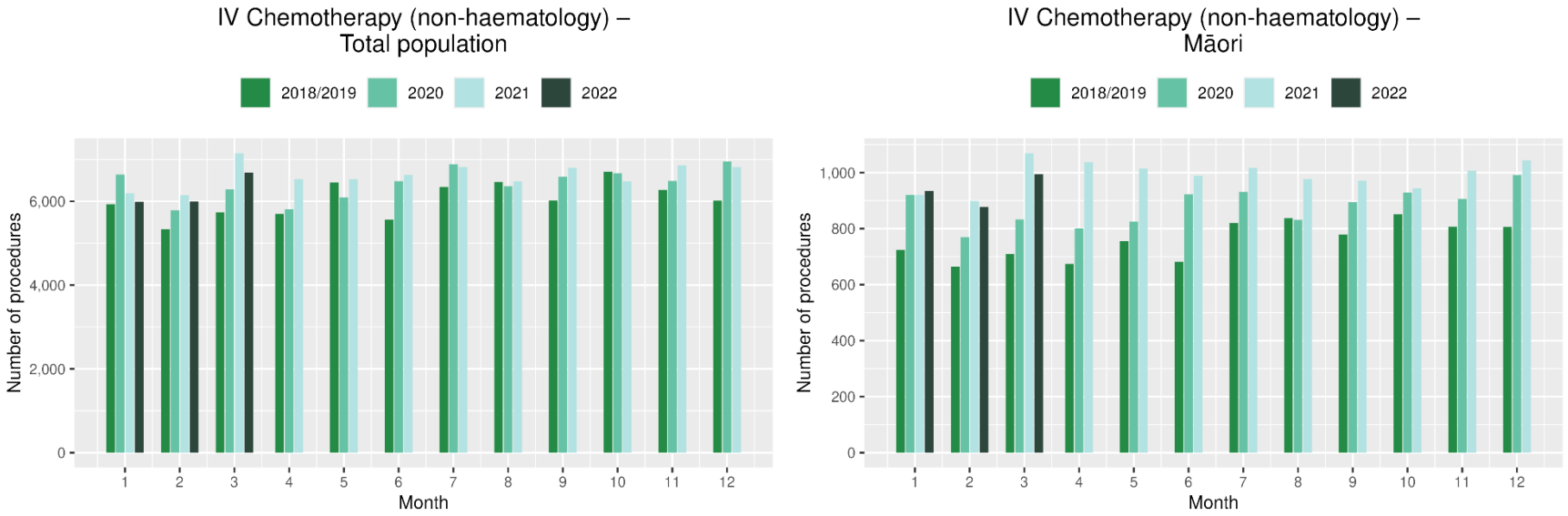
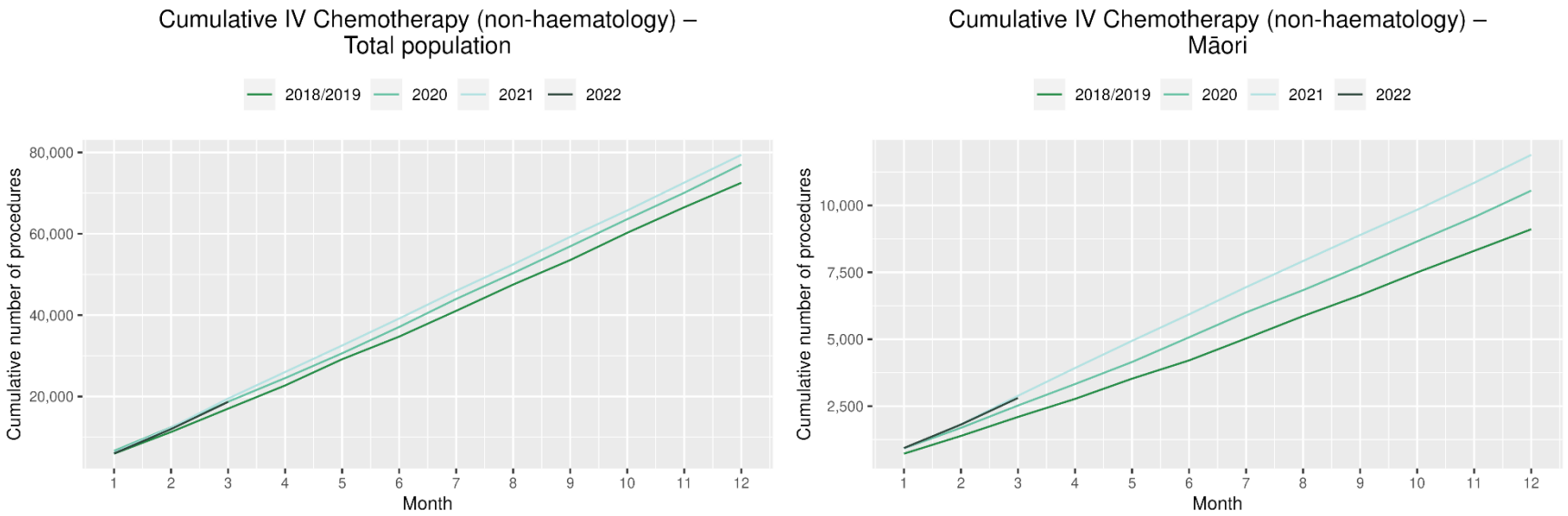


Figure 13: Cumulative number of attendances for IV chemotherapy, 2018/19 average, 2020 and 2021, total population and Māori



RADIATION ONCOLOGY

Notes on data

- Radiation oncology first specialist assessments and megavoltage attendances data were extracted from NNPAC on 05 May 2022.
- First specialist assessment (FSA) reflects counts of first attendance for radiation oncology specialist assessment.
- Radiation therapy attendances include appointments for planning/simulation and for treatment with radiation therapy on a linear accelerator.
- Radiation therapy courses data were extracted from Radiation Oncology Collection (ROC) on 28 April 2022. ROC is a national collection that contains diagnosis and treatment data for patients receiving radiation therapy from both the public and private providers. ROC is updated quarterly.
- A course of radiation therapy is a set of radiotherapy treatment(s) to a continuous or contiguous volume with a single intent from a single referral. A course can include multiple phases and multiple radiotherapy modalities. The monthly data here refers to the number of completed courses. The course starting date may not be in the same month.
- Radiation therapy course data reflect *completed* radiation therapy courses. This measure likely reflects trends in service volume over time better than radiation therapy attendance, as the increased use of hypofractionation[3] is likely to contribute to a decrease in the number of attendances required to complete a course of treatment.
- Technical information: radiation oncology FSA (Purchase Unit Code: M50022), megavoltage attendances (Purchase Unit Code: M50025).

Key points

- Attendances for radiation oncology first specialist assessments (FSAs) increased by 13% in March 2022 compared to March 2018/19. For Māori, there was a 32% increase in FSAs in March 2022 compared to March 2018/19. For 2022 to date, there was a 4% increase in radiation oncology FSAs compared with 2018/19
- Radiation therapy attendances decreased by 6% in March 2022 compared to March 2018/19. For Māori, there was a 1% decrease in radiation therapy attendances in in March 2022 compared to March 2018/19. For Pacific peoples there was a 4% decrease in radiation therapy attendances in March 2022 compared to March 2018/19.
- Radiation therapy courses decreased by 11% in March 2022 compared to March 2018/19. For Māori, there was a 6% decrease in radiation therapy attendances in in March 2022 compared to March 2018/19. For Pacific peoples there was a 6% increase in radiation therapy attendances in March 2022 compared to March 2018/19.

[3] Hypofractionation is a radiation treatment technique used to treat some cancers, whereby larger doses of radiation are given each treatment, meaning that patients require fewer sessions to complete their treatment. The technique is being increasingly used for some prostate and breast cancers in New Zealand and around the world.

- For 2022 to date, there was a 10 % decrease in radiation oncology attendances and a 7% decrease in completed radiation therapy courses compared with 2018/19

Results

Table 13: Number of radiation oncology first specialist assessments and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	103	109	6%	110	123	12%	106	139	32%	318	371	17%
Pacific Peoples	46	47	2%	37	41	12%	47	62	33%	129	150	16%
Non-Māori/Non-Pacific	780	683	-12%	782	848	8%	852	935	10%	2,414	2,466	2%
Total Population	928	839	-10%	928	1,012	9%	1,004	1,136	13%	2,860	2,987	4%

Figure 14: Number of radiation oncology first specialist assessments by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori

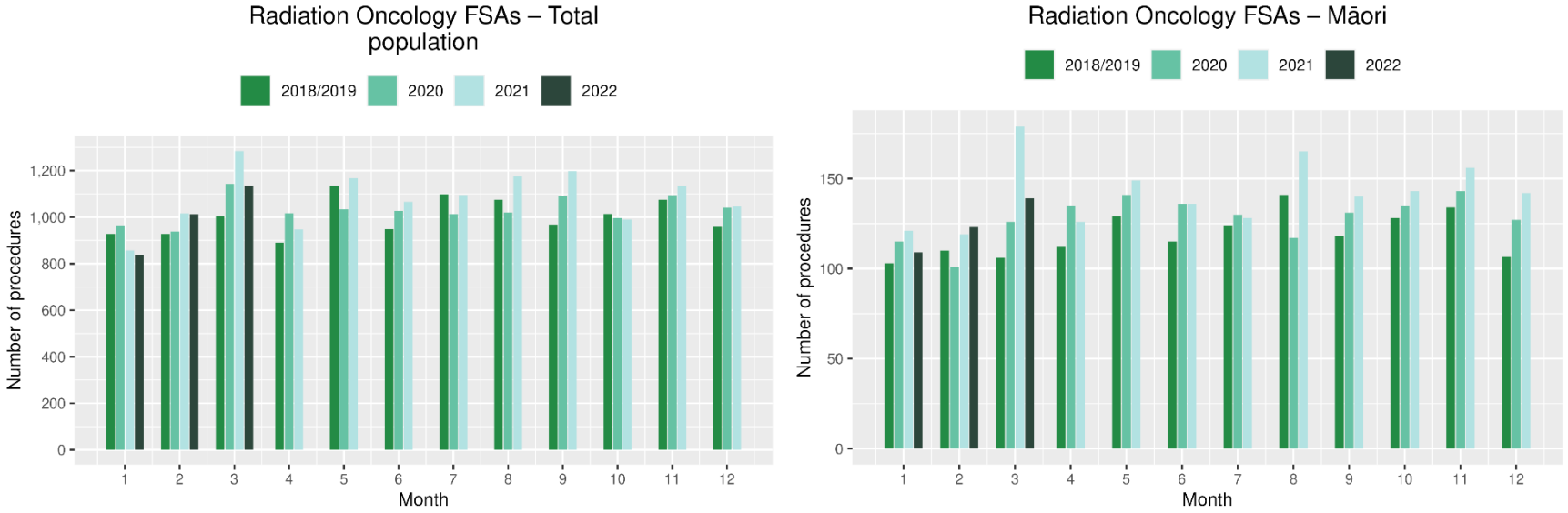


Figure 15: Cumulative number of radiation oncology first specialist assessments by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori

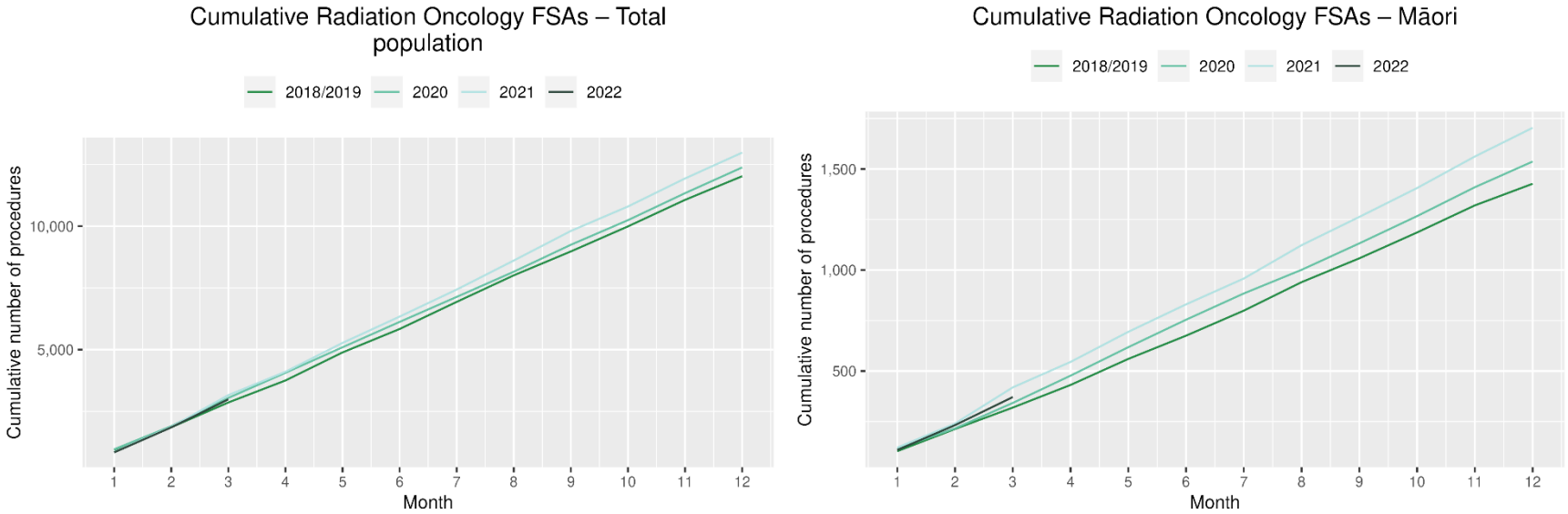


Table 14: Number of radiation therapy attendances and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	1,666	1,697	2%	1,519	1,782	17%	1,751	1,726	-1%	4,936	5,205	5%
Pacific Peoples	538	462	-14%	512	519	1%	476	457	-4%	1,526	1,438	-6%
Non-Māori/Non-Pacific	11,482	9,354	-19%	10,564	9,403	-11%	11,773	10,980	-7%	33,818	29,737	-12%
Total Population	13,686	11,513	-16%	12,594	11,704	-7%	13,999	13,163	-6%	40,279	36,380	-10%

Figure 16: Number of radiation therapy attendances by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori

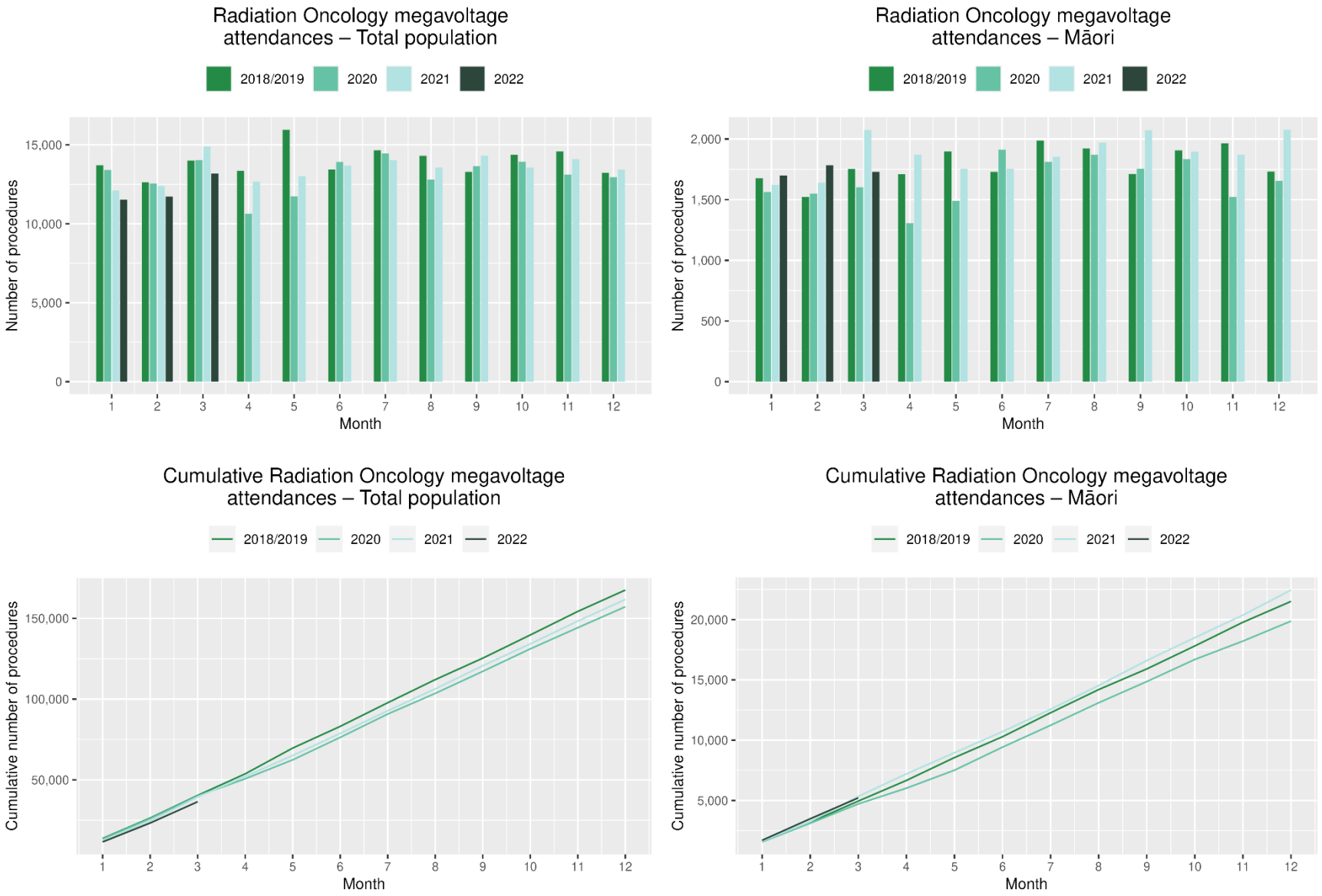


Table 15: Number of completed radiation therapy courses and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	117	132	13%	115	135	18%	124	116	-6%	355	383	8%
Pacific Peoples	38	35	-8%	41	41	1%	35	37	6%	114	113	0%
Non-Māori/Non-Pacific	805	690	-14%	744	741	0%	931	817	-12%	2,480	2,248	-9%
Total Population	959	857	-11%	899	917	2%	1,090	970	-11%	2,948	2,744	-7%

Figure 17: Number of completed radiation therapy courses by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori

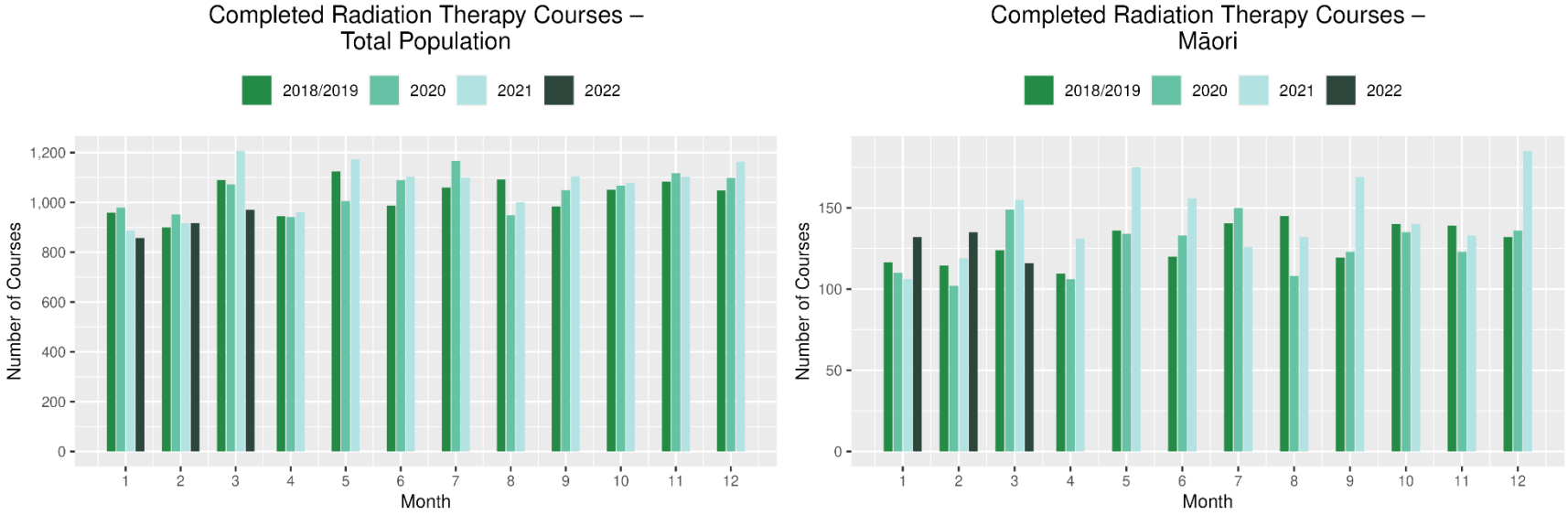
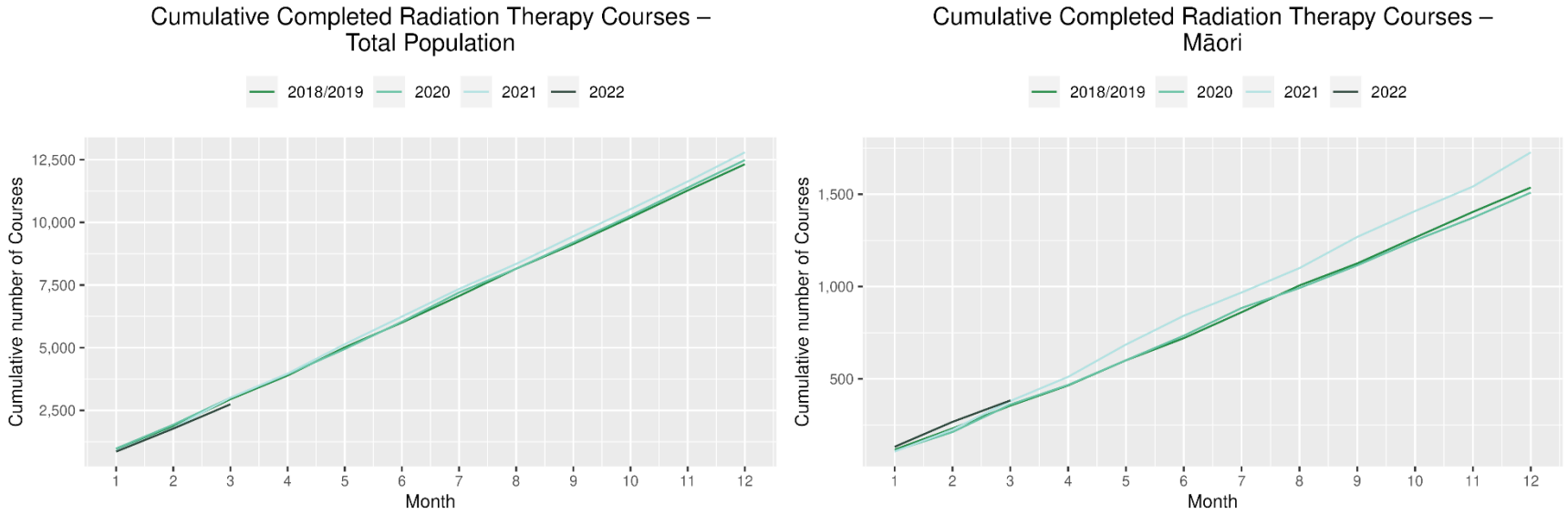


Figure 18: Cumulative number of completed radiation therapy courses by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori



HAEMATOLOGY

Notes on data

- Data were extracted from NNPAC and NMDS on 05 May 2022.
- First specialist assessment (FSA) reflects counts of first attendance for specialist haematology assessment for any indication, not just cancer.
- IV chemotherapy reflects appointments for IV chemotherapy for haematological malignancies.
- Technical information: Haematology FSA (Purchase Unite Code: M30002), IV haem/chemo (Purchase Unit Code: M30020).

Key points

- There was a 5% increase in attendances for haematology first specialist assessments (FSAs) in March 2022 compared to March 2018/19. For Māori, there was a 2% decrease in FSAs March 2022 compared to March 2018/19.
- For 2022 to date, there was a 3% decrease in haematology FSAs compared with 2018/19, and for Māori there was no change.
- Attendances for haematology intravenous (IV) chemotherapy increased by 17% in March 2022 compared to March 2018/19. For Māori, there was no change in haematology IV chemotherapy in March 2022 compared to March 2018/19. For Pacific peoples there was an 4% increase in IV chemotherapy in March 2022 compared to March 2018/19.
- For 2022 to date, there was a 15% increase in haematology IV chemotherapy compared with 2018/19.

Results

Table 16: Number of haematology first specialist assessment attendances and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	46	47	3%	47	47	0%	65	64	-2%	158	158	0%
Pacific Peoples	26	27	4%	24	37	57%	26	41	58%	76	105	39%
Non-Māori/Non-Pacific	416	354	-15%	441	413	-6%	476	488	3%	1,333	1,255	-6%
Total Population	488	428	-12%	512	497	-3%	567	593	5%	1,566	1,518	-3%

Figure 192: Number of haematology first specialist assessments by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori

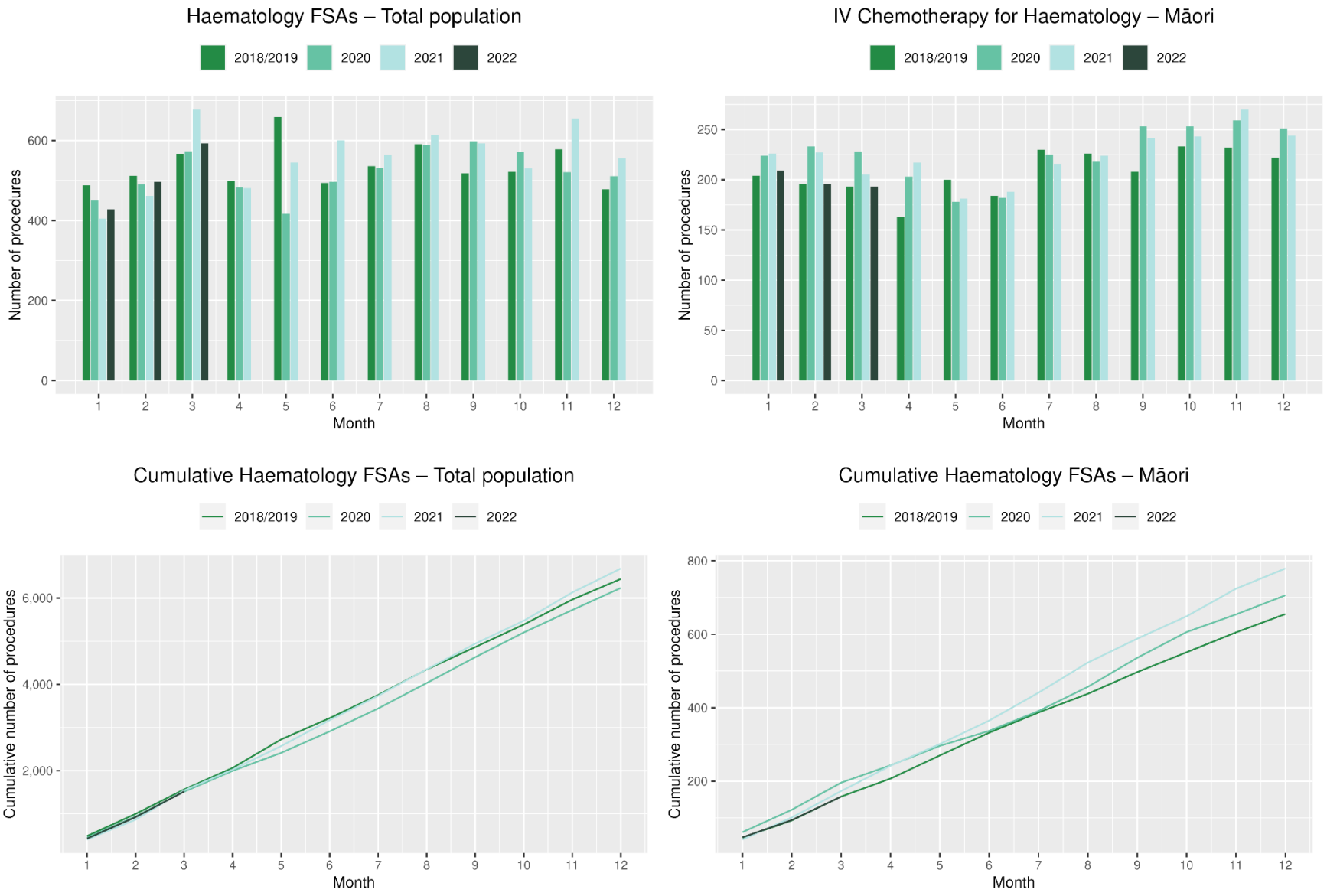


Table 17: Number of IV chemotherapy attendances for haematological malignancies and percentage difference in 2022 compared to the average of 2018 and 2019, by month and cumulative year to date, by ethnicity

	January			February			March			Cumulative January -March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Māori	204	209	3%	196	196	0%	193	193	0%	592	598	1%
Pacific Peoples	99	138	39%	103	116	13%	98	102	4%	300	356	19%
Non-Māori/Non-Pacific	1,656	1,829	10%	1,505	1,811	20%	1,582	1,904	20%	4,742	5,544	17%
Total Population	1,959	2,176	11%	1,804	2,123	18%	1,872	2,199	17%	5,634	6,498	15%

Figure 20: Number of attendances for IV chemotherapy for haematological malignancies by month, 2018/19 average, 2020, 2021 and 2022, total population and Māori

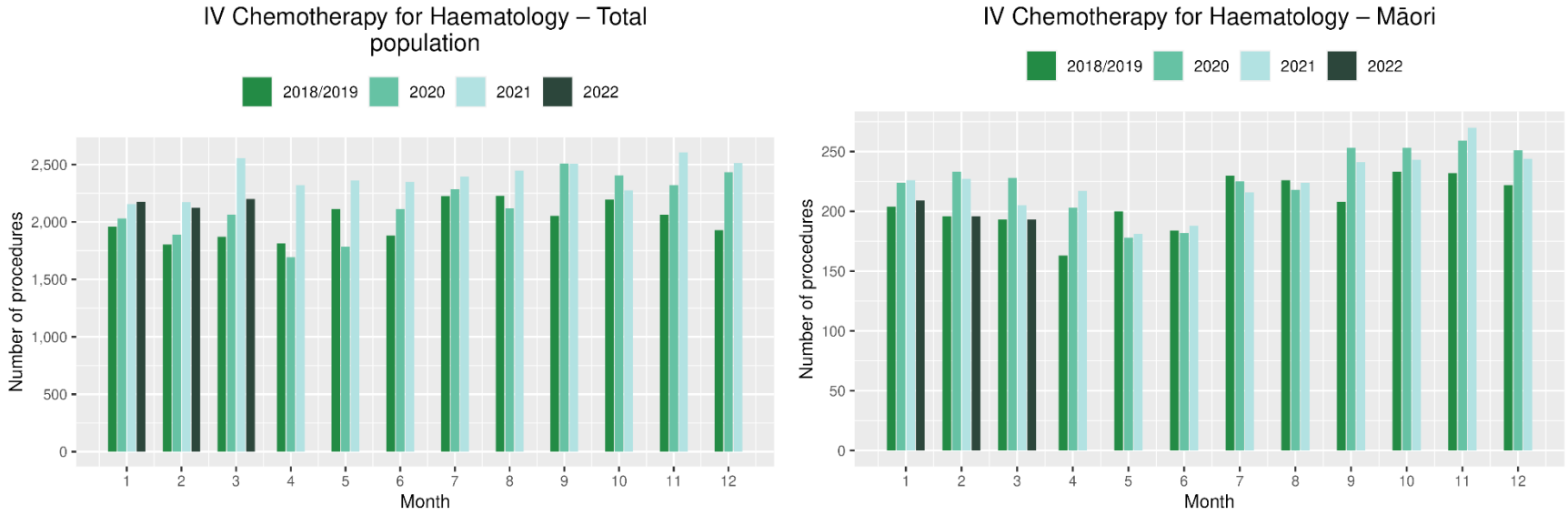
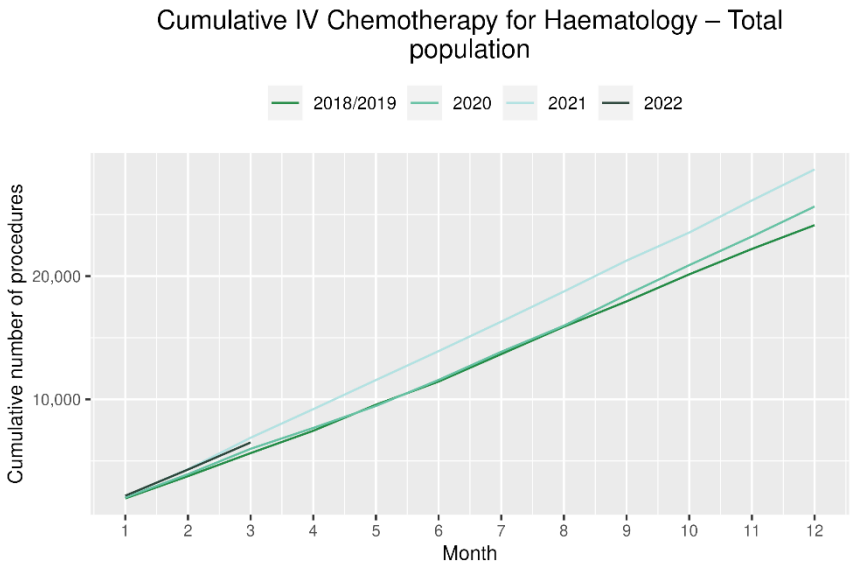
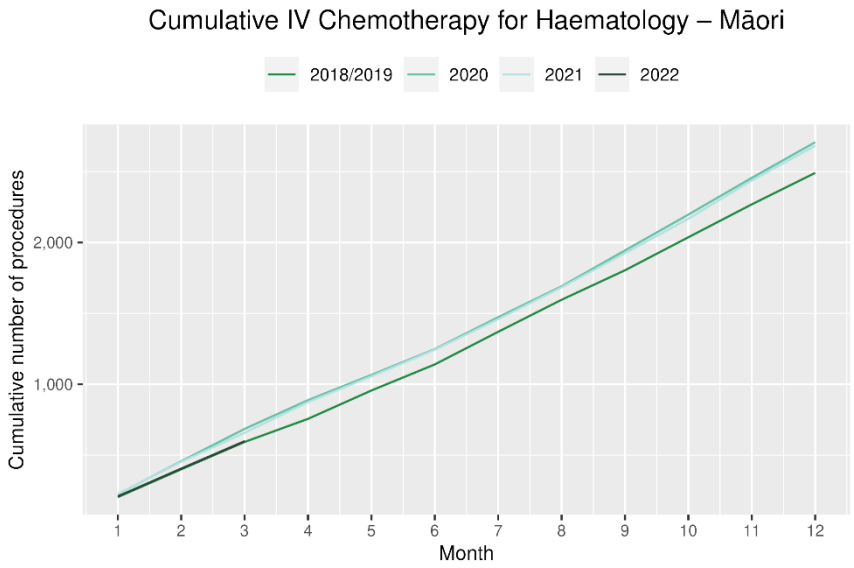


Figure 21: Cumulative number of attendances for IV chemotherapy for haematological malignancies, 2018/19 average, 2020, 2021 and 2022, total population and Māori





APPENDIX 1: KEY DATES

The follow provides a brief overview of key dates relating to COVID-19 restrictions (Alert Levels 3 and 4 where the greatest restrictions were in place) and outbreaks. More detailed information can be found on the Unite COVID-19 website[4], including an overview of Alert Levels and the COVID-19 Protection Framework[5].

23 March – 14 May 2020	All Aotearoa New Zealand was at Alert Level 3 or 4
12 August – 30 September 2020	Auckland only moved to Alert Level 3
28 Feb – 7 March 2021	Auckland only was at Alert Level 3
17 August to 7 September 2021	All Aotearoa New Zealand was at Alert 3 or 4 at the outset of the Delta variant outbreak
From 7 September 2021	Auckland remained at Alert Level 4; the rest of the country moved to Alert Level 2
September – December 2021	Auckland moved to and remained at Alert Level 3 from 21 September. There were various regional changes between Alert Level 2 and 3 over this period some parts of the North Island including parts of Waikato. Details are available on the Unite COVID-19 website[4]. Note: The definition of Alert Level 3 was eased in early October and three gradually reducing steps of level 3 were introduced in October
3 Dec 2021	End of COVID-19 Alert System. All Aotearoa New Zealand moved to the COVID-19 Protection Framework (traffic lights)
29 Dec 2021	The first case of the Omicron variant in the community in New Zealand was detected
February 2022	Omicron case numbers and hospitalisations increased more significantly in the second half of February onwards[6]
10 March 2022	Seven day rolling average of cases is over 20,000, while daily count reaches over 23,000.
23 March 2022	Changes are made to the Red Light setting: no limitations on numbers of people gathering outdoors, indoors limit increase to 2000 people.

[4] https://covid19.govt.nz/about-our-covid-19-response/history-of-the-covid-19-alert-system/
[5] https://covid19.govt.nz/traffic-lights/covid-19-protection-framework
[6] https://www.health.govt.nz/covid-19-novel-coronavirus/covid-19-data-and-statistics/covid-19-current-cases

APPENDIX 2: NZCR DATA INFORMATION

The New Zealand Cancer Registry as a data source for new cancer diagnoses

Cancer registration is a process where data is collated from multiple sources about people diagnosed with cancer and rules are applied to determine the type of cancer they have. This information is recorded in the New Zealand Cancer Registry. Each tumour is classified using an international World Health Organization standard so that cancer incidence can be compared between countries. The tumour is staged based on all the information available within 4 months of diagnosis. This process may take up to six months or more depending on the number of missing reports that need to be followed up with laboratories.

For each registration there may be multiple pathology reports as there may be multiple procedures performed on the tumour. This means there will be more than one registration for people diagnosed with more than one type of tumour.

Cancer registrations come from pathology laboratories, haematology laboratories, mortality records and reviewing hospital discharge records. Laboratory reports provide the best source of near real time data to monitor new diagnoses of cancer in New Zealand.

Pathology reports as a data source for providing near real time monitoring cancer diagnoses

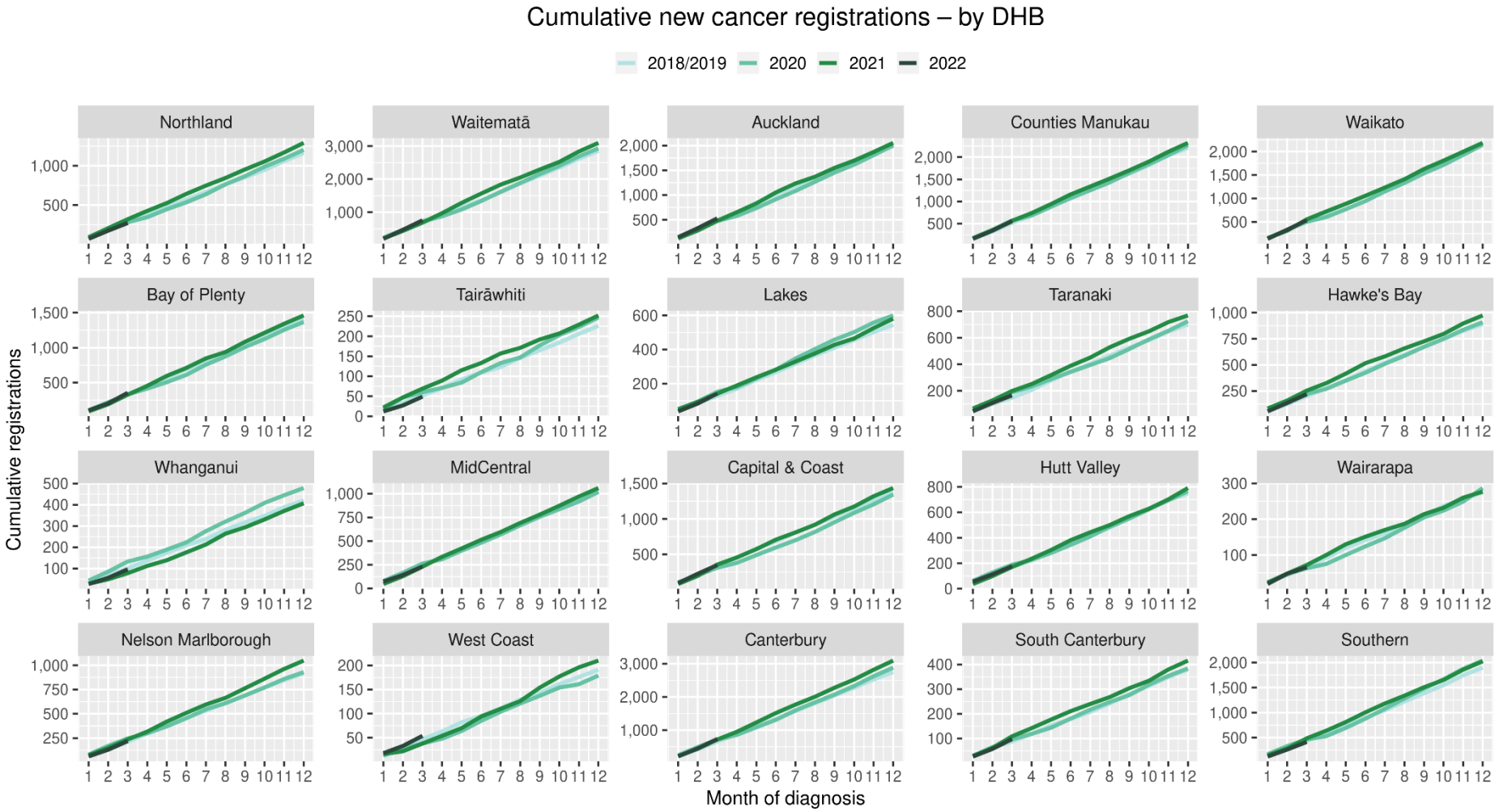
Pathology reports (documents) are received by the NZCR as electronic messages. An administrator triages these documents each day and if the document appears to meet the requirements for registration the document is “administered”. The document may relate to an existing registration or may contain information for a new cancer event. Documents that do not meet the cancer reporting requirements will be marked as “deleted”, “rejected” or “agreed not for registration”.

The administrator creates a new provisional cancer event if the pathology report identifies a new cancer diagnosis for this person. This new cancer event is assigned to a cancer group and this provisional event is then queued for further assessment by a clinical coder. If the required information has been provided the coder creates a new registration. If some information is not yet available, then the registration is held open until further information arrives to complete the registration or determine that the tumour does not meet the registration criteria.

APPENDIX 3: NZCR REGISTRATIONS BY DHB

Number of cancer registrations and percentage difference in 2022 compared to 2021 average, by month and cumulative year to date, by DHB of domicile

	January			February			March			Cumulative January-March		
DHB	**2018/19**	**2022**	**Change%**	**2018/19**	**2022**	**Change%**	**2018/19**	**2022**	**Change%**	**2018/19**	**2022**	**Change%**
Northland	91	70	-23%	92	104	14%	106	98	-8%	288	272	-6%
Waitematā	205	198	-3%	231	273	18%	244	286	17%	680	757	11%
Auckland	135	147	9%	174	182	5%	185	199	8%	494	528	7%
Counties Manukau	160	159	-1%	162	185	14%	196	213	9%	518	557	8%
Waikato	156	138	-12%	173	194	12%	198	203	3%	527	535	2%
Bay of Plenty	102	104	2%	106	100	-5%	129	151	18%	336	355	6%
Tairāwhiti	14	12	-11%	19	15	-19%	19	22	19%	51	49	-3%
Lakes	37	37	0%	48	46	-4%	43	59	39%	128	142	11%
Taranaki	44	45	3%	57	63	12%	46	57	24%	146	165	13%
Hawkes Bay	63	55	-13%	61	81	33%	79	84	7%	203	220	9%
Whanganui	33	27	-18%	38	29	-23%	29	40	38%	100	96	-4%
MidCentral	81	72	-11%	76	70	-7%	85	90	7%	241	232	-4%
Capital and Coast	97	93	-4%	103	132	29%	133	123	-7%	332	348	5%
Hutt Valley	48	55	16%	58	58	1%	63	64	2%	168	177	5%
Wairarapa	25	19	-24%	19	29	57%	26	18	-29%	69	66	-4%
Nelson Marlborough	60	62	3%	69	69	1%	84	89	6%	213	220	4%
West Coast	11	18	64%	21	15	-29%	15	21	45%	47	54	16%
Canterbury	204	212	4%	217	237	9%	236	282	20%	656	731	11%
South Canterbury	31	27	-11%	31	31	0%	26	40	57%	87	98	13%
Southern	138	122	-12%	140	140	0%	158	152	-4%	436	414	-5%


Cumulative new cancer registrations – by DHB
2018/2019
2020
2021
2022
Northland
Waitematā
Auckland
Counties Manukau
Waikato
Bay of Plenty
Tairāwhiti
Lakes
Taranaki
Hawke's Bay
Whanganui
MidCentral
Capital & Coast
Hutt Valley
Wairarapa
Nelson Marlborough
West Coast
Canterbury
South Canterbury
Southern
Cumulative registrations
Month of diagnosis

Cumulative cancer registrations by DHB and ethnicity

	Total Population						Māori						Non-Māori/Non-Pacific					
	Cumulative January-March				Difference between 2018/19 and 2022		Cumulative January-March				Difference between 2018/19 and 2022		Cumulative January-March				Difference between 2018/19 and 2022	
	2018/2019	2020	2021	2022	Number	%change	2018/2019	2020	2021	2022	Number	%change	2018/2019	2020	2021	2022	Number	%change
Northland	288	281	320	272	-16	-6%	64	58	86	58	-6	-9%	221	217	230	213	-8	-3%
Waitematā	680	729	690	757	78	11%	38	47	39	46	9	23%	614	645	615	663	49	8%
Auckland	494	475	477	528	34	7%	30	21	35	32	3	8%	419	408	399	444	26	6%
Counties Manukau	518	573	565	557	39	8%	68	80	83	52	-16	-23%	355	403	385	410	56	16%
Waikato	527	503	553	535	8	2%	86	75	79	73	-13	-15%	434	419	461	455	22	5%
Bay of Plenty	336	332	328	355	20	6%	48	45	57	57	10	20%	286	286	268	295	10	3%
Tairāwhiti	51	60	69	49	-2	-3%	19	31	25	17	-2	-11%	31	28	44	32	1	3%
Lakes	128	152	141	142	15	11%	32	38	43	38	6	19%	94	111	93	102	8	9%
Taranaki	146	188	198	165	19	13%	15	15	29	18	3	20%	130	173	167	146	16	12%
Hawkes Bay	203	223	254	220	18	9%	35	40	45	27	-8	-23%	162	179	203	191	29	18%
Whanganui	100	133	78	96	-4	-4%	14	17	16	14	0	0%	85	116	61	81	-4	-5%
MidCentral	241	263	230	232	-9	-4%	22	25	26	29	7	32%	217	234	202	200	-17	-8%
Capital and Coast	332	311	355	348	16	5%	26	26	40	21	-5	-19%	289	264	292	305	17	6%
Hutt Valley	168	188	171	177	9	5%	18	21	22	16	-2	-11%	143	159	136	149	7	5%
Wairarapa	69	63	72	66	-3	-4%	5	10	7	2	-3	-56%	64	53	65	62	-2	-3%
elson Marlborough	213	247	236	220	8	4%	14	7	13	15	2	11%	198	238	222	201	4	2%
West Coast	47	38	38	54	8	16%	2	2	5	2	0	0%	45	36	33	52	8	17%
Canterbury	656	717	716	731	75	11%	33	40	39	39	7	20%	611	671	669	685	75	12%
South Canterbury	87	97	109	98	11	13%	3	4	5	4	2	60%	84	93	104	94	10	12%
Southern	436	465	486	414	-22	-5%	23	27	34	21	-2	-7%	411	433	448	390	-21	-5%
Total	5,715	6,038	6,086	6,016	301	5%	590	629	728	581	-9	-2%	4,888	5,166	5,097	5,170	283	6%

Cumulative cancer registrations by cancer type and ethnicity

	Total Population						Māori						Non-Māori/Non-Pacific					
	Cumulative January-March				Difference between 2018/19 and 2022		Cumulative January-March				Difference between 2018/19 and 2022		Cumulative January-March				Difference between 2018/19 and 2022	
	2018/2019	2020	2021	2022	Number	%change	2018/2019	2020	2021	2022	Number	%change	2018/2019	2020	2021	2022	Number	%change
Breast	835	898	938	879	44	5%	119	135	157	110	-9	-7%	679	703	719	711	32	5%
Colorectal	734	844	761	851	117	16%	46	61	67	57	11	24%	669	766	670	767	98	15%
Gynaecology	254	287	257	269	16	6%	37	38	32	38	1	3%	187	222	193	190	4	2%
Haematology and Lymphoid	586	581	584	562	-24	-4%	55	58	67	41	-14	-25%	503	494	494	489	-14	-3%
Melanoma and non-melanoma skin cancer	851	938	927	924	73	9%	19	15	21	21	2	11%	829	921	902	899	71	9%
Other digestive system	354	410	404	399	46	13%	57	64	61	54	-3	-4%	270	322	318	322	53	19%
Prostate	936	846	908	867	-69	-7%	71	77	92	69	-2	-3%	835	745	791	777	-58	-7%
Respiratory and thorax	431	467	440	426	-5	-1%	90	90	99	91	1	1%	315	347	320	308	-7	-2%
Urinary system	248	254	270	240	-8	-3%	27	27	34	28	1	4%	214	214	226	208	-6	-3%
Total	5,227	5,525	5,489	5,417	190	4%	520	565	630	509	-11	-2%	4,498	4,734	4,633	4,671	173	4%

APPENDIX 4: DIAGNOSIS AND TREATMENT DATA BY DHB

Percentage differences are only presented if the cumulative total is 10 or greater. In some cases, the totals may differ to those presented in the national report due to non-DHB providers being excluded from the analyses within this appendix.

Gastrointestinal endoscopy

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	906	749	1,043	858	-48	-5%	156	142	218	167	12	7%	746	600	815	677	-69	-9%
Waitematā	2,067	2,176	2,380	2,391	324	16%	110	118	145	120	10	9%	1,896	1,969	2,131	2,184	288	15%
Auckland	1,429	1,331	1,503	1,459	30	2%	68	80	86	89	22	32%	1,266	1,146	1,299	1,274	9	1%
Counties Manukau	1,912	2,657	2,311	2,025	114	6%	191	260	223	194	3	2%	1,466	2,033	1,782	1,531	66	4%
Waikato	1,363	1,603	1,616	1,294	-69	-5%	170	183	207	189	20	12%	1,176	1,390	1,392	1,085	-91	-8%
Bay of Plenty	1,058	1,241	1,651	1,216	159	15%	123	162	196	197	74	60%	930	1,075	1,446	1,002	73	8%
Lakes	447	396	573	408	-39	-9%	86	64	110	83	-3	-3%	355	320	457	319	-36	-10%
Tairāwhiti	163	188	193	201	38	23%	44	60	60	66	22	50%	117	124	132	133	16	14%
Taranaki	421	420	696	573	153	36%	50	28	70	69	19	38%	368	390	622	499	132	36%
Whanganui	333	304	87	239	-94	-28%	46	33	10	32	-14	-30%	286	268	77	204	-82	-29%
Hawkes Bay	639	786	874	699	60	9%	70	98	106	130	61	87%	561	676	758	558	-3	-1%
MidCentral	502	548	711	671	169	34%	36	54	68	74	39	108%	463	490	636	594	132	28%
Capital and Coast	659	829	766	839	181	27%	41	68	68	78	38	93%	587	726	668	717	130	22%
Hutt Valley	605	773	762	805	201	33%	41	75	79	95	54	132%	547	674	656	682	136	25%
Wairarapa	233	217	274	133	-100	-43%	21	23	25	10	-11	-52%	210	192	248	120	-90	-43%
Nelson Marlborough	276	682	690	658	382	138%	14	40	41	32	19	137%	262	635	644	624	363	139%
West Coast	150	177	214	193	44	29%	*	*	*	*	*		140	170	193	179	40	28%
Canterbury	1,840	2,086	1,869	1,849	9	0%	107	113	94	103	-4	-4%	1,707	1,940	1,746	1,720	14	1%
South Canterbury	270	299	329	279	9	3%	*	*	*	*	*		259	286	314	262	3	1%
Southern	1,128	1,257	1,538	1,437	309	27%	52	79	80	77	25	48%	1,094	1,164	1,443	1,342	248	23%
Grand total	16,397	18,719	20,080	18,227	1,831	11%	927	1,149	1,159	1,141	214	23%	14,430	16,268	17,459	15,706	1,276	9%

Bronchoscopy

	Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	21	20	26	20	-1	-5%	7	7	7	6	-1		14	12	19	13	-1	-4%
Waitematā	42	45	53	48	6	14%	2	4	6	3	1		39	38	47	42	4	9%
Auckland	85	79	74	88	3	4%	10	12	7	18	9		69	60	63	62	-7	-9%
Counties Manukau	82	87	69	67	-15	-18%	16	9	16	10	-6	-38%	56	68	43	48	-8	-14%
Waikato	62	54	70	53	-9	-14%	16	13	18	10	-6	-38%	44	40	52	42	-2	-3%
Bay of Plenty	40	41	47	20	-20	-50%	9	11	16	5	-4		31	30	31	15	-16	-51%
Lakes	21	20	20	17	-4	-17%	7	8	9	6	-1		13	11	11	11	-2	-15%
Tairāwhiti	1	7	8	4	4		0	1	4	3	3		1	6	4	1	1	
Taranaki	13	10	15	19	7	52%	3	0	3	2	-1		10	10	12	17	7	70%
Whanganui	5	4	6	2	-3		2	1	2	1	-1		3	3	4	1	-2	
Hawkes Bay	19	14	17	16	-3	-14%	2	2	7	5	3		16	11	10	11	-5	-31%
MidCentral	10	4	9	7	-3		2	0	2	3	2		8	4	6	4	-4	
Capital and Coast	23	19	17	20	-3	-11%	3	3	1	7	4		19	15	15	12	-7	-35%
Hutt Valley	29	21	21	22	-7	-24%	4	4	4	5	2		26	16	15	17	-9	-33%
Nelson Marlborough	15	19	19	26	12	79%	3	3	2	3	1		12	16	17	23	11	92%
Canterbury	90	112	97	78	-12	-13%	8	5	9	7	-1		82	103	86	69	-13	-15%
South Canterbury	4	5	5	2	-2		1	0	0	0	-1		3	5	5	2	-1	
Southern	64	36	55	46	-18	-28%	6	7	3	3	-3		56	29	51	39	-17	-30%
Grand total	621	597	628	555	-66	-11%	97	90	116	97	0	0%	498	477	491	429	-69	-14%

Colorectal cancer surgery

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	24	23	26	18	-6	-25%	6	4	7	5	-1		19	19	19	13	-6	-30%
Waitematā	69	57	37	47	-22	-32%	4	3	3	2	-2		63	52	33	45	-18	-28%
Auckland	46	45	36	41	-5	-10%	5	7	3	3	-2		39	35	29	32	-7	-17%
Counties Manukau	31	42	28	20	-11	-35%	3	7	2	4	2		27	29	23	14	-13	-48%
Waikato	51	61	68	50	-1	-2%	4	9	15	10	6		47	52	51	40	-7	-14%
Bay of Plenty	34	46	30	35	2	4%	3	8	6	5	2		31	38	21	30	-1	-2%
Lakes	16	15	21	22	7	42%	3	1	7	7	5		13	14	12	15	2	15%
Tairāwhiti	8	6	10	5	-3		3	1	4	3	1		5	5	5	2	-3	
Taranaki	20	21	20	21	2	8%	2	4	4	2	1		18	17	16	19	1	6%
Whanganui	8	12	13	12	4		1	1	1	0	-1		7	11	12	12	5	
Hawkes Bay	36	29	29	36	1	1%	5	3	0	3	-2		31	24	29	33	2	6%
MidCentral	29	37	36	28	-1	-3%	2	2	1	4	3		27	35	35	24	-3	-11%
Capital and Coast	35	33	30	32	-3	-7%	3	5	6	4	2		30	27	21	27	-3	-10%
Hutt Valley	13	17	19	11	-2	-15%	1	2	2	0	-1		12	15	17	10	-2	-13%
Wairarapa	7	2	3	2	-5		1	0	0	0	-1		7	2	3	2	-5	
Nelson Marlborough	21	17	18	20	-1	-5%	1	2	1	1	1		21	15	17	19	-2	-7%
West Coast	0	1	2	4	4		0	0	0	0	0		0	1	2	4	4	
Canterbury	77	80	65	75	-2	-3%	4	7	1	3	-1		73	71	64	71	-2	-2%
South Canterbury	10	10	13	7	-3	-30%	0	1	0	0	0		10	9	13	7	-3	-30%
Southern	55	72	60	51	-4	-7%	3	1	2	2	-1		52	70	56	49	-3	-6%
Grand total	587	626	564	537	-50	-8%	48	68	65	58	11	22%	528	541	478	468	-60	-11%

Lung cancer surgery

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan-Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Auckland	71	70	52	64	-7	-9%	11	6	8	10	-1	-5%	57	58	40	50	-7	-12%
Waikato	32	41	33	24	-8	-24%	12	7	9	3	-9	-74%	20	33	23	21	1	5%
Bay of Plenty	0	0	1	0	0		0				0						0	
Capital and Coast	29	15	33	32	3	10%	5	0	0	0	-5		0	0	1	0	0	
Canterbury	22	13	21	26	4	18%	1	3	5	7	7		23	12	24	24	2	7%
Southern	12	7	8	12	0	0%	1	1	10	4	3		22	12	11	19	-3	-12%
Grand total	165	146	148	158	-7	-4%	1	1	0	0	-1		121	115	99	114	-7	-5%

Prostate cancer surgery

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan-Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	13	10	17	5	-8	-60%	2	4	1	0	-2		11	6	16	5	-6	-55%
Waitematā	13	30	19	21	8	62%	0	0	3	1	1		13	28	15	20	7	54%
Auckland	17	28	26	18	2	9%	1	4	1	1	1		15	24	21	16	1	7%
Counties Manukau	0	0	2	7	7		0	0	1	1	1		0	0	0	4	4	
Waikato	18	14	18	12	-6	-31%	0	0	3	4	4		18	14	15	8	-10	-54%
Bay of Plenty	1	0	0	0	-1		0	0	0	0	0		1	0	0	0	-1	
Lakes	11	20	12	9	-2	-14%	2	6	4	1	-1		9	14	8	8	-1	
Tairāwhiti	1	0	0	3	2		1	0	0	1	0		0	0	0	2	2	
Taranaki	6	8	13	10	4		1	1	0	1	1		6	7	13	9	4	
Whanganui	1	1	2	0	-1		0	0	0	0	0		1	1	2	0	-1	
Hawkes Bay	5	3	6	9	4		1	2	1	1	1		5	1	5	8	4	
MidCentral	17	20	15	22	6	33%	2	0	0	5	4		15	20	15	17	2	13%
Capital and Coast	13	14	19	18	5	38%	1	1	0	2	1		11	13	18	15	5	43%
Wairarapa	2	2	3	2	0		1	1	0	0	-1		2	1	3	2	1	
Nelson Marlborough	12	16	5	8	-4	-30%	0	0	0	1	1		11	16	5	7	-4	-36%
West Coast	1	2	3	1	1		0	0	0	0	0		1	2	3	1	1	
Canterbury	19	13	15	16	-3	-16%	1	0	0	0	-1		19	13	14	16	-3	-14%
South Canterbury	3	6	3	1	-2		0	0	0	0	0		3	6	3	1	-2	
Southern	17	22	31	27	11	64%	2	0	1	0	-2		15	22	30	27	12	80%
Grand total	166	209	209	189	24	14%	11	19	15	19	9	81%	152	188	186	166	14	9%

Medical oncology first specialist assessments

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	117	108	135	143	27	23%	28	34	35	39	11	39%	88	71	98	102	15	17%
Auckland	540	605	572	620	80	15%	60	64	57	73	13	22%	422	445	435	466	45	11%
Waikato	209	185	202	207	-2	-1%	45	45	46	45	0	0%	159	138	153	160	2	1%
Bay of Plenty	108	131	149	133	25	23%	25	20	32	33	9	35%	83	110	116	100	18	21%
Lakes	24	40	70	57	33	138%	6	11	22	18	13		18	29	46	39	22	123%
Tairāwhiti	30	36	35	23	-7	-22%	12	15	17	8	-4	-33%	18	21	18	14	-4	-20%
Taranaki	58	53	55	60	3	4%	7	5	10	10	3		51	48	45	49	-2	-3%
MidCentral	262	261	280	269	8	3%	42	32	50	53	12	28%	216	225	227	211	-5	-2%
Capital and Coast	221	205	218	238	17	8%	23	31	26	21	-2	-9%	187	160	178	203	17	9%
Nelson Marlborough	102	122	104	112	10	10%	7	8	5	11	4		94	113	98	99	5	5%
West Coast	6	5	6	7	1		1	0	0	0	-1		6	5	6	7	2	
Canterbury	309	319	327	335	26	8%	18	19	24	16	-2	-11%	287	294	300	315	28	10%
South Canterbury	0	11	25	27	27		0	1	1	1	1		0	10	24	26	26	
Southern	152	166	143	105	-47	-31%	8	12	4	12	5		144	150	136	91	-53	-37%
Grand total	2,135	2,247	2,321	2,336	201	9%	280	297	329	340	61	22%	1,768	1,819	1,880	1,882	115	6%

Medical oncology IV chemotherapy

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	705	733	807	861	157	22%	145	223	249	279	135	93%	551	502	544	575	24	4%
Waitematā	1	0	2	1	1		0	0	1	0	0		1	0	1	1	1	
Auckland	4,362	5,393	5,821	5,635	1,273	29%	434	560	654	619	186	43%	3,405	4,231	4,453	4,198	793	23%
Waikato	1,776	1,615	2,054	1,778	2	0%	287	291	359	315	28	10%	1,470	1,298	1,663	1,434	-36	-2%
Bay of Plenty	1,182	1,430	1,263	1,434	252	21%	218	308	301	304	86	39%	950	1,117	953	1,126	177	19%
Lakes	687	749	761	854	168	24%	197	244	224	212	16	8%	473	499	523	620	148	31%
Tairāwhiti	156	146	451	347	192	123%	75	68	210	131	57	76%	81	77	237	210	129	159%
Taranaki	419	514	588	557	139	33%	38	39	88	123	85	224%	374	470	500	418	45	12%
Whanganui	28	24	20	43	16	56%	6	2	3	2	-4		22	22	17	40	18	82%
Hawkes Bay	7	19	16	8	2		2	12	11	0	-2		5	7	5	8	3	
MidCentral	1,751	1,936	2,239	2,027	277	16%	287	286	428	411	125	43%	1,423	1,627	1,788	1,589	167	12%
Capital and Coast	1,623	1,635	1,314	1,173	-450	-28%	162	202	137	141	-21	-13%	1,388	1,333	1,095	967	-421	-30%
Hutt Valley	26	25	44	28	2	8%	3	1	5	2	-1		23	20	37	24	2	7%
Wairarapa	1	4	16	13	12		0	0	2	0	0		1	4	11	13	12	
Nelson Marlborough	705	725	746	787	83	12%	58	51	35	54	-4	-7%	629	661	711	732	104	16%
West Coast	7	13	9	2	-5		0	5	0	0	0		7	8	9	2	-5	
Canterbury	1,620	1,615	1,602	1,687	68	4%	95	101	111	82	-13	-14%	1,482	1,456	1,459	1,584	103	7%
South Canterbury	264	293	271	281	17	6%	2	7	6	23	21		257	286	265	258	1	0%
Southern	1,688	1,839	1,456	1,149	-539	-32%	92	124	64	108	17	18%	1,591	1,687	1,368	1,013	-578	-36%
Grand total	17,002	18,708	19,480	18,665	1,664	10%	2,097	2,524	2,888	2,806	710	34%	14,128	15,305	15,639	14,812	684	5%

Radiation oncology first specialist assessments

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan-Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	100	61	94	90	-10	-10%	27	18	32	23	-4	-13%	72	43	62	66	-6	-8%
Auckland	808	837	824	760	-48	-6%	93	81	119	92	-1	-1%	626	657	603	569	-57	-9%
Waikato	327	380	391	349	23	7%	52	77	78	66	15	28%	268	300	307	278	11	4%
Bay of Plenty	213	219	278	226	13	6%	30	29	45	43	14	46%	181	187	230	181	0	0%
Lakes	4	4	7	3	-1		1	1	2	1	0		3	3	5	2	-1	
Tairāwhiti	17	13	5	23	7	39%	8	3	2	11	4		9	10	3	11	2	
MidCentral	410	443	461	434	24	6%	51	54	67	65	15	29%	355	382	392	363	8	2%
Capital and Coast	329	321	383	352	24	7%	28	34	32	30	3	9%	285	270	330	297	13	4%
Wairarapa	0	0	0	2	2		0	0	0	0	0		0	0	0	2	2	
Nelson Marlborough	24	51	53	36	13	53%	3	3	3	2	-1		21	48	49	34	13	62%
West Coast	2	3	5	3	1		0	0	0	0	0		2	3	5	3	1	
Canterbury	382	453	417	485	104	27%	18	20	26	20	2	11%	360	425	384	458	99	27%
Southern	247	260	239	224	-23	-9%	0	22	13	18	18		233	235	225	202	-31	-13%
Grand total	2,860	3,045	3,157	2,987	128	4%	307	342	419	371	64	21%	2,414	2,563	2,595	2,466	53	2%

Completed Radiation Oncology Courses

	Total population			Maori			Non-Maori/Non Pacific		
	Cumulative number Jan-March			Cumulative number Jan-March			Cumulative number Jan-March		
	2018/2019	2022	% change	2018/2019	2022	% change	2018/2019	2022	% change
Auckland	759	659	-13%	103	108	5%	579	491	-15%
Waikato	397	358	-10%	76	71	-7%	315	282	-10%
Bay of Plenty	238	195	-18%	40	34	-15%	196	157	-20%
MidCentral	350	355	2%	55	72	32%	292	277	-5%
Captial and Coast	440	458	4%	35	44	28%	387	384	-1%
Canterbury	485	453	-7%	32	28	-13%	450	420	-7%
Southern	281	266	-5%	16	26	68%	264	237	-10%
Total	2,948	2,744	-7%	355	383	8%	2,480	2,248	-9%

Radiation oncology megavoltage fractions

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Auckland	10,599	10,875	9,627	9,077	-1,522	-14%	1,374	1,094	1,450	1,312	-62	-4%	8,255	8,380	6,989	6,919	-1,336	-16%
Waikato	5,322	4,641	5,251	4,525	-797	-15%	931	1,008	1,046	931	1	0%	4,292	3,613	4,111	3,515	-777	-18%
Bay of Plenty	4,058	4,354	5,087	4,042	-16	0%	812	707	895	753	-59	-7%	3,225	3,552	4,130	3,281	57	2%
MidCentral	5,566	5,683	5,598	5,910	344	6%	754	822	958	1,109	355	47%	4,766	4,805	4,615	4,703	-63	-1%
Capital and Coast	5,034	4,902	5,118	4,535	-499	-10%	457	469	499	560	104	23%	4,310	4,190	4,449	3,643	-667	-15%
Canterbury	6,191	6,310	5,789	5,888	-303	-5%	417	467	329	316	-101	-24%	5,683	5,768	5,349	5,503	-180	-3%
Southern	3,574	3,237	2,924	2,447	-1,127	-32%	207	148	158	232	26	12%	3,333	3,052	2,738	2,205	-1,128	-34%
Grand total	40,343	40,002	39,394	36,424	-3,919	-10%	4,949	4,715	5,335	5,213	264	5%	33,862	33,360	32,381	29,769	-4,093	-12%

Haematology first specialist assessment

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	56	63	41	47	-9	-15%	10	16	11	13	3	30%	45	47	30	34	-11	-24%
Waitematā	176	176	127	150	-26	-15%	8	16	9	7	-1		162	153	111	128	-34	-21%
Auckland	225	185	254	211	-14	-6%	17	19	20	15	-2	-12%	185	153	218	171	-14	-7%
Counties Manukau	189	153	181	187	-2	-1%	23	23	28	21	-2	-9%	139	111	118	121	-18	-13%
Waikato	174	170	162	179	5	3%	31	31	24	27	-4	-13%	141	135	134	150	10	7%
Bay of Plenty	100	74	90	109	9	9%	14	12	12	20	6	43%	84	61	77	86	2	2%
Tairāwhiti	10	12	20	14	5		4	1	8	7	4		6	11	12	6	1	
Taranaki	36	51	44	44	9	24%	5	6	3	4	-1		31	45	41	40	9	29%
MidCentral	179	221	207	187	9	5%	24	32	28	15	-9	-36%	155	186	178	170	15	10%
Capital and Coast	166	147	158	127	-39	-23%	12	21	13	17	6	48%	148	117	128	100	-48	-32%
Nelson Marlborough	57	34	27	31	-26	-46%	2	2	2	3	2		55	32	25	28	-27	-49%
West Coast	3	0	2	5	3		0	0	0	0	0		3	0	2	5	3	
Canterbury	129	149	150	142	13	10%	4	11	9	5	1		120	136	139	137	18	15%
Southern	70	79	82	85	16	22%	6	6	6	4	-2		64	72	75	79	15	23%
Grand total	1,566	1,514	1,545	1,518	-48	-3%	157	196	173	158	1	1%	1,333	1,259	1,288	1,255	-78	-6%

Haematology IV chemotherapy

	Total population						Māori						Non-Māori / Non-Pacific					
	Cumulative number for Jan-Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19		Cumulative number for Jan- Mar				Difference between 2022 and 2018/19	
	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change	2018/2019	2020	2021	2022	Number	% change
Northland	476	350	385	266	-210	-44%	109	59	92	55	-54	-49%	362	277	289	211	-151	-42%
Waitematā	997	981	881	1016	19	2%	35	52	38	72	37	106%	907	899	817	904	-3	0%
Auckland	866	808	1028	769	-97	-11%	67	34	50	63	-4	-5%	694	699	846	612	-82	-12%
Counties Manukau	500	540	860	636	136	27%	80	44	106	42	-38	-48%	324	412	614	454	130	40%
Waikato	436	578	595	604	168	39%	75	116	123	70	-5	-7%	360	462	459	511	151	42%
Bay of Plenty	281	252	436	377	96	34%	31	35	67	37	7	21%	248	217	362	336	89	36%
Lake	82	164	177	172	91	111%	31	38	44	39	9	28%	51	126	124	123	72	141%
Tairāwhiti	40	22	29	20	-20	-49%	7	1	7	5	-2		31	21	22	15	-16	-51%
MidCentral	670	629	515	590	-80	-12%	75	71	37	63	-12	-15%	591	558	471	522	-69	-12%
Capital and Coast	723	856	771	592	-131	-18%	48	132	29	93	46	96%	650	681	685	465	-185	-28%
Nelson Marlborough	0	3	0	0	0		0	0	0	0	0		0	3	0	0	0	
West Coast	3	1	5	0	-3		0	0	0	0	0		3	1	5	0	-3	
Canterbury	513	728	614	788	275	54%	37	86	38	18	-19	-51%	476	633	574	769	294	62%
Southern	49	73	587	668	619	1263%	1	17	27	41	41		49	56	556	622	574	1182%
Grand total	5,634	5,985	6,883	6,498	864	15%	592	685	658	598	6	1%	4,742	5,045	5,824	5,544	802	17%

APPENDIX 5: SURGICAL PROCEDURE CODES

Below is a list of the surgical procedure codes that were used for analysis on cancer surgery.

COLORECTAL CANCER SURGERY		
Clinical code	Block short description	Clinical code description
3200000	Colectomy	Limited excision of large intestine with formation of stoma
3200001	Colectomy	Right hemicolectomy with formation of stoma
3200300	Colectomy	Limited excision of large intestine with anastomosis
3200301	Colectomy	Right hemicolectomy with anastomosis
3200400	Colectomy	Subtotal colectomy with formation of stoma
3200401	Colectomy	Extended right hemicolectomy with formation of stoma
3200500	Colectomy	Subtotal colectomy with anastomosis
3200501	Colectomy	Extended right hemicolectomy with anastomosis
3200600	Colectomy	Left hemicolectomy with anastomosis
3200601	Colectomy	Left hemicolectomy with formation of stoma
3200900	Colectomy	Total colectomy with ileostomy
3201200	Colectomy	Total colectomy with ileorectal anastomosis
3201500	Total proctocolectomy	Total proctocolectomy with ileostomy
3202400	Anterior resection of rectum	High anterior resection of rectum
3202500	Anterior resection of rectum	Low anterior resection of rectum
3202600	Anterior resection of rectum	Ultra low anterior resection of rectum
3202800	Anterior resection of rectum	Ultra low anterior resection of rectum with hand sutured coloanal anastomosis
3203000	Rectosigmoidectomy or proctectomy	Rectosigmoidectomy with formation of stoma
3203900	Rectosigmoidectomy or proctectomy	Abdominoperineal proctectomy
3205100	Total proctocolectomy	Total proctocolectomy with ileo-anal anastomosis
3205101	Total proctocolectomy	Total proctocolectomy with ileo-anal anastomosis and formation of temporary ileostomy
3206000	Rectosigmoidectomy or proctectomy	Restorative proctectomy
3209900	Excision of lesion or tissue of rectum or anus	Per anal submucosal excision of lesion or tissue of rectum
3211200	Rectosigmoidectomy or proctectomy	Perineal rectosigmoidectomy
9220800	Anterior resection of rectum	Anterior resection of rectum, level unspecified

LUNG CANCER SURGERY		
Clinical code	Clinical code description	Block Description
3844000	Wedge resection of lung	Partial resection of lung
3844001	Radical wedge resection of lung	Partial resection of lung
3843800	Segmental resection of lung	Partial resection of lung
9016900	Endoscopic wedge resection of lung	Partial resection of lung
3843801	Lobectomy of lung	Lobectomy of lung
3844100	Radical lobectomy	Lobectomy of lung
3844101	Radical pneumonectomy	Pneumonectomy
3843802	Pneumonectomy	Pneumonectomy

PROSTATE CANCER SURGERY		
Clinical code	Block short description	Clinical code description
3720004	Open prostatectomy	Retropubic prostatectomy
3720900	Open prostatectomy	Radical prostatectomy
3720901	Other closed prostatectomy	Laparoscopic radical prostatectomy
3721000	Open prostatectomy	Radical prostatectomy with bladder neck reconstruction
3721001	Other closed prostatectomy	Laparoscopic radical prostatectomy with bladder neck reconstruction
3721100	Open prostatectomy	Radical prostatectomy with bladder neck reconstruction and pelvic lymphadenectomy
3721101	Other closed prostatectomy	Laparoscopic radical prostatectomy with bladder neck reconstruction and pelvic lymphadenectomy
3720900	Open prostatectomy	Radical prostatectomy
3720901	Closed prostatectomy	Laparoscopic radical prostatectomy
3721000	Open prostatectomy	Radical prostatectomy with bladder neck reconstruction
3721001	Closed prostatectomy	Laparoscopic radical prostatectomy with bladder neck reconstruction
3721100	Open prostatectomy	Radical prostatectomy with bladder neck reconstruction and pelvic lymphadenectomy