

**COVID-19 and cancer services**

**Report 3**

Working report on the impact of COVID-19 on cancer services for the period ending June 2020

**August 2020**

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# Summary of findings

**Overview of impact of COVID-19 on cancer diagnosis and treatment**

There has been a substantial increase in new cancer registrations and diagnostic procedures in June compared to May 2020. This report shows that we are catching up on the dip in cancer registrations seen over the lockdown period. The overall number of diagnostic procedures and new cancer registrations in 2020 remains lower than 2019. Cancer treatment services – surgery, medical oncology, radiation oncology and haematology – continued during the COVID-19 lockdown and continue to be delivered at pre-COVID volumes.

## Background and data

* This is the third report looking at the impact of COVID-19 on cancer services. This report looks at the period until the end of June 2020, the first full month out of national alert levels 3 and 4.
* The purpose of this analysis was to rapidly measure the impact of COVID-19 on cancer services to assist with recovery 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.
* Comparisons between 2020 and 2019 do not consider any projected increase in diagnoses over time.
* The focus of the report was to understand the impact of COVID-19 on existing service delivery and does not address pre-existing unmet need.

## Cancer diagnosis

### Registrations

* Overall for the year to date (up until end of June 2020), there have been 689 fewer cancer registrations compared to the same time period in 2019, a 4.5% decrease.
* There were 225 more cancers registered in June 2020 compared to June 2019, a 9.2% increase. Māori were the only ethnic group where there remained a decrease in the monthly number of registrations in June 2020 compared to 2019.
* The decrease in cancer registrations for the year to date was relatively similar across all ethnic groups. Over the year to date there was a 5% decrease in registrations for Māori, 2.5% decrease for Pacific and a 5.3% decrease for European/other. There was an increase in registrations for people in the Asian ethnic group.
* The overall impact on registrations for the year to date has been most marked for haematology/lymphoid, melanoma and non-melanoma skin cancer, prostate and breast cancers (all have seen a 10-12% decrease for the year to date).

### Diagnostics

* Gastrointestinal endoscopy services increased substantially in June 2020, with a 20% increase in endoscopies performed in June 2020 compared to June 2019.
* Overall, for the year to date there has been 11% fewer gastrointestinal endoscopies performed in 2020 compared to 2019, with Māori having a smaller cumulative reduction (5%) compared to non-Māori/non-Pacific (12%).
* Despite the 11% decrease in colonoscopies for the year to date, there has only been a 1.8% decrease in registrations of colorectal cancer. This suggests that triage systems are operating well within DHBs, with those at highest risk being prioritised to receive their colonoscopies.
* There has been significant work by DHBs to increase the delivery of endoscopies post lockdown. There is ongoing work nationally to address the demand for colonoscopy services.
* Bronchoscopy services have increased in June 2020 compared to May 2020. There was an increase in bronchoscopies performed in June 2020 compared to June 2019. However, there remains a deficit between the number of bronchoscopies performed in 2020 compared to 2019. Overall there were 22% fewer bronchoscopies performed in the first six months of 2020 compared to the first six months of 2019. This appears to have started prior to the lockdown, with fewer bronchoscopies from February 2020. Te Aho o Te Kahu is investigating the cause of variance in bronchoscopies in 2020.

## Cancer Treatment

### Surgery

* Overall, the impact of COVID-19 on cancer surgery volumes has been minimal, with 2% fewer surgeries performed in the first six months of 2020 compared to the first six months of 2019. There has been an 18% increase in surgery for Māori in 2020 compared to 2019.
* Colorectal cancer surgery returned to pre-COVID volumes in June.
* There was an increase in curative lung cancer surgery in June 2020 compared to June 2019.
* Overall, for the year to date there has been a 5% decrease in curative lung cancer surgeries compared to 2019. This deficit is smaller than the gap seen at the end of May 2020 (9%). The decrease in lung cancer surgery follows the pattern seen for bronchoscopies, with the decrease starting prior to lockdown. This was most noticeable for Māori. Te Aho o Te Kahu is looking into this further.
* For the year to date there has been a 15% increase in prostate cancer surgeries compared to 2019.

### Chemotherapy and radiotherapy

* Overall, for the year to date the number of medical oncology FSAs and number of attendances for IV chemotherapy in 2020 is comparable to 2019. There has been an overall 17% increase in attendances for IV chemotherapy for Māori during the first six months of 2020 compared to the same time period in 2019
* Overall for the year to date the number of radiation oncology FSAs in 2020 is comparable to 2019.
* For the year to date there has been a 6% decrease in attendances for radiation therapy. This is similar for Māori (6%) and non-Māori/non-Pacific (7%). This may be the result of national hypofractionation guidance. Te Aho o Te Kahu is looking into this further using the Radiation Oncology Collection (ROC database), which allows for more detailed analysis.
* Overall, for the year to date there has been a 10% decrease in haematology first specialist appointments compared to the same time period in 2019. One contributor to this is likely to be a decrease in FSAs for non-malignant, non-urgent indications, deferred as part of the hospital response framework. These cases may have been managed in primary care.
* For the year to date there has been an 8% increase in IV chemotherapy for haematological malignancies compared to the same time period in 2019.

# Introduction

## Purpose of this report

This is the third report released by Te Aho o Te Kahu outlining the impact of COVID-19 on cancer services in New Zealand. This report looks at data through to the end of June 2020.

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 care, radiology and palliative care are not measured in this report.

## Data and analysis

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

It is important to note that the purpose of the analysis is to rapidly measure the impact of COVID-19 and the recovery on cancer services and does not consider pre-existing unmet need. The report also makes direct comparisons between 2020 and 2019 and does not consider any projected increase in diagnoses over time.

## Key dates

Key dates in relation to COVID-19 that may be of use when reviewing the report include:

* 23 March: alert level 3 and hospital alert level framework released
* 26 March: alert level 4
* 28 April: alert level 3
* 14 May: alert level 2
* 9 June: alert level 1

# Cancer Registrations

## Notes on data

* The data come from laboratory reports to the New Zealand Cancer Register (NZCR). This means that cancers diagnosed without haematology or pathology (e.g. radiology alone) will not be counted in this analysis.
* ‘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. Data were extracted from NZCR on 29 July 2020.
* Further information on this data is included in Appendix 1.

## Results

Table 1 shows the change in cancer registrations in 2020 compared to 2019 by month, and the cumulative impact this has had on cancer registrations for the year to date (up until the end of June 2020). For each ethnic group except Māori the number of new registrations in June 2020 exceeded the number reported in June 2019.

Table 1: Absolute number and percentage change in cancer registrations in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
| **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | -71 | -28.9 | -30 | -11.6 | -28 | -10.7 | -74 | -5.1 |
| Pacific | -20 | -23.3 | -36 | -29.8 | 21 | 26.9 | -14 | -2.5 |
| Asian | -37 | -30.6 | -20 | -13.1 | 18 | 13.5 | 56 | 7.5 |
| European/Other | -848 | -41.2 | -403 | -17.1 | 216 | 11.1 | -660 | -5.3 |
| Total Population | -976 | -38.8 | -492 | -17 | 225 | 9.2 | -689 | -4.5 |

Note: a small number of reports have ‘unspecified’ ethnicity, meaning the sum of all ethnic groups may not equal the total population.

Figure 1: Total number of cancer registrations by month and year (left), cumulative number of cancer registrations by month and year (right)

|  |  |
| --- | --- |
|  |  |

Figure 2: Number of cancer registrations by month and year, by ethnicity

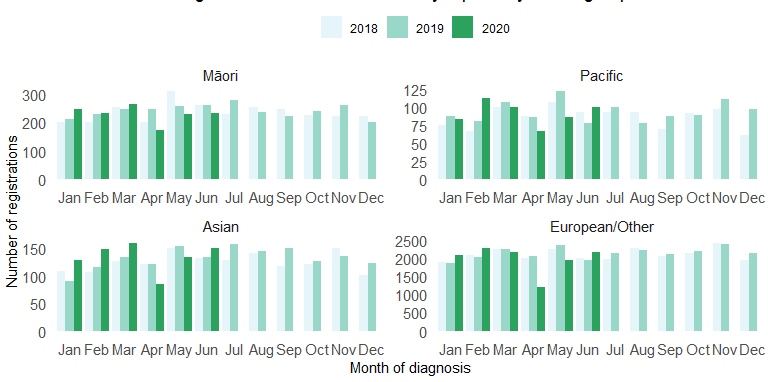


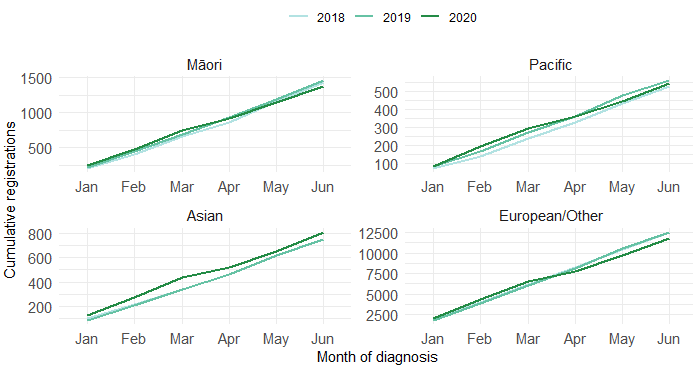
Figure 3: Cumulative number of cancer registrations by year, by ethnicity

Table 2: Changes in cancer registration in 2020 compared to 2019 by month and for the year to date, absolute difference in number of cases and percentage change, by cancer group.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
| **Cancer Group** | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Breast | -205 | -56.8 | -133 | -33.2 | -19 | -5.2 | -243 | -11.7 |
| Cervix | -85 | -47.2 | -46 | -24.1 | 19 | 11.2 | 75 | 7.9 |
| Colorectal | -91 | -34.9 | -14 | -4.7 | -10 | -3.7 | -29 | -1.8 |
| Gynaecology | -3 | -3.8 | -18 | -16.2 | 21 | 22.8 | 29 | 5.1 |
| Haematology and lymphoid | -82 | -40.4 | -69 | -29.5 | 9 | 4.8 | -129 | -10.7 |
| Melanoma and non-melanoma skin | -312 | -53.8 | -280 | -40.6 | 45 | 8.7 | -386 | -10.5 |
| Other digestive system | -33 | -24.4 | -9 | -6 | 41 | 38.3 | 22 | 2.9 |
| Prostate | -148 | -51 | 35 | 10.1 | -22 | -6.5 | -233 | -12.2 |
| Respiratory and thorax | -24 | -16.6 | -9 | -6 | 3 | 2.5 | -35 | -4 |
| Urinary system | 3 | 2.7 | 7 | 5.7 | 12 | 10.3 | 14 | 1.9 |

Figure 4: Number of cancer registrations by month and year, by cancer group



Figure 5: Cumulative number of cancer registrations by year, by cancer group

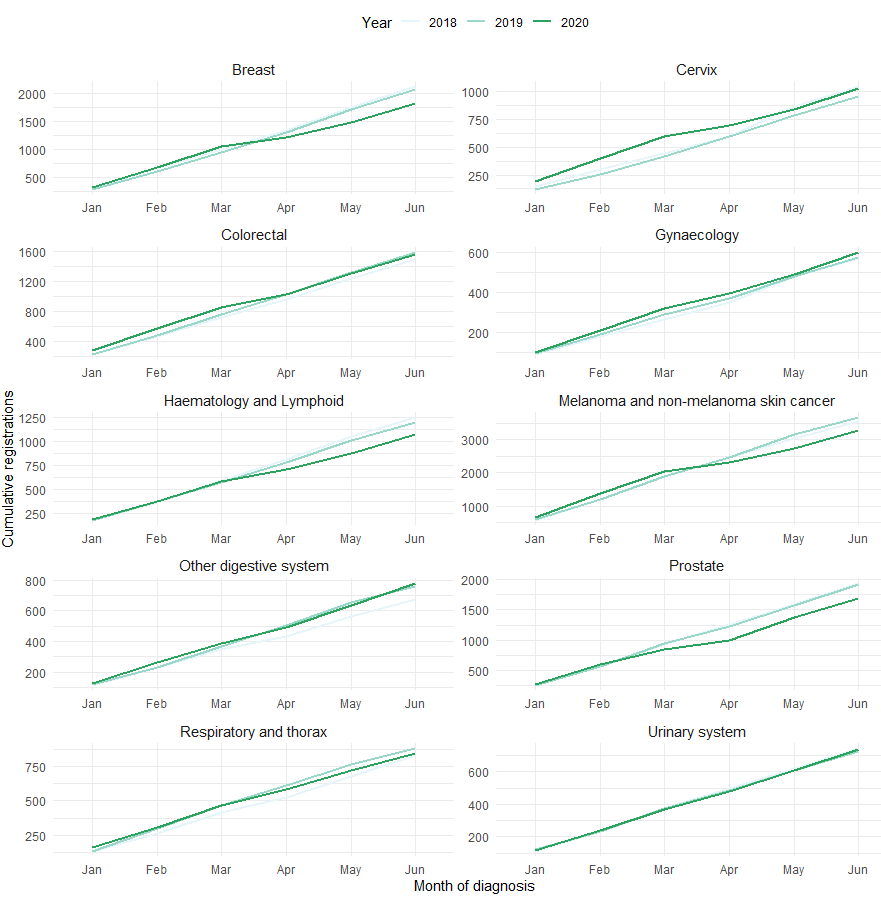


Table 3: Changes in cancer registration in 2020 compared to 2019 by month and for the year to date, absolute difference in number of cases and percentage change, by DHB of domicile (See Appendix 2 for graphs)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
| **DHB** | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Northland | -20 | -19 | -13 | -10.1 | 4 | 3.9 | -7 | -1 |
| Waitemata | -133 | -40.9 | -101 | -25.6 | 106 | 40.5 | -50 | -2.6 |
| Auckland | -74 | -38.1 | -56 | -20.5 | 39 | 16.9 | -71 | -5.1 |
| Counties Manukau | -81 | -37.7 | -31 | -12.2 | 36 | 17.5 | -9 | -0.7 |
| Waikato | -85 | -38.1 | -32 | -13.3 | 25 | 13.1 | -105 | -7.7 |
| Bay of Plenty | -34 | -23.3 | -40 | -24.7 | -16 | -10.3 | -65 | -7.1 |
| Tairawhiti | -22 | -61.1 | -12 | -38.7 | 8 | 32 | -25 | -14.7 |
| Lakes | -29 | -46 | -16 | -21.9 | -2 | -3.4 | -20 | -5.4 |
| Taranaki | -30 | -37.5 | -45 | -40.2 | -8 | -9.8 | 1 | 0.2 |
| Hawke's Bay | -37 | -41.1 | -6 | -5.9 | -12 | -11.3 | -62 | -10.5 |
| Whanganui | -19 | -39.6 | -7 | -13.7 | 6 | 14.3 | 1 | 0.3 |
| MidCentral | -34 | -34 | 3 | 2.8 | 5 | 4.8 | 52 | 8.7 |
| Capital & Coast | -65 | -44.5 | -11 | -7.1 | -2 | -1.6 | -54 | -6.6 |
| Hutt Valley | -17 | -26.6 | -20 | -23.5 | -8 | -9.5 | -15 | -3.3 |
| Wairarapa | -5 | -20.8 | 4 | 16.7 | 7 | 30.4 | 9 | 5.8 |
| Nelson Marlborough | -44 | -41.5 | -28 | -25.5 | 2 | 1.9 | -42 | -6.8 |
| West Coast | -9 | -40.9 | -14 | -43.8 | 11 | 73.3 | -17 | -13.7 |
| Canterbury | -89 | -32.7 | -28 | -9.3 | -31 | -10.4 | -73 | -4.4 |
| South Canterbury | -15 | -38.5 | -6 | -17.6 | 8 | 23.5 | -4 | -1.9 |
| Southern | -138 | -63 | -37 | -16.2 | 45 | 24.6 | -154 | -12.7 |

## Key points

* Overall for the year to date (up until end of June 2020), there have been 689 fewer cancer registrations compared to the same time period in 2019, a 4.5% decrease.
* There were 225 more cancers registered in June 2020 compared to June 2019, a 9.2% increase. Māori were the only ethnic group where there remained a decrease in the monthly number of registrations in June 2020 compared to 2019.
* The decrease in cancer registrations for the year to date was relatively similar across all ethnic groups. Over the year to date there was a 5% decrease in registrations for Māori, 2.5% decrease for Pacific and a 5.3% decrease for European/other. There was an increase in registrations for people in the Asian ethnic group.
* The overall impact of COVID-19 on registrations for the year to date has been most marked for haematology/lymphoid, melanoma and non-melanoma skin cancer, prostate and breast cancers (all have seen a 10-12% decrease for the year to date).

# Gastrointestinal endoscopy

## Notes on data

* Gastrointestinal endoscopy data were extracted from National Non-admitted Patient Collection (outpatient) and National Minimum Dataset (inpatient) on 27July 2020.
* Includes colonoscopies and gastroscopies for all indications (i.e. not just cancer).
* Technical information: Gastroscopies (Purchase Unit Code - MS02005), Colonoscopies (Purchase Unit Code - MS02007), Combined Gastroscopies + Colonoscopies (Purchase Unit Code - MS02014).

## Results

Table 4: Absolute number and percentage change in colonoscopy and gastroscopy in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | -354 | -68% | -79 | -13% | 143 | 23% | -171 | -5% |
| Pacific Peoples | -124 | -60% | 13 | 5% | 89 | 40% | 146 | 12% |
| Non-Māori/Non-Pacific | -4323 | -78% | -1246 | -19% | 1115 | 19% | -4118 | -12% |
| Total Population | -4801 | -77% | -1312 | -18% | 1347 | 20% | -4143 | -11% |

Figure 6: Number of gastrointestinal endoscopy procedures by month and year, for the total population (left) and for Māori (right)

Figure 7: Cumulative number of gastrointestinal endoscopy procedures by year, for the total population (left) and for Māori (right)

## Key points

* Gastrointestinal endoscopy services increased substantially in June 2020, with a 20% increase in endoscopies performed in June 2020 compared to June 2019.
* Overall, for the year to date there have been 11% fewer gastrointestinal endoscopies performed in 2020 compared to 2019, with Māori having a smaller cumulative reduction (5%) compared to non-Māori/non-Pacific (12%). There has been a 12% increase in gastrointestinal endoscopies for Pacific Peoples compared to the same time period in 2019.
* Despite the 11% year to date decrease in colonoscopies, there has only been a 1.8% decrease in registrations of colorectal cancer (see Table 2). This indicates that triage systems are operating well within DHBs, with those at highest risk being prioritised to receive their colonoscopies.
* There has been significant work by DHBs to increase the delivery of endoscopies post lockdown. There is ongoing work nationally to address the demand for colonoscopy services.

# Bronchoscopy

## Notes on data

* Bronchoscopy data were extracted from National Non-admitted Patient Collection (outpatient) and National Minimum Dataset (inpatient) on the 27 July 2020.
* Includes bronchoscopies for any indication (i.e. not just cancer).
* Technical information: Bronchoscopies (Purchase Unit Code - MS02003).

## Results

Table 5: Absolute number and percentage change in bronchoscopies in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | -25 | -83% | -19 | -43% | 0 | 0% | -69 | -32% |
| Pacific Peoples\* | - | | - | | - | | 3 | 5% |
| Non-Māori / Non-Pacific | -144 | -74% | -79 | -34% | 34 | 25% | -234 | -22% |
| Total Population | -175 | -74% | -91 | -33% | 33 | 19% | -300 | -22% |

\*Due to small numbers, monthly figures have not been included for Pacific Peoples

Figure 8: Number of bronchoscopies by month and year, for the total population (left) and for Māori (right)

Figure 9: Cumulative number of bronchoscopies procedures by year, for the total population (left) and for Māori (right)

## Key points

* Bronchoscopy services have increased in June 2020 compared to May 2020. There was an increase in bronchoscopies performed in June 2020 compared to June 2019.
* However, there remains a deficit between the number of bronchoscopies performed in 2020 compared to 2019. Overall there were 22% fewer bronchoscopies performed in the first six months of 2020 compared to the first six months of 2019.
* Māori were disproportionately impacted by the cumulative decrease in bronchoscopies (32% decrease for Māori compared to 22% decrease for non-Māori/non-Pacific). This appears to have started prior to the lockdown, with fewer bronchoscopies from February 2020.
* Te Aho o Te Kahu is investigating the cause of variance in bronchoscopies in 2020.

# Combined curative cancer surgery

## Notes on data

* This report includes data on curative surgery for colorectal, lung and prostate cancer. These cancers were chosen because a pre-validated list of surgical procedure codes for these cancers already existed within Te Aho o Te Kahu, agreed on as part of the quality performance indicator work programme. These three cancers are therefore used as case studies for cancer surgery more generally. The procedure codes are included in Appendix 4.
* The data was extracted from the National Minimum Dataset on 27 July 2020.

## Results

Table 6: Absolute number and percentage change in curative surgery (colorectal, lung and prostate) in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | -6 | -15% | 2 | 6% | 23 | 92% | 34 | 18% |
| Pacific Peoples\* | - | | - | | - | | -15 | -26% |
| Non-Māori / Non-Pacific | -87 | -27% | 9 | 3% | 5 | 2% | -63 | -4% |
| Total Population | -103 | -27% | 3 | 1% | 24 | 8% | -44 | -2% |

\*Due to small numbers, monthly figures have not been included for Pacific Peoples

Figure 10: Number of curative cancer surgeries (prostate, colorectal, lung) by month and year, for the total population (left) and for Māori (right)

Figure 11: Cumulative number of curative cancer surgeries (colorectal, lung, prostate) by year, for the total population (left) and for Māori (right)

## Key points

* Overall, the impact of COVID-19 on cancer surgery volumes has been minimal, with 2% fewer surgeries performed in the first six months of 2020 compared to the first six months of 2019. There has been an 18% increase in surgery for Māori in 2020 compared to 2019.
* As noted in the previous reports, the decrease in surgery seen over the lockdown period appeared to be largely driven by the decrease in diagnostic services.

# Colorectal cancer surgery

## Notes on data

* A list of the surgical procedure codes used for analysis are included in Appendix 4.
* The data was extracted from the National Minimum Dataset on 27 July 2020.

## Results

Table 7: Absolute number and percentage change in curative colorectal cancer surgery in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | -1 | -4% | 6 | 40% | 12 | 92% | 42 | 45% |
| Pacific Peoples | - | | - | | - |  | -11 | -31% |
| Non-Māori / Non-Pacific | -77 | -34% | -31 | -17% | -11 | -6% | -109 | -10% |
| Total Population | -87 | -33% | -29 | -14% | -3 | -2% | -78 | -6% |

\*Due to small numbers, monthly figures have not been included for Pacific Peoples

Figure 12: Number of curative colorectal cancer surgeries by month and year, for the total population (left) and for Māori (right)

Figure 13: Cumulative number of curative colorectal cancer surgeries by year, for the total population (left) and for Māori (right)

## Key points

* Colorectal cancer surgery returned to pre-COVID volumes in June.
* Overall there has been a 6% decrease in colorectal surgery for the year to date compared to the first six months of 2020. This is likely to be largely driven by the decline in diagnostic colonoscopies performed during lockdown.
* Overall, there has been a 45%increase in curative colorectal cancer surgery for Māori for the year to date compared to the same time period in 2019.

# Lung cancer surgery

## Notes on data

* A list of the surgical procedure codes used for analysis are included in Appendix 4.
* The data were extracted from the National Minimum Dataset on 27 July 2020.
* The number of lung cancer surgeries performed each month is relatively small, so caution is needed when comparing data by month.

## Results

Table 8: Absolute number and percentage change in curative lung cancer surgery in 2020 compared to 2019 by month, and cumulative year to date.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Total Population | -7 | -11% | 13 | 23% | 7 | 13% | -19 | -5% |

\*Due to the small number of surguries performed each month calculations have only been included for the total population rather than by ethnicity

Figure 14: Number of curative lung cancer surgeries by month and year, total population (left) and for Māori (right)

\*Due to the small number of surgeries performed each month it is not possible to draw conclusions from small changes between months.

Figure 15: Cumulative number of curative lung cancer surgeries by year, for the total population (left) and for Māori (right)

## Key points

* There was an increase in curative lung cancer surgery in June 2020 compared to June 2019.
* Overall, for the year to date there has been a 5% decrease in curative lung cancer surgeries compared to 2019. This deficit is smaller than the gap seen at the end of May 2020 (9%).
* The decrease in lung cancer surgery follows the pattern seen for bronchoscopies, with the decrease starting prior to lockdown. Te Aho o Te Kahu is looking into this further.
* The early decrease in lung cancer surgery is most noticeable for Māori, with fewer curative surgeries performed since the beginning of 2020, noting that the numbers are relatively small.

# Prostate cancer surgery

## Notes on data

* A list of the surgical procedure codes used for analysis are included in Appendix 4.
* The data was extracted from the National Minimum Dataset on 27 July 2020.
* The number of prostate cancer surgeries performed each month is relatively small, so caution is needed when comparing data by month.

## Results

Table 9: Absolute number and percentage change in curative prostate cancer surgery in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Total Population | -9 | -16% | 19 | 32% | 20 | 33% | 53 | 15% |

\*Due to the small number of surguries performed each month calculations have only been included for the total population

Figure 16: Number of curative prostate cancer surgeries by month and year, total population (left) and for Māori (right)

\*Due to the small number of surguries performed each month it is not possible to draw conclusions from small changes between months.

Figure 17: Cumulative number of curative prostate cancer surgeries by year, for the total population (left) and for Māori (right)

## Key points

* For the year to date there has been a 15% increase in prostate cancer surgeries compared to 2019. There was an increase in prostate cancer surgeries performed in June 2020 compared to June 2019.

# Medical oncology

## Notes on data

* Extracted from National non-admitted patient collection (Outpatient collection) on 27 July 2020.
* First specialist assessment (FSA) reflects counts of first attendance for specialist medical oncology assessment.
* IV chemotherapy reflects appointments for outpatient and inpatient IV chemotherapy for non-haematological indications.
* Technical information: medical oncology FSA (PUC M50020), and IV chemotherapy (PUC MS02009)

## Results

Table 10: Absolute number and percentage change in medical oncology first specialist assessments in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | -15 | -15% | -1 | -1% | 12 | 12% | -3 | 0% |
| Pacific Peoples | 12 | 43% | -7 | -14% | -6 | -17% | 40 | 20% |
| Non-Māori / Non-Pacific | 87 | 15% | -60 | -8% | 54 | 9% | 122 | 3% |
| Total Population | 84 | 12% | -68 | -8% | 60 | 8% | 159 | 4% |

Figure 18: Number of medical oncology first specialist assessments by month and year, for the total population (left) and for Māori (right)

Figure 19: Cumulative number of medical oncology first specialist assessments by year, for the total population (left) and for Māori (right)

Table 11: Absolute number and percentage change in IV chemotherapy attendances in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | % |
| Māori | 118 | 17% | 42 | 5% | 221 | 33% | 735 | 17% |
| Pacific Peoples | 4 | 1% | -11 | -3% | 57 | 22% | 45 | 3% |
| Non-Māori / Non-Pacific | -335 | -7% | -582 | -11% | 560 | 12% | 429 | 1% |
| Total Population | -213 | -4% | -551 | -8% | 838 | 15% | 1209 | 3% |

Figure 20: Number of attendances for IV chemotherapy by month and year, for the total population (left) and for Māori (right)

Figure 21: Cumulative number of attendances for IV chemotherapy by year, for the total population (left) and for Māori (right)

## Key points

* Overall, for the year to date the number of medical oncology FSAs and number of attendances for IV chemotherapy in 2020 is comparable to 2019.
* There has been an overall 17% increase in attendances for IV chemotherapy for Māori during the first six months of 2020 compared to the same time period in 2019.

# Radiation oncology

## Notes on data

* Extracted from National Non-admitted patient collection on 27 July 2020.
* First specialist assessment (FSA) reflects counts of first attendance for radiation oncology specialist assessment.
* Megavoltage attendance reflects appointments for planning/simulation and for treatment with radiation therapy on a linear accelerator.
* Technical information: radiation oncology FSA (PUC M50022), megavoltage attendances (Purchase Unit Code M50025)

## Results

Table 12: Absolute number and percentage change in radiation oncology first specialist assessments in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | 12 | 10% | 7 | 5% | 22 | 20% | 62 | 9% |
| Pacific Peoples | 14 | 47% | -15 | -29% | -16 | -36% | -19 | -7% |
| Non-Māori / Non-Pacific | 46 | 6% | -103 | -11% | 79 | 10% | 148 | 3% |
| Total Population | 72 | 8% | -111 | -10% | 85 | 9% | 191 | 3% |

Figure 22: Number of radiation oncology first specialist assessments by month and year, total population (left) and for Māori (right)

Figure 23: Cumulative number of radiation oncology first specialist assessments by month and year, total population (left) and for Māori (right)

Table 13: Absolute number and percentage change in radiation therapy attendances in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | -360 | -22% | -374 | -20% | 274 | 17% | -550 | -6% |
| Pacific Peoples | 32 | 7% | -172 | -28% | -3 | -1% | 259 | 9% |
| Non-Māori / Non-Pacific | -1771 | -17% | -3076 | -25% | 555 | 5% | -4636 | -7% |
| Total Population | -2099 | -17% | -3622 | -25% | 826 | 7% | -4927 | -6% |

Figure 24: Number of attendances for radiation therapy by month and year, total population (left) and for Māori (right)

Figure 25: Cumulative number of attendances for radiation therapy by month and year, total population (left) and for Māori (right)

## Key points

* Overall for the year to date the number of radiation oncology FSAs in 2020 is comparable to 2019.
* For the year to date there has been a 6% decrease in attendances for radiation therapy. This is similar for Māori (6%) and non-Māori/non-Pacific (7%). This may be the result of national hypofractionation guidance. Te Aho o Te Kahu is looking into this further using the Radiation Oncology Collection (ROC database), which allows for more detailed analysis.

# Haematology

## Notes on data

* Extracted from National Non-admitted Patient Collection (outpatient) and National Minimum Dataset (inpatient) 27 July 2020.
* First specialist assessment (FSA) reflects counts of first attendance for specialist haematology assessment for any indication (i.e. 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).

## Results

Table 14: Absolute number and percentage change in haematology FSAs in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | 0 | 0% | -14 | -21% | -32 | -44% | -23 | -6% |
| Pacific Peoples | 4 | 20% | -10 | -28% | 5 | 16% | -14 | -9% |
| Non-Māori / Non-Pacific | -44 | -11% | -230 | -41% | 30 | 8% | -270 | -10% |
| Total Population | -40 | -8% | -254 | -38% | 3 | 1% | -307 | -10% |

Figure 26: Number of haematology first specialist assessments by month and year, total population (left) and for Māori (right)

Figure 27: Cumulative number of haematology first specialist assessments by month and year, total population (left) and for Māori (right)

Table 15: Absolute number and percentage change in IV chemotherapy attendances for haematological malignancies in 2020 compared to 2019 by month, and cumulative year to date

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2020** | | **May 2020** | | **June 2020** | | **Year to date** | |
|  | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Māori | 30 | 17% | -54 | -23% | 5 | 3% | 45 | 4% |
| Pacific Peoples | 31 | 42% | 34 | 47% | 93 | 160% | 144 | 29% |
| Non-Māori / Non-Pacific | -115 | -8% | -185 | -11% | 376 | 27% | -679 | -7% |
| Total Population | -54 | -3% | -205 | -10% | 474 | 29% | 868 | 8% |

Figure 28: Number attendances for IV chemotherapy for haematological malignancies by month and year, total population (left) and for Māori (right)

Figure 29: Cumulative number of attendances for IV chemotherapy for haematological malignancies by month and year, total population (left) and for Māori (right)

## Key points

* Overall, for the year to date there has been a 10% decrease in haematology first specialist appointments compared to the same time period in 2019. One contributor to this is likely to be a decrease in FSAs for non-malignant, non-urgent indications, deferred as part of the hospital response framework. These cases may have been managed in primary care.
* For the year to date there has been an 8% increase in IV chemotherapy for haematology compared to the same time period in 2019.

# Appendix 1: NZCR data information

## The New Zealand Cancer Registry as a source of data 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 Organisation 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.

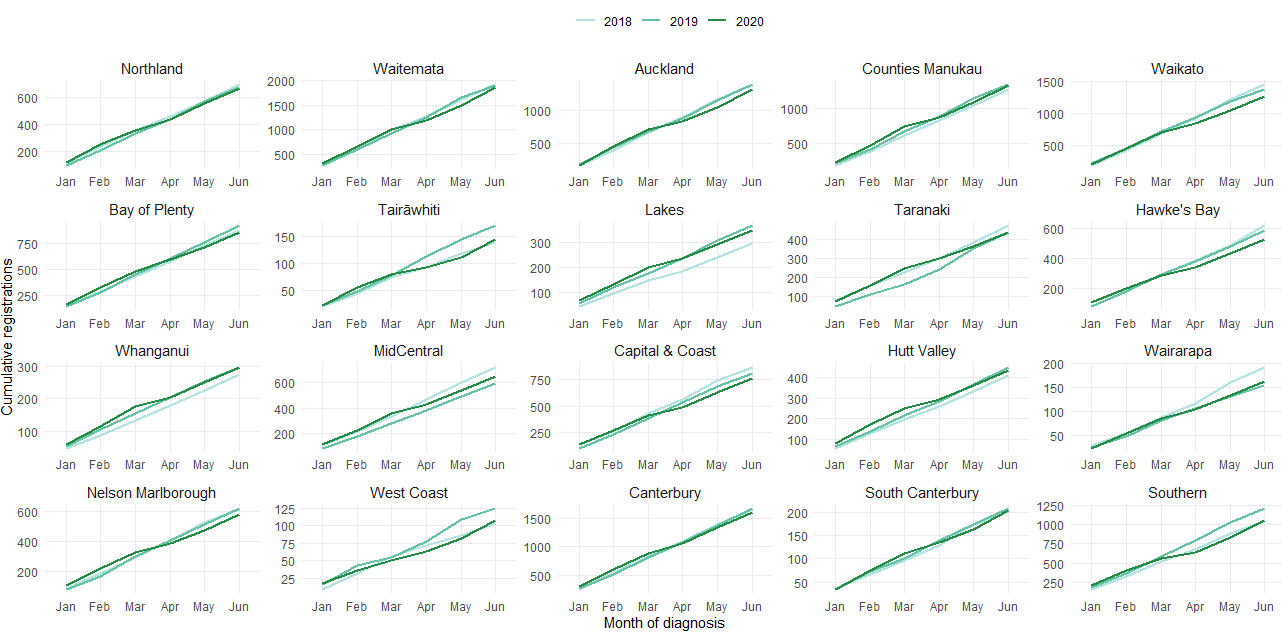
Cancer registrations come from pathology laboratories, haematology laboratories, mortality records and reviewing hospital discharge records. Laboratory reports provide the best source of near real time data to monitor new diagnoses of cancer in New Zealand.

## 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 2: NZCR registrations by DHB



## Cancer Registrations by DHB

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **European/Other\*** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 695 | 671 | 664 | -7 | -1 |  | 155 | 113 | 131 | 18 | 15.9 |  | 526 | 540 | 518 | -22 | -4.1 |
| Waitemata | 1922 | 1911 | 1861 | -50 | -2.6 |  | 92 | 90 | 111 | 21 | 23.3 |  | 1591 | 1588 | 1470 | -118 | -7.4 |
| Auckland | 1391 | 1389 | 1318 | -71 | -5.1 |  | 57 | 70 | 51 | -19 | -27.1 |  | 1062 | 997 | 991 | -6 | -0.6 |
| Counties Manukau | 1269 | 1345 | 1336 | -9 | -0.7 |  | 127 | 146 | 168 | 22 | 15.1 |  | 789 | 811 | 773 | -38 | -4.7 |
| Waikato | 1445 | 1366 | 1261 | -105 | -7.7 |  | 207 | 204 | 166 | -38 | -18.6 |  | 1153 | 1099 | 1027 | -72 | -6.6 |
| Bay of Plenty | 879 | 919 | 854 | -65 | -7.1 |  | 121 | 133 | 113 | -20 | -15 |  | 744 | 763 | 722 | -41 | -5.4 |
| Tairāwhiti | 140 | 170 | 145 | -25 | -14.7 |  | 41 | 56 | 60 | 4 | 7.1 |  | 99 | 110 | 83 | -27 | -24.5 |
| Lakes | 296 | 369 | 349 | -20 | -5.4 |  | 76 | 83 | 78 | -5 | -6 |  | 204 | 264 | 250 | -14 | -5.3 |
| Taranaki | 473 | 438 | 439 | 1 | 0.2 |  | 47 | 38 | 39 | 1 | 2.6 |  | 414 | 398 | 394 | -4 | -1 |
| Hawke's Bay | 620 | 591 | 529 | -62 | -10.5 |  | 92 | 95 | 78 | -17 | -17.9 |  | 504 | 473 | 435 | -38 | -8 |
| Whanganui | 276 | 296 | 297 | 1 | 0.3 |  | 34 | 53 | 36 | -17 | -32.1 |  | 237 | 239 | 254 | 15 | 6.3 |
| MidCentral | 720 | 595 | 647 | 52 | 8.7 |  | 84 | 55 | 59 | 4 | 7.3 |  | 619 | 514 | 560 | 46 | 8.9 |
| Capital & Coast | 870 | 814 | 760 | -54 | -6.6 |  | 56 | 57 | 63 | 6 | 10.5 |  | 694 | 666 | 605 | -61 | -9.2 |
| Hutt Valley | 414 | 452 | 437 | -15 | -3.3 |  | 47 | 63 | 39 | -24 | -38.1 |  | 331 | 342 | 358 | 16 | 4.7 |
| Wairarapa | 192 | 154 | 163 | 9 | 5.8 |  | 20 | 8 | 18 | 10 |  |  | 168 | 142 | 138 | -4 | -2.8 |
| Nelson Marlborough | 611 | 619 | 577 | -42 | -6.8 |  | 26 | 28 | 20 | -8 | -28.6 |  | 573 | 578 | 545 | -33 | -5.7 |
| West Coast | 103 | 124 | 107 | -17 | -13.7 |  | 5 | 6 | 6 | 0 |  |  | 98 | 115 | 100 | -15 | -13 |
| Canterbury | 1658 | 1674 | 1601 | -73 | -4.4 |  | 97 | 80 | 88 | 8 | 10 |  | 1465 | 1512 | 1405 | -107 | -7.1 |
| South Canterbury | 202 | 209 | 205 | -4 | -1.9 |  | 12 | 9 | 7 | -2 |  |  | 184 | 199 | 193 | -6 | -3 |
| Southern | 1048 | 1213 | 1059 | -154 | -12.7 |  | 34 | 70 | 51 | -19 | -27.1 |  | 983 | 1123 | 979 | -144 | -12.8 |
| Total | 15247 | 15331 | 14642 | -689 | -4.5 |  | 1430 | 1457 | 1383 | -74 | -5.1 |  | 12452 | 12480 | 11820 | -660 | -5.3 |

# Appendix 3: Diagnosis and treatment data by DHB

Percentage differences are only presented if the cumulative 2019 total is 10 or greater. In some cases, the grand totals may differ slightly to those presented in the national report. This is due to non-DHB providers being excluded from the analyses within this appendix.

## Gastrointestinal endoscopy

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 1771 | 2056 | 1447 | -609 | -30% |  | 288 | 391 | 269 | -122 | -31% |  | 1475 | 1644 | 1166 | -478 | -29% |
| Waitemata | 3919 | 4390 | 4006 | -384 | -9% |  | 207 | 257 | 220 | -37 | -14% |  | 3569 | 3992 | 3612 | -380 | -10% |
| Auckland | 2963 | 3068 | 2448 | -620 | -20% |  | 158 | 140 | 139 | -1 | -1% |  | 2623 | 2722 | 2101 | -621 | -23% |
| Counties Manukau | 3965 | 4275 | 5064 | 789 | 18% |  | 379 | 407 | 509 | 102 | 25% |  | 3117 | 3288 | 3860 | 572 | 17% |
| Waikato | 2521 | 3153 | 2946 | -207 | -7% |  | 304 | 366 | 367 | 1 | 0% |  | 2176 | 2749 | 2532 | -217 | -8% |
| Bay of Plenty | 2356 | 2280 | 2133 | -147 | -6% |  | 269 | 304 | 284 | -20 | -7% |  | 2077 | 1969 | 1841 | -128 | -7% |
| Lakes | 952 | 932 | 787 | -145 | -16% |  | 175 | 170 | 153 | -17 | -10% |  | 762 | 750 | 615 | -135 | -18% |
| Tairāwhiti | 319 | 366 | 308 | -58 | -16% |  | 87 | 110 | 96 | -14 | -13% |  | 230 | 253 | 207 | -46 | -18% |
| Taranaki | 985 | 913 | 833 | -80 | -9% |  | 97 | 101 | 65 | -36 | -36% |  | 884 | 807 | 763 | -44 | -5% |
| Whanganui | 704 | 739 | 575 | -164 | -22% |  | 108 | 95 | 75 | -20 | -21% |  | 595 | 642 | 494 | -148 | -23% |
| Hawke's Bay | 1200 | 1414 | 1264 | -150 | -11% |  | 131 | 164 | 169 | 5 | 3% |  | 1057 | 1231 | 1075 | -156 | -13% |
| MidCentral | 1029 | 1033 | 1049 | 16 | 2% |  | 61 | 76 | 94 | 18 | 24% |  | 958 | 947 | 945 | -2 | 0% |
| Capital & Coast | 1411 | 1411 | 1524 | 113 | 8% |  | 112 | 70 | 120 | 50 | 71% |  | 1245 | 1278 | 1350 | 72 | 6% |
| Hutt Valley | 1116 | 1505 | 1496 | -9 | -1% |  | 89 | 116 | 152 | 36 | 31% |  | 985 | 1344 | 1293 | -51 | -4% |
| Nelson Marlborough | 467 | 1215 | 1177 | -38 | -3% |  | 22 | 69 | 66 | -3 | -4% |  | 442 | 1140 | 1102 | -38 | -3% |
| Canterbury | 2958 | 4540 | 3602 | -938 | -21% |  | 157 | 266 | 204 | -62 | -23% |  | 2757 | 4209 | 3345 | -864 | -21% |
| South Canterbury | 557 | 601 | 567 | -34 | -6% |  | 24 | 23 | 23 | 0 | 0% |  | 533 | 578 | 543 | -35 | -6% |
| Southern | 2182 | 2403 | 1675 | -728 | -30% |  | 88 | 122 | 93 | -29 | -24% |  | 2078 | 2263 | 1565 | -698 | -31% |
| Wairarapa | 427 | 518 | 381 | -137 | -26% |  | 35 | 48 | 34 | -14 | -29% |  | 384 | 466 | 343 | -123 | -26% |
| West Coast | 317 | 294 | 332 | 38 | 13% |  | 22 | 17 | 11 | -6 | -35% |  | 294 | 276 | 319 | 43 | 16% |
| Grand Total | 32119 | 37106 | 33614 | -3492 | -9% |  | 2813 | 3312 | 3143 | -169 | -5% |  | 28241 | 32548 | 29071 | -3477 | -11% |

## Bronchoscopy

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 44 | 33 | 32 | -1 | -3% |  | 13 | 11 | 9 | -2 | -18% |  | 30 | 22 | 22 | 0 | 0% |
| Waitemata | 72 | 78 | 62 | -16 | -21% |  | 3 | 3 | 6 | 3 | - |  | 65 | 74 | 53 | -21 | -28% |
| Auckland | 148 | 196 | 151 | -45 | -23% |  | 12 | 19 | 16 | -3 | -16% |  | 121 | 163 | 119 | -44 | -27% |
| Counties Manukau | 172 | 180 | 171 | -9 | -5% |  | 36 | 30 | 16 | -14 | -47% |  | 114 | 122 | 128 | 6 | 5% |
| Waikato | 138 | 141 | 94 | -47 | -33% |  | 29 | 32 | 22 | -10 | -31% |  | 106 | 107 | 71 | -36 | -34% |
| Bay of Plenty | 71 | 91 | 65 | -26 | -29% |  | 13 | 22 | 18 | -4 | -18% |  | 58 | 67 | 47 | -20 | -30% |
| Lakes | 37 | 46 | 34 | -12 | -26% |  | 15 | 14 | 16 | 2 | 14% |  | 22 | 31 | 17 | -14 | -45% |
| Tairāwhiti | 1 | 2 | 14 | 12 | - |  | 1 | 1 | 5 | 4 | - |  | 0 | 1 | 9 | 8 | - |
| Taranaki | 22 | 25 | 18 | -7 | -28% |  | 4 | 6 | 0 | -6 | - |  | 18 | 19 | 18 | -1 | -5% |
| Whanganui | 3 | 10 | 7 | -3 | -30% |  | 0 | 5 | 2 | -3 | - |  | 3 | 5 | 5 | 0 | - |
| Hawke's Bay | 39 | 40 | 17 | -23 | -58% |  | 11 | 10 | 2 | -8 | -80% |  | 28 | 29 | 14 | -15 | -52% |
| MidCentral | 22 | 18 | 12 | -6 | -33% |  | 3 | 5 | 1 | -4 | - |  | 19 | 13 | 11 | -2 | -15% |
| Capital & Coast | 47 | 48 | 29 | -19 | -40% |  | 6 | 5 | 5 | 0 | - |  | 38 | 42 | 23 | -19 | -45% |
| Hutt Valley | 43 | 63 | 39 | -24 | -38% |  | 6 | 13 | 6 | -7 | -54% |  | 34 | 50 | 32 | -18 | -36% |
| Nelson Marlborough | 34 | 33 | 44 | 11 | 33% |  | 4 | 4 | 5 | 1 | - |  | 30 | 29 | 38 | 9 | 31% |
| Canterbury | 167 | 206 | 187 | -19 | -9% |  | 11 | 21 | 8 | -13 | -62% |  | 155 | 183 | 174 | -9 | -5% |
| South Canterbury | 6 | 6 | 9 | 3 | - |  | 0 | 1 | 0 | -1 | - |  | 6 | 5 | 9 | 4 | - |
| Southern | 119 | 136 | 67 | -69 | -51% |  | 8 | 12 | 8 | -4 | -33% |  | 111 | 121 | 59 | -62 | -51% |
| Grand Total | 1185 | 1352 | 1052 | -300 | -22% |  | 175 | 214 | 145 | -69 | -32% |  | 958 | 1083 | 849 | -234 | -22% |

## Colorectal cancer surgery

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 36 | 53 | 43 | -10 | -19% |  | 6 | 10 | 12 | 2 | 20% |  | 30 | 43 | 31 | -12 | -28% |
| Waitemata | 137 | 129 | 111 | -18 | -14% |  | 9 | 10 | 9 | -1 | -10% |  | 125 | 109 | 99 | -10 | -9% |
| Auckland | 95 | 95 | 97 | 2 | 2% |  | 5 | 6 | 11 | 5 | - |  | 83 | 76 | 82 | 6 | 8% |
| Counties Manukau | 79 | 61 | 78 | 17 | 28% |  | 6 | 5 | 15 | 10 | - |  | 64 | 53 | 54 | 1 | 2% |
| Waikato | 108 | 106 | 123 | 17 | 16% |  | 12 | 8 | 17 | 9 | - |  | 93 | 97 | 105 | 8 | 8% |
| Bay of Plenty | 70 | 72 | 89 | 17 | 24% |  | 11 | 6 | 12 | 6 | - |  | 59 | 65 | 77 | 12 | 18% |
| Lakes | 32 | 41 | 37 | -4 | -10% |  | 5 | 7 | 7 | 0 | - |  | 27 | 34 | 30 | -4 | -12% |
| Tairāwhiti | 9 | 15 | 14 | -1 | -7% |  | 4 | 2 | 3 | 1 | - |  | 5 | 13 | 11 | -2 | -15% |
| Taranaki | 45 | 45 | 34 | -11 | -24% |  | 5 | 3 | 4 | 1 | - |  | 40 | 42 | 30 | -12 | -29% |
| Whanganui | 28 | 25 | 22 | -3 | -12% |  | 3 | 1 | 2 | 1 | - |  | 25 | 24 | 20 | -4 | -17% |
| Hawke's Bay | 76 | 74 | 61 | -13 | -18% |  | 13 | 5 | 9 | 4 | - |  | 63 | 68 | 50 | -18 | -26% |
| MidCentral | 64 | 54 | 61 | 7 | 13% |  | 5 | 2 | 6 | 4 | - |  | 59 | 51 | 55 | 4 | 8% |
| Capital & Coast | 72 | 76 | 71 | -5 | -7% |  | 5 | 8 | 10 | 2 | - |  | 64 | 65 | 59 | -6 | -9% |
| Hutt Valley | 30 | 28 | 25 | -3 | -11% |  | 1 | 2 | 2 | 0 | - |  | 27 | 26 | 23 | -3 | -12% |
| Nelson Marlborough | 50 | 42 | 33 | -9 | -21% |  | 0 | 5 | 2 | -3 | - |  | 50 | 37 | 31 | -6 | -16% |
| Canterbury | 159 | 157 | 144 | -13 | -8% |  | 8 | 8 | 12 | 4 | - |  | 148 | 147 | 129 | -18 | -12% |
| South Canterbury | 28 | 26 | 17 | -9 | -35% |  | 0 | 1 | 2 | 1 | - |  | 28 | 25 | 15 | -10 | -40% |
| Southern | 117 | 136 | 102 | -34 | -25% |  | 6 | 5 | 1 | -4 | - |  | 110 | 130 | 100 | -30 | -23% |
| Wairarapa | 13 | 9 | 3 | -6 | - |  | 1 | 0 | 0 | 0 | - |  | 12 | 9 | 3 | -6 | - |
| West Coast | 1 | 3 | 4 | 1 | - |  | - | - | - | - | - |  | 1 | 3 | 4 | 1 | - |
| Grand Total | 1249 | 1247 | 1169 | -78 | -6% |  | 105 | 94 | 136 | 42 | 45% |  | 1113 | 1117 | 1008 | -109 | -10% |

## Lung cancer surgery

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Auckland | 134 | 141 | 130 | -11 | -8% |  | 20 | 32 | 21 | -11 | -34% |  | 106 | 100 | 97 | -3 | -3% |
| Counties Manukau | 1 | 1 | 2 | 1 | - |  | 0 | 0 | 1 | 1 | - |  | 0 | 1 | 1 | 0 | - |
| Waikato | 54 | 69 | 85 | 16 | 23% |  | 19 | 22 | 20 | -2 | -9% |  | 33 | 47 | 64 | 17 | 36% |
| Capital & Coast | 57 | 71 | 48 | -23 | -32% |  | 13 | 11 | 6 | -5 | -45% |  | 41 | 56 | 40 | -16 | -29% |
| Canterbury | 40 | 46 | 55 | 9 | 20% |  | 2 | 1 | 3 | 2 | - |  | 38 | 45 | 52 | 7 | 16% |
| Southern | 16 | 24 | 13 | -11 | -46% |  | 3 | 0 | 1 | 1 | - |  | 13 | 24 | 12 | -12 | -50% |
| Grand Total | 302 | 352 | 333 | -19 | -5% |  | 57 | 66 | 52 | -14 | -21% |  | 231 | 273 | 266 | -7 | -3% |

## Prostate cancer surgery

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 25 | 26 | 17 | -9 | -35% |  | 4 | 2 | 5 | 3 | - |  | 21 | 23 | 12 | -11 | -48% |
| Waitemata | 37 | 31 | 59 | 28 | 90% |  | 1 | 2 | 1 | -1 | - |  | 36 | 29 | 56 | 27 | 93% |
| Auckland | 44 | 49 | 62 | 13 | 27% |  | 1 | 4 | 4 | 0 | - |  | 40 | 41 | 58 | 17 | 41% |
| Counties Manukau | 0 | 0 | 0 | 0 | - |  | - | - | - | - | - |  | 0 | 0 | 0 | 0 | - |
| Waikato | 36 | 35 | 27 | -8 | -23% |  | 1 | 1 | 1 | 0 | - |  | 35 | 34 | 25 | -9 | -26% |
| Bay of Plenty | 1 | 2 | 0 | -2 | - |  | 0 | 1 | 0 | -1 | - |  | 1 | 1 | 0 | -1 | - |
| Tairāwhiti | 4 | 2 | 6 | 4 | - |  | 1 | 2 | 2 | 0 | - |  | 3 | 0 | 4 | 4 | - |
| Taranaki | 11 | 12 | 17 | 5 | 42% |  | 1 | 1 | 4 | 3 | - |  | 10 | 11 | 13 | 2 | 18% |
| Whanganui | 2 | 2 | 1 | -1 | - |  | 0 | 0 | 0 | 0 | - |  | 2 | 2 | 1 | -1 | - |
| Hawke's Bay | 4 | 10 | 9 | -1 | -10% |  | 0 | 1 | 3 | 2 | - |  | 4 | 9 | 6 | -3 | - |
| MidCentral | 35 | 43 | 41 | -2 | -5% |  | 2 | 5 | 2 | -3 | - |  | 33 | 38 | 39 | 1 | 3% |
| Capital & Coast | 26 | 30 | 32 | 2 | 7% |  | 1 | 2 | 1 | -1 | - |  | 23 | 26 | 31 | 5 | 19% |
| Nelson Marlborough | 27 | 15 | 23 | 8 | 53% |  | - | - | - | - | - |  | 27 | 14 | 23 | 9 | 64% |
| Canterbury | 36 | 33 | 39 | 6 | 18% |  | 0 | 1 | 2 | 1 | - |  | 36 | 32 | 37 | 5 | 16% |
| South Canterbury | 8 | 6 | 9 | 3 | - |  |  |  |  |  |  |  | 8 | 6 | 9 | 3 | - |
| Southern | 34 | 39 | 48 | 9 | 23% |  | 4 | 2 | 4 | 2 | - |  | 30 | 36 | 44 | 8 | 22% |
| Wairarapa | 4 | 5 | 4 | -1 | - |  | 1 | 0 | 1 | 1 | - |  | 3 | 5 | 3 | -2 | - |
| West Coast | 4 | 3 | 2 | -1 | - |  | 0 | 0 | 0 | 0 | - |  | 4 | 3 | 2 | -1 | - |
| Grand Total | 338 | 343 | 396 | 53 | 15% |  | 17 | 24 | 30 | 6 | 25% |  | 316 | 310 | 363 | 53 | 17% |

## Medical oncology first specialist assessments

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 224 | 247 | 203 | -44 | -18% |  | 59 | 61 | 56 | -5 | -8% |  | 165 | 183 | 144 | -39 | -21% |
| Auckland | 1105 | 1149 | 1289 | 140 | 12% |  | 132 | 119 | 143 | 24 | 20% |  | 837 | 883 | 964 | 81 | 9% |
| Waikato | 425 | 377 | 405 | 28 | 7% |  | 96 | 82 | 89 | 7 | 9% |  | 321 | 285 | 310 | 25 | 9% |
| Bay of Plenty | 224 | 226 | 268 | 42 | 19% |  | 39 | 52 | 45 | -7 | -13% |  | 184 | 173 | 222 | 49 | 28% |
| Lakes | 41 | 89 | 91 | 2 | 2% |  | 17 | 26 | 25 | -1 | -4% |  | 23 | 62 | 66 | 4 | 6% |
| Tairāwhiti | 41 | 73 | 68 | -5 | -7% |  | 20 | 29 | 33 | 4 | 14% |  | 21 | 44 | 35 | -9 | -20% |
| Taranaki | 115 | 107 | 118 | 11 | 10% |  | 10 | 14 | 14 | 0 | 0% |  | 104 | 93 | 103 | 10 | 11% |
| MidCentral | 531 | 510 | 540 | 30 | 6% |  | 80 | 88 | 84 | -4 | -5% |  | 439 | 413 | 447 | 34 | 8% |
| Capital & Coast | 446 | 424 | 438 | 14 | 3% |  | 45 | 56 | 59 | 3 | 5% |  | 370 | 348 | 354 | 6 | 2% |
| Nelson Marlborough | 226 | 200 | 220 | 20 | 10% |  | 15 | 17 | 10 | -7 | -41% |  | 210 | 182 | 209 | 27 | 15% |
| Canterbury | 601 | 687 | 638 | -49 | -7% |  | 40 | 49 | 37 | -12 | -24% |  | 553 | 629 | 590 | -39 | -6% |
| South Canterbury | 1 | 2 | 35 | 33 | - |  | 0 | 0 | 2 | 2 | - |  | 1 | 2 | 33 | 31 | - |
| Southern | 285 | 367 | 314 | -53 | -14% |  | 13 | 22 | 17 | -5 | -23% |  | 271 | 344 | 293 | -51 | -15% |
| West Coast | 14 | 17 | 7 | -10 | -59% |  | 0 | 2 | 0 | -2 | - |  | 14 | 14 | 7 | -7 | -50% |
| Grand Total | 4279 | 4475 | 4634 | 159 | 4% |  | 566 | 617 | 614 | -3 | 0% |  | 3513 | 3655 | 3777 | 122 | 3% |

## Medical oncology IV chemotherapy

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 1555 | 1384 | 1492 | 108 | 8% |  | 287 | 324 | 463 | 139 | 43% |  | 1250 | 1048 | 1014 | -34 | -3% |
| Waitemata | 0 | 2 | 0 | -2 | - |  | - | - | - | - | - |  | 0 | 2 | 0 | -2 | - |
| Auckland | 8347 | 9620 | 10930 | 1310 | 14% |  | 887 | 828 | 1234 | 406 | 49% |  | 6543 | 7563 | 8439 | 876 | 12% |
| Waikato | 3436 | 3766 | 3026 | -740 | -20% |  | 511 | 621 | 512 | -109 | -18% |  | 2884 | 3102 | 2463 | -639 | -21% |
| Bay of Plenty | 2618 | 2346 | 2892 | 546 | 23% |  | 470 | 398 | 582 | 184 | 46% |  | 2108 | 1926 | 2292 | 366 | 19% |
| Lakes | 1310 | 1503 | 1501 | -2 | 0% |  | 379 | 405 | 462 | 57 | 14% |  | 882 | 1084 | 1027 | -57 | -5% |
| Tairāwhiti | 385 | 289 | 275 | -14 | -5% |  | 174 | 130 | 133 | 3 | 2% |  | 211 | 159 | 141 | -18 | -11% |
| Taranaki | 785 | 873 | 1019 | 146 | 17% |  | 106 | 52 | 102 | 50 | 96% |  | 670 | 810 | 903 | 93 | 11% |
| Whanganui | 69 | 44 | 48 | 4 | 9% |  | 15 | 5 | 7 | 2 | - |  | 54 | 39 | 41 | 2 | 5% |
| Hawke's Bay | 12 | 18 | 46 | 28 | 156% |  | 3 | 3 | 36 | 33 | - |  | 9 | 15 | 10 | -5 | -33% |
| MidCentral | 3240 | 3960 | 3817 | -143 | -4% |  | 414 | 747 | 602 | -145 | -19% |  | 2753 | 3094 | 3166 | 72 | 2% |
| Capital & Coast | 3047 | 3494 | 3180 | -314 | -9% |  | 295 | 341 | 382 | 41 | 12% |  | 2617 | 2971 | 2600 | -371 | -12% |
| Hutt Valley | 61 | 54 | 46 | -8 | -15% |  | 9 | 2 | 2 | 0 | - |  | 52 | 47 | 39 | -8 | -17% |
| Nelson Marlborough | 1531 | 1285 | 1473 | 188 | 15% |  | 138 | 91 | 74 | -17 | -19% |  | 1370 | 1164 | 1383 | 219 | 19% |
| Canterbury | 3393 | 2929 | 3101 | 172 | 6% |  | 212 | 190 | 202 | 12 | 6% |  | 3074 | 2676 | 2784 | 108 | 4% |
| South Canterbury | 534 | 533 | 517 | -16 | -3% |  | 5 | 2 | 11 | 9 | - |  | 529 | 519 | 506 | -13 | -3% |
| Southern | 3285 | 3642 | 3564 | -78 | -2% |  | 198 | 174 | 233 | 59 | 34% |  | 3069 | 3446 | 3274 | -172 | -5% |
| Wairarapa | 11 | 5 | 34 | 29 | - |  | 0 | 1 | 8 | 7 | - |  | 11 | 4 | 25 | 21 | - |
| West Coast | 6 | 26 | 21 | -5 | -19% |  | 0 | 0 | 4 | 4 | - |  | 6 | 26 | 17 | -9 | -35% |
| Grand Total | 33625 | 35773 | 36982 | 1209 | 3% |  | 4103 | 4314 | 5049 | 735 | 17% |  | 28092 | 29695 | 30124 | 429 | 1% |

## Radiation oncology first specialist assessments

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 168 | 186 | 133 | -53 | -28% |  | 51 | 40 | 49 | 9 | 23% |  | 115 | 143 | 83 | -60 | -42% |
| Auckland | 1591 | 1547 | 1563 | 16 | 1% |  | 187 | 190 | 172 | -18 | -9% |  | 1206 | 1173 | 1218 | 45 | 4% |
| Waikato | 674 | 727 | 741 | 14 | 2% |  | 114 | 124 | 161 | 37 | 30% |  | 548 | 587 | 573 | -14 | -2% |
| Bay of Plenty | 400 | 484 | 459 | -25 | -5% |  | 57 | 60 | 66 | 6 | 10% |  | 341 | 419 | 389 | -30 | -7% |
| Lakes | 26 | 13 | 6 | -7 | -54% |  | 5 | 3 | 3 | 0 | - |  | 21 | 10 | 3 | -7 | -70% |
| Tairāwhiti | 42 | 30 | 26 | -4 | -13% |  | 16 | 10 | 13 | 3 | 30% |  | 25 | 20 | 13 | -7 | -35% |
| MidCentral | 901 | 755 | 876 | 121 | 16% |  | 106 | 100 | 118 | 18 | 18% |  | 785 | 646 | 744 | 98 | 15% |
| Capital & Coast | 686 | 712 | 665 | -47 | -7% |  | 67 | 70 | 70 | 0 | 0% |  | 586 | 610 | 565 | -45 | -7% |
| Nelson Marlborough | 20 | 112 | 97 | -15 | -13% |  | 1 | 6 | 7 | 1 | - |  | 19 | 105 | 89 | -16 | -15% |
| Canterbury | 807 | 772 | 946 | 174 | 23% |  | 37 | 47 | 41 | -6 | -13% |  | 762 | 712 | 893 | 181 | 25% |
| Southern | 525 | 482 | 503 | 21 | 4% |  | 28 | 26 | 39 | 13 | 50% |  | 488 | 450 | 456 | 6 | 1% |
| West Coast | 3 | 7 | 3 | -4 | - |  | 0 | 1 | 0 | -1 | - |  | 3 | 6 | 3 | -3 | - |
| Grand Total | 5843 | 5827 | 6018 | 191 | 3% |  | 669 | 677 | 739 | 62 | 9% |  | 4899 | 4881 | 5029 | 148 | 3% |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Auckland | 21904 | 22371 | 20331 | -2040 | -9% |  | 2768 | 3081 | 2404 | -677 | -22% |  | 16867 | 17209 | 15638 | -1571 | -9% |
| Waikato | 10382 | 11441 | 9697 | -1744 | -15% |  | 1938 | 2039 | 2108 | 69 | 3% |  | 8260 | 9203 | 7480 | -1723 | -19% |
| Bay of Plenty | 10226 | 7247 | 8131 | 884 | 12% |  | 1871 | 1182 | 1305 | 123 | 10% |  | 8184 | 6032 | 6694 | 662 | 11% |
| MidCentral | 10528 | 11810 | 10841 | -969 | -8% |  | 1540 | 1577 | 1424 | -153 | -10% |  | 8865 | 10154 | 9246 | -908 | -9% |
| Capital & Coast | 9911 | 10255 | 9557 | -698 | -7% |  | 1034 | 1039 | 1098 | 59 | 6% |  | 8402 | 8715 | 8009 | -706 | -8% |
| Nelson Marlborough | 0 | 0 | 9 | 9 | - |  | 0 | 0 | 2 | 2 | - |  | 0 | 0 | 7 | 7 | - |
| Canterbury | 14125 | 11426 | 11747 | 321 | 3% |  | 910 | 716 | 775 | 59 | 8% |  | 12931 | 10597 | 10831 | 234 | 2% |
| Southern | 3884 | 2738 | 2048 | -690 | -25% |  | 328 | 163 | 131 | -32 | -20% |  | 3442 | 2541 | 1910 | -631 | -25% |
| Grand Total | 80960 | 77288 | 72361 | -4927 | -6% |  | 10389 | 9797 | 9247 | -550 | -6% |  | 66951 | 64451 | 59815 | -4636 | -7% |

## Radiation oncology megavoltage fractions

## Haematology first specialist assessment

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 105 | 112 | 117 | 5 | 4% |  | 17 | 27 | 29 | 2 | 7% |  | 87 | 83 | 87 | 4 | 5% |
| Waitemata | 380 | 311 | 350 | 39 | 13% |  | 16 | 21 | 28 | 7 | 33% |  | 346 | 280 | 307 | 27 | 10% |
| Auckland | 483 | 472 | 363 | -109 | -23% |  | 34 | 37 | 31 | -6 | -16% |  | 402 | 386 | 288 | -98 | -25% |
| Counties Manukau | 385 | 360 | 280 | -80 | -22% |  | 36 | 50 | 36 | -14 | -28% |  | 288 | 258 | 199 | -59 | -23% |
| Waikato | 345 | 386 | 381 | -5 | -1% |  | 54 | 79 | 63 | -16 | -20% |  | 285 | 300 | 311 | 11 | 4% |
| Bay of Plenty | 200 | 189 | 148 | -41 | -22% |  | 33 | 29 | 23 | -6 | -21% |  | 164 | 155 | 122 | -33 | -21% |
| Lakes | 0 | 2 | 0 | -2 | - |  | 0 | 1 | 0 | -1 | - |  | 0 | 1 | 0 | -1 | - |
| Tairāwhiti | 22 | 15 | 19 | 4 | 27% |  | 9 | 1 | 3 | 2 | - |  | 13 | 13 | 16 | 3 | 23% |
| Taranaki | 70 | 80 | 93 | 13 | 16% |  | 10 | 6 | 11 | 5 | - |  | 60 | 73 | 82 | 9 | 12% |
| MidCentral | 373 | 386 | 361 | -25 | -6% |  | 49 | 47 | 44 | -3 | -6% |  | 321 | 335 | 309 | -26 | -8% |
| Capital & Coast | 404 | 371 | 331 | -40 | -11% |  | 23 | 31 | 38 | 7 | 23% |  | 370 | 324 | 276 | -48 | -15% |
| Nelson Marlborough | 116 | 79 | 57 | -22 | -28% |  | 1 | 4 | 3 | -1 | - |  | 114 | 74 | 54 | -20 | -27% |
| Canterbury | 212 | 269 | 250 | -19 | -7% |  | 13 | 14 | 14 | 0 | 0% |  | 192 | 247 | 233 | -14 | -6% |
| Southern | 140 | 143 | 127 | -16 | -11% |  | 12 | 7 | 8 | 1 | - |  | 125 | 134 | 118 | -16 | -12% |
| West Coast | 9 | 10 | 1 | -9 | -90% |  | 1 | 0 | 0 | 0 | - |  | 8 | 10 | 1 | -9 | -90% |
| Grand Total | 3244 | 3185 | 2878 | -307 | -10% |  | 308 | 354 | 331 | -23 | -6% |  | 2775 | 2673 | 2403 | -270 | -10% |

## Haematology IV chemotherapy

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | | | | |  | **Māori** | | | | |  | **Non-Māori/Non-Pacific** | | | | |
|  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |  | **Cumulative number for Jan to June** | | | **Difference between 2019 and 2020** | |
|  |  |  |
|  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |  | 2018 | 2019 | 2020 | Number | % |
| Northland | 970 | 890 | 694 | -196 | -22% |  | 232 | 187 | 133 | -54 | -29% |  | 738 | 674 | 534 | -140 | -21% |
| Waitemata | 1982 | 1992 | 1957 | -35 | -2% |  | 46 | 81 | 101 | 20 | 25% |  | 1847 | 1806 | 1736 | -70 | -4% |
| Auckland | 1730 | 1793 | 1664 | -129 | -7% |  | 93 | 129 | 60 | -69 | -53% |  | 1465 | 1450 | 1451 | 1 | 0% |
| Counties Manukau\* | 1175 | 432 | 1149 | 717 |  |  | 183 | 68 | 103 | 35 |  |  | 709 | 305 | 871 | 566 |  |
| Waikato | 892 | 955 | 1079 | 124 | 13% |  | 131 | 172 | 206 | 34 | 20% |  | 757 | 781 | 873 | 92 | 12% |
| Bay of Plenty | 590 | 651 | 501 | -150 | -23% |  | 69 | 48 | 66 | 18 | 38% |  | 521 | 575 | 435 | -140 | -24% |
| Lakes | 10 | 331 | 315 | -16 | -5% |  | 0 | 97 | 77 | -20 | -21% |  | 10 | 234 | 238 | 4 | 2% |
| Tairāwhiti | 106 | 50 | 50 | 0 | 0% |  | 10 | 10 | 4 | -6 | -60% |  | 83 | 40 | 46 | 6 | 15% |
| MidCentral | 1286 | 1420 | 1177 | -243 | -17% |  | 146 | 164 | 106 | -58 | -35% |  | 1119 | 1256 | 1065 | -191 | -15% |
| Capital & Coast | 1492 | 1685 | 1595 | -90 | -5% |  | 22 | 217 | 213 | -4 | -2% |  | 1400 | 1413 | 1255 | -158 | -11% |
| Nelson Marlborough | 0 | 0 | 6 | 6 | - |  | 0 | 0 | 0 | 0 | - |  | 0 | 0 | 6 | 6 | - |
| Canterbury\* | 1039 | 485 | 1357 | 872 |  |  | 56 | 27 | 159 | 132 |  |  | 970 | 458 | 1171 | 713 |  |
| Southern\*\* | 110 | 101 | 114 | 13 | 13% |  | 1 | 1 | 20 | 19 | - |  | 109 | 100 | 93 | -7 | -7% |
| West Coast | 4 | 9 | 4 | -5 | - |  | 0 | 2 | 0 | -2 | - |  | 4 | 7 | 4 | -3 | - |
| Grand Total | 11386 | 10794 | 11662 | 868 | 8% |  | 989 | 1203 | 1248 | 45 | 4% |  | 9732 | 9099 | 9778 | 679 | 7% |

\*Te Aho o Te Kahu are working with Canterbury and Counties Manukau DHB to understand the cause for low volumes in 2019. Number and percentage differences have not been presented as will not accurately reflect the difference between 2019 and 2020 in these DHBs.  
\*\* Note the relatively low volumes in Southern DHB are due to variation in coding which is being followed up on.

# Appendix 4: Surgical procedure codes

Below is a list of the surgical procedure codes that were used for analysis on curative 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 |

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| **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 |