

15 October 2021

**Response to a request for official information**

Thank you for your request for official information received 6 September 2021 by Nelson Marlborough Health (NMH), where you seek information regarding outpatient radiology examinations.

- 1. The number of outpatient radiology assessments/investigations per year for the past 5 years broken down under categories for X-ray, MRI, CT, Other, listed as an absolute number, percentage change from the previous year, number per capita for Maori and non-Maori and total for each category?***

Response:

**TABLE 1 Outpatient Radiology Examinations as an Absolute Number, for Maori and non-Maori**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
Maori	CT	485	536	491	485	494
	MRI	332	308	308	248	256
	X-Ray	1,656	1,806	1,994	1,923	2,255
	Other	1,413	1,508	1,318	1,458	1,514
<b>Maori Total</b>		<b>3,886</b>	<b>4,158</b>	<b>4,111</b>	<b>4,114</b>	<b>4,519</b>
Other	CT	6,679	7,024	7,659	7,223	8,028
	MRI	4,332	4,229	3,725	3,208	3,290
	X-Ray	16,280	17,545	18,791	18,587	22,405
	Other	12,063	13,551	10,396	10,904	11,702
<b>Other Total</b>		<b>39,354</b>	<b>42,349</b>	<b>40,571</b>	<b>39,922</b>	<b>45,425</b>
<b>Grand Total</b>		<b>43,240</b>	<b>46,507</b>	<b>44,682</b>	<b>44,036</b>	<b>49,944</b>

**TABLE 2 Total Examinations for each Category**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
All	CT	7,164	7,560	8,150	7,708	8,522
	MRI	4,664	4,537	4,033	3,456	3,546
	X-Ray	17,936	19,351	20,785	20,510	24,660
	Other	13,476	15,059	11,714	12,362	13,216
<b>Grand Total</b>		<b>43,240</b>	<b>46,507</b>	<b>44,682</b>	<b>44,036</b>	<b>49,944</b>

Note. This Table relates to data in Table 1.

**TABLE 3 Outpatient Radiology Examinations as a Percentage Change from the previous year, for Maori and non-Maori**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
Maori	CT	100.0%	110.5%	91.6%	98.8%	101.9%
	MRI	100.0%	92.8%	100.0%	80.5%	103.2%
	X-Ray	100.0%	109.1%	110.4%	96.4%	117.3%
	Other	100.0%	106.7%	87.4%	110.6%	103.8%
<b>Maori Total</b>		<b>100.0%</b>	<b>107.0%</b>	<b>98.9%</b>	<b>100.1%</b>	<b>109.8%</b>
Other	CT	100.0%	105.2%	109.0%	94.3%	111.1%
	MRI	100.0%	97.6%	88.1%	86.1%	102.6%
	X-Ray	100.0%	107.8%	107.1%	98.9%	120.5%
	Other	100.0%	112.3%	76.7%	104.9%	107.3%
<b>Other Total</b>		<b>100.0%</b>	<b>107.6%</b>	<b>95.8%</b>	<b>98.4%</b>	<b>113.8%</b>
<b>Grand Total</b>		<b>100.0%</b>	<b>107.6%</b>	<b>96.1%</b>	<b>98.6%</b>	<b>113.4%</b>

**TABLE 4 Total Examinations for each Category**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
All	CT	100.0%	105.5%	107.8%	94.6%	110.6%
	MRI	100.0%	97.3%	88.9%	85.7%	102.6%
	X-Ray	100.0%	107.9%	107.4%	98.7%	120.2%
	Other	100.0%	111.7%	77.8%	105.5%	106.9%
<b>Grand Total</b>		<b>100.0%</b>	<b>107.6%</b>	<b>96.1%</b>	<b>98.6%</b>	<b>113.4%</b>

Note. This Table relates to data in Table 3.

**TABLE 5 Population figures applied to per Capita calculations (Tables 6 and 12)**

Stats NZ 2013 Base, 2019 update		Population 1,000's
155,100	Total	155.1
16,800	Maori	16.8
138,300	Other	138.3

**TABLE 6 Outpatient Radiology Examinations as a Number per Capita, for Maori and non-Maori**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
Maori	CT	28.9	31.9	29.2	28.9	29.4
	MRI	19.8	18.3	18.3	14.8	15.2
	X-Ray	98.6	107.5	118.7	114.5	134.2
	Other	84.1	89.8	78.5	86.8	90.1
<b>Maori Total</b>		<b>231.3</b>	<b>247.5</b>	<b>244.7</b>	<b>244.9</b>	<b>269.0</b>
Other	CT	48.3	50.8	55.4	52.2	58.0
	MRI	31.3	30.6	26.9	23.2	23.8
	X-Ray	117.7	126.9	135.9	134.4	162.0
	Other	87.2	98.0	75.2	78.8	84.6
<b>Other Total</b>		<b>284.6</b>	<b>306.2</b>	<b>293.4</b>	<b>288.7</b>	<b>328.5</b>
<b>Grand Total</b>		<b>278.8</b>	<b>299.9</b>	<b>288.1</b>	<b>283.9</b>	<b>322.0</b>

**TABLE 7 Total Examinations for each Category**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
All	CT	46.2	48.7	52.5	49.7	54.9
	MRI	30.1	29.3	26.0	22.3	22.9
	X-Ray	115.6	124.8	134.0	132.2	159.0
	Other	86.9	97.1	75.5	79.7	85.2
<i>Grand Total</i>		<i>278.8</i>	<i>299.9</i>	<i>288.1</i>	<i>283.9</i>	<i>322.0</i>

Note. This Table relates to data in Table 6.

- 2. The number of outpatient radiology assessments/investigations per year for the past 5 years broken down under categories where there is a primary or main provisional diagnosis of cancer for X-ray, MRI, CT, Other, listed as an absolute number, percentage change from the previous year, number per capita for Maori and non-Maori and total for each category?**

Response:

**NOTE:**

These are patients on the Faster Cancer Treatment (FCT) register, whether cancer was later confirmed or not, and the examination can be a diagnostic tool to confirm a final diagnosis. FCT data was applied as NMH does not have a casemix system to link clinical diagnostic data to clinical support services, such as Radiology.

**TABLE 8 Outpatient Radiology Examinations where there is a primary or main provisional diagnosis of cancer, as an Absolute Number, for Maori and non-Maori**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
Maori	CT	165	178	164	152	129
	MRI	39	37	28	30	25
	X-Ray	149	140	109	125	89
	Other	126	147	90	109	116
<b>Maori Total</b>		<b>479</b>	<b>502</b>	<b>391</b>	<b>416</b>	<b>359</b>
Other	CT	2,273	2,575	2,650	2,538	2,603
	MRI	465	517	514	565	618
	X-Ray	1,503	1,489	1,468	1,433	1,482
	Other	1,523	1,790	1,185	1,256	1,159
<b>Other Total</b>		<b>5,764</b>	<b>6,371</b>	<b>5,817</b>	<b>5,792</b>	<b>5,862</b>
<i>Grand Total</i>		<i>6,243</i>	<i>6,873</i>	<i>6,208</i>	<i>6,208</i>	<i>6,221</i>

**TABLE 9 Total Examinations for each Category**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
All	CT	2,438	2,753	2,814	2,690	2,732
	MRI	504	554	542	595	643
	X-Ray	1,652	1,629	1,577	1,558	1,571
	Other	1,649	1,937	1,275	1,365	1,275
<i>Grand Total</i>		<i>6,243</i>	<i>6,873</i>	<i>6,208</i>	<i>6,208</i>	<i>6,221</i>

Note. This Table relates to data in Table 8.

**TABLE 10 Outpatient Radiology Examinations where there is a primary or main provisional diagnosis of cancer, as a Percentage Change from the previous year, for Maori and non-Maori**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
Maori	CT	100.0%	107.9%	92.1%	92.7%	84.9%
	MRI	100.0%	94.9%	75.7%	107.1%	83.3%
	X-Ray	100.0%	94.0%	77.9%	114.7%	71.2%
	Other	100.0%	116.7%	61.2%	121.1%	106.4%
<b>Maori Total</b>		<b>100.0%</b>	<b>104.8%</b>	<b>77.9%</b>	<b>106.4%</b>	<b>86.3%</b>
Other	CT	100.0%	113.3%	102.9%	95.8%	102.6%
	MRI	100.0%	111.2%	99.4%	109.9%	109.4%
	X-Ray	100.0%	99.1%	98.6%	97.6%	103.4%
	Other	100.0%	117.5%	66.2%	106.0%	92.3%
<b>Other Total</b>		<b>100.0%</b>	<b>110.5%</b>	<b>91.3%</b>	<b>99.6%</b>	<b>101.2%</b>
<b>Grand Total</b>		<b>100.0%</b>	<b>110.1%</b>	<b>90.3%</b>	<b>100.0%</b>	<b>100.2%</b>

**TABLE 11 Total Examinations for each Category**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
All	CT	100.0%	112.9%	102.2%	95.6%	101.6%
	MRI	100.0%	109.9%	97.8%	109.8%	108.1%
	X-Ray	100.0%	98.6%	96.8%	98.8%	100.8%
	Other	100.0%	117.5%	65.8%	107.1%	93.4%
<b>Grand Total</b>		<b>100.0%</b>	<b>110.1%</b>	<b>90.3%</b>	<b>100.0%</b>	<b>100.2%</b>

Note. This Table relates to data in Table 10.

**TABLE 12 Outpatient Radiology Examinations where there is a primary or main provisional diagnosis of cancer, as a Number per Capita, for Maori and non-Maori**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
Maori	CT	9.8	10.6	9.8	9.0	7.7
	MRI	2.3	2.2	1.7	1.8	1.5
	X-Ray	8.9	8.3	6.5	7.4	5.3
	Other	7.5	8.8	5.4	6.5	6.9
<b>Maori Total</b>		<b>28.5</b>	<b>29.9</b>	<b>23.3</b>	<b>24.8</b>	<b>21.4</b>
Other	CT	16.4	18.6	19.2	18.4	18.8
	MRI	3.4	3.7	3.7	4.1	4.5
	X-Ray	10.9	10.8	10.6	10.4	10.7
	Other	11.0	12.9	8.6	9.1	8.4
<b>Other Total</b>		<b>41.7</b>	<b>46.1</b>	<b>42.1</b>	<b>41.9</b>	<b>42.4</b>
<b>Grand Total</b>		<b>40.3</b>	<b>44.3</b>	<b>40.0</b>	<b>40.0</b>	<b>40.1</b>

**TABLE 13 Total Examinations for each Category**

Ethnicity group	Exam category	2016/17	2017/18	2018/19	2019/20	2020/21
All	CT	15.7	17.7	18.1	17.3	17.6
	MRI	3.2	3.6	3.5	3.8	4.1
	X-Ray	10.7	10.5	10.2	10.0	10.1
	Other	10.6	12.5	8.2	8.8	8.2
<b>Grand Total</b>		<b>40.3</b>	<b>44.3</b>	<b>40.0</b>	<b>40.0</b>	<b>40.1</b>

Note. This Table relates to data in Table 12.

**3. The number of outpatient radiology investigations cancelled delayed or postponed in levels 3 & 4 for the coronavirus outbreaks of 2020 and 2021, listed by level and year?**

Response:

**TABLE 14 Dates applied to 'Cancelled due to pandemic' calculations (Tables 15 – 17)**

Level		
Level 4	25/03/2020	27/04/2020
Level 3	28/04/2020	13/05/2020
Level 4	18/08/2021	31/08/2021
Level 3	1/09/2021	7/09/2021

**TABLE 15 Outpatient Radiology Examinations 'Cancelled due to pandemic'**

Level and Year	Total
Level 4 - 2020	26
Level 3 - 2020	26
Level 4 - 2021	638
Level 3 - 2021	13

**4. The number of outpatient radiology investigations cancelled delayed or postponed in levels 3 & 4 for the coronavirus outbreaks of 2020 and 2021 where the primary diagnosis or main provisional diagnosis was cancer, listed by level and year?**

Response:

**TABLE 16 Outpatient Radiology Examinations 'Cancelled due to pandemic' where the primary diagnosis or main provisional diagnosis was cancer**

Level and Year	Total
Level 4 - 2020	6
Level 3 - 2020	4
Level 4 - 2021	55

**5. The number of cancelled, delayed or postponed inpatient procedures in levels 3 & 4 to date where the primary diagnosis or main provisional diagnosis was cancer, listed by level?**

Response:

**TABLE 17 Inpatient Procedures 'Cancelled due to pandemic' where the primary diagnosis or main provisional diagnosis was cancer**

Level and Year	Total
Level 4 - 2020	18
Level 4 - 2021	7

This response has been provided under the Official Information Act 1982. You have the right to seek an investigation by the Ombudsman of this decision. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or free phone 0800 802 602. If you have any questions about this decision please feel free to email our OIA Coordinator [OIArequest@nmdhb.govt.nz](mailto:OIArequest@nmdhb.govt.nz)

I trust that this information meets your requirements. NMH, like other agencies across the state sector, supports the open disclosure of information to assist the public's understanding of how we are delivering publicly-funded healthcare. This includes the proactive publication of anonymised Official Information Act responses on our website from 10 working days after they have been released. If you feel that there are good reasons why your response should not be made publicly available, we will be happy to consider.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Lexie O'Shea', with a stylized flourish at the end.

Lexie O'Shea  
**Chief Executive**