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FOREWORD

This volume contains some revised tables for reports 1 to 5. These consist of a newer presentation of some tables, the results of changes in the definition and calculation of some indicators, and corrections of errors in reports 1 to 5. Only the tables involving cytology or histology records of women have required revision. Previously published results of enrolment, coverage, and participation remain unchanged. In almost all instances, the recommendations made in the reports are unaffected.

To ensure consistency between results reported in reports 1 to 5 with report 6 and future monitoring reports, an extensive audit of the calculation and presentation of the results in reports 1 to 5 was undertaken. This will allow better assessment of the trends in indicators over time and to provide consistency.

Revised tables were necessary where cytology or histology results have been used because small changes in the hierarchy used to assign the most serious abnormality code, when multiple abnormalities were present, occurred during the preparation of reports 1 to 5. Also, some of the original indicators of NCSP performance calculated required more precise definition. In particular, this involved specifying the inclusion and exclusion criteria for the calculation of different indicators, thus the method of calculation of the indicators has been refined during the production of reports 1 to 5. Decisions about which data fields were most appropriate for calculating the indicators have also been made. For example, the field recording the date when a woman has her first smear in the NCSP more accurately represents the date of enrolment, than the field recording the date when enrolment details were entered onto the NCSP-Register at the NCSP regional offices.

Additional detail has been added for the revised tables of earlier reports. For example, short-interval re-screening for reports 1, 2 and 3 now include calculation of the indicator using satisfactory smears only.

This volume also provides an opportunity for the successive results of reports 1 to 5 to be available in one document. Each of the five sections presents the revised tables for each of the reports 1 to 5.

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RECOMMENDATIONS

With the revision of indicator targets, the published recommendations for each quarterly report were reviewed. Because most revised indicator results were only slightly different from the original published results, most recommendations remain unchanged. While the revised results had an effect on a few published recommendations, this did not dramatically change the content of the recommendation. The recommendations which were affected and how the revised results affected them are described below.

Report 1

It was recommended that efforts to reduce the high level of short interval re-screening in all 5-year age groups, particularly the 20-39 year age groups needed to continue. With the revised results, this specified age group should have also included women aged 40-54 years.

Report 2

It was recommended that reasons why 382 women with a history of a high grade abnormality had no follow up smear results recorded on the NCSP-Register needed to be examined. With the revised results, the number of women should have been 1,532.

It was recommended that reasons why no histology result was recorded by the NCSP-Register for 26 women who had a cytology report of high grade or more serious abnormality needed to be assessed and follow-up arrangements for these women checked was also recommended. With the revised results, the number of women should have been 259.

Report 3

It was recommended that reasons why 339 women with a history of a high grade abnormality had no follow up smear results recorded on the NCSP-Register needed to be assessed. With the revised results, the number of women should have been 1,574.

It was recommended that reasons why histology results were not recorded by the NCSP-Register for the 28 women who had had a HSIL or ASCUS possible high grade cytology report needed to be assessed and follow-up arrangements for these women checked was also recommended. With the revised results, the number of women should have been 278.

Report 4

It was recommended that reasons for the relatively high level of short interval re-screening needed to be examined, particularly in those areas with higher levels of short interval re-screening (Auckland, North West Auckland and Tairāwhiti). With the revised results, the Capital Coast DHB area also had a particularly high level of short interval re-screening compared with other DHB areas.

It was recommended that reasons why 369 women with a history of a high grade abnormality had no follow up smear results recorded on the NCSP-Register needed to be examined and follow up arrangements for these women checked was recommended. With the revised results, the number of women should have been 1,573.

It was recommended that reasons why no histology result was recorded by the NCSP-Register for the 32 women who had a cytology report of high grade or more serious abnormality needed to be assessed and follow-up arrangements for these women checked was recommended. With the revised results, the number of women should have been 320.

It was recommended that Medical Laboratory Wellington, Medlab Bay of Plenty and Valley Diagnostic Laboratory should continue to work towards achieving the 7-day [cytology turn around time] target was recommended. With the revised results, Medlab Bay of Plenty did achieve the 7-day cytology turn around time target.

Report 5

It was recommended that efforts to examine the relatively high level of short interval re-screening needed to continue, particularly in those areas with higher levels of short interval re-screening (Auckland, North West Auckland and Tairāwhiti). With the revised results, the Capital Coast DHB area also had a particularly high level of short interval re-screening compared with other DHB areas.

The IMG-NCSP provided the coded numbers of the 356 women who had a high grade cytology report but no recorded follow-up histology result to the NSU so follow-up arrangements for these women can be checked was recommended. With the revised results, the number of women should have been 359.

It was recommended that Medical Laboratory Wellington, Medlab Central Palmerston North and Valley Diagnostic Laboratory should continue to work towards achieving the 7-day cytology turn around time target was recommended. With the revised results, Medlab Central Palmerston North did achieve the 7-day cytology turn around time target.

It was recommended that the nineteen laboratories that did not meet the 5-day histology turn around time target should work towards achieving this was recommended. With the revised results, the number of laboratories should have been six.

It was recommended that reasons for laboratories reporting levels of unsatisfactory smears outside the target range should be sought, particularly those laboratories that reported levels below the target range (Medlab South Christchurch and Southern Community Laboratory Christchurch) was recommended. With the revised results, the proportion of smears reported as unsatisfactory by Medlab Hamilton was also below the target.

Report 1

1.1 Short interval re-screening

Table 1-1. Short interval re-screening proportion (%) for 20-69 year old women by 5-year age group* [target = less than 10%].

Age groups (years)	Number of women with at least one A1† or A2‡ smear	Number of women with more than one A1† or A2‡ smear	Number of women with an abnormal smear (ASCUS or worse)	Proportion (%) with >1 A1† or A2‡ smear amongst women with a normal history#	Proportion (%) with >1 A1† smear amongst women with a normal history
20-24	30,809	10,249	4,149	22.9	11.7
25-29	53,533	15,465	4,619	22.2	11.5
30-34	62,031	17,606	3,597	24.0	13.6
35-39	68,173	18,265	3,173	23.2	14.0
40-44	61,368	15,876	2,736	22.4	13.4
45-49	50,230	13,281	2,121	23.2	14.1
50-54	42,682	11,084	1,488	23.3	14.4
55-59	30,710	7,155	858	21.1	13.0
60-64	24,359	4,933	545	18.4	11.1
65-69	18,330	3,231	328	16.1	9.4
Total 20-69	442,225	117,145	23,614	22.3	13.1

* Many abnormal results for Northland women not included (see Methods section in Report 1)

† A1 = satisfactory smear

‡ A2 = satisfactory but limited smear

= (column 3 – column 4) x 100/(column 2 – column 4)

Table 1-2. Short-interval re-screening proportion (%) for 20-69 year old women for each DHB area* [target = less than 10%].

District Health Board area	Smear Adequacy	
	Satisfactory (A1) & satisfactory but limited (A2) smears	Satisfactory (A1) smears only
Auckland	28.1	17.8
Bay of Plenty	20.1	10.9
Canterbury	20.3	14.2
Capital Coast	28.2	14.5
Counties Manakau	23.8	12.9
Hawkes Bay	19.4	11.3
Hutt	22.9	14.8
Lakes	22.2	14.2
MidCentral	19.6	11.6
Nelson/Marlborough	17.6	5.8
Northland	32.5	20.5
Otago	15.9	11.5
South Canterbury	19.5	12.4
Southland	13.9	9.7
Tairāwhiti	30.0	20.1
Taranaki	17.1	6.4
Waikato	15.8	6.1
Wairarapa	21.3	11.4
Waitemata	27.2	16.6
West Coast	14.9	9.9
Whanganui	20.8	12.0
DHB Unspecified	24.5	14.0
Total	22.3	13.1

- Many abnormal results for Northland women not included (see Methods section in Report 1)

1.2 Delayed re-screening for women with a high grade abnormality

Table 1-3. Timeliness of the most recent smear among women with a history of a high grade or more serious abnormality* [targets = 85% within 15 months and 99% within 18 months].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Less than 15 months	14,120	72.8	72.8
15-18 months	958	4.9	78.2
More than 18 months	2,742	14.1	91.9
No smear recorded	1,575	8.1	100.0
Total	19,395		

* Many abnormal results for Northland women not included (see Methods section in Report 1)

1.3 Follow-up of women with HSIL cytology

Table 1-4. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women* [targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	2,585	75.1	75.1
13-26 weeks	403	11.7	86.8
27-52 weeks	164	4.8	91.5
More than 52 weeks	39	1.1	92.7
Subtotal	3,191		
No histology recorded	252	7.3	100.0
Total	3,443		

* Many abnormal results for Northland women not included (see Methods section in Report 1)

Table 1-5. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women by NCSP region* [targets = 90% within 12 weeks and 99% within 52 weeks].

NCSP Region	Time period										
	Within 12 weeks		13-26 weeks		27-52 weeks		More than 52 weeks		No histology reported		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Auckland	628	80.1	63	8.0	36	4.6	7	0.9	50	6.4	784
Bay of Plenty	170	63.2	33	12.3	12	4.5	5	1.9	49	18.2	269
Canterbury	410	81.2	45	8.9	15	3.0	7	1.4	28	5.5	505
Hawkes Bay	112	64.7	31	17.9	23	13.3	1	0.6	6	3.5	173
Manawatu/ Wanganui	140	73.7	21	11.1	12	6.3	2	1.1	15	7.9	190
Nelson/ Marlborough	51	63.8	14	17.5	8	10.0	2	2.5	5	6.3	80
Northland	2	66.7	0	0.0	0	0.0	0	0.0	1	33.3	3
Otago	174	84.1	22	10.6	9	4.3	1	0.5	1	0.5	207
Southland	78	72.2	12	11.1	8	7.4	2	1.9	8	7.4	108
Tairāwhiti	104	91.2	6	5.3	2	1.8	1	0.9	1	0.9	114
Taranaki	106	60.6	46	26.3	10	5.7	7	4.0	6	3.4	175
Waikato	244	81.1	37	12.3	9	3.0	2	0.7	9	3.0	301
Wellington	331	67.1	69	14.0	19	3.9	2	0.4	72	14.6	493
West Coast	35	85.4	4	9.8	1	2.4	0	0.0	1	2.4	41
Total	2,585	75.1	403	11.7	164	4.8	39	1.1	252	7.3	3,443

* Many abnormal results for Northland women not included (see Methods section in Report 1)

Table 1-6. The number of women with no histology result recorded by NCSP-Register status and source of any subsequent smear.*

Women's status	Subsequent smear			Total
	No smear	Smear taken by non- specialist	Smear taken by specialist	
Not signed in	28	18	49	95
Signed in since high grade cytology result	27	50	80	157
Total	55	68	129	252

* Many abnormal results for Northland women not included (see Methods section in Report 1)

1.4 Summary of laboratory indicators

Table 1-7. A summary of laboratory indicators.*

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy# (target = not more than 96%)		HSIL# (target = not less than 0.6%)		Total abnormalities#† (target = not more than 10%)		Smear turn around time proportion (%) Within 7 days
		No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Hospital-based</i>	Number											
Auckland Hospital Laboratory‡	983	248	25.2	23	2.3	745	75.14	25	4.80	215	24.90	99.90
Canterbury Health Laboratories	552	113	20.5	7	1.3	339	62.20	57	10.46	206	37.80	93.66
Healthlab Otago	2,411	736	30.5	67	2.8	1,960	83.62	89	3.80	384	16.38	73.16
Waikato Hospital Laboratory	818	62	7.6	0	0.0	492	60.15	36	4.40	326	39.85	88.14
Wellington Hospital Laboratory	274	157	57.3	3	1.1	175	64.58	8	2.95	96	35.42	100.00
Rest of Table 1-7 continued on next page												

* Many abnormal results for Northland women not included (see Methods section in Report 1)

Unsatisfactory smears excluded.

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women's Hospital Laboratory.

Table 1-7 *continued*

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy# (target = not more than 96%)		HSIL# (target = not less than 0.6%)		Total abnormalities#† (target = not more than 10%)		Smear turn around time proportion (%) Within 7 days
		No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Community-based</i>	Number	No.	%	No.	%	No.	%	No.	%	No.	%	
Diagnostic Medlab Auckland	30,772	8,284	26.9	247	0.8	28,815	94.40	285	0.93	1,710	5.60	0.01
Medical Laboratory Southland	1,197	154	12.9	2	0.2	1,103	92.30	8	0.67	92	7.70	0.00
Medical Laboratory Wellington	7,704	1,453	18.9	133	1.7	6,841	90.36	72	0.95	730	9.64	0.00
Medlab Bay of Plenty	4,166	1,007	24.2	26	0.6	3,438	83.04	83	2.00	702	16.96	42.85
Medlab Central, Palmerston North	5,648	1,191	21.1	23	0.4	5,173	91.96	71	1.26	452	8.04	0.00
Medlab Hamilton	6,358	1,330	20.9	17	0.3	5,342	84.25	44	0.69	999	15.75	1.21
Medlab Hawkes Bay	1,892	377	19.9	11	0.6	1,729	91.92	28	1.49	152	8.08	0.00
Medlab South Christchurch	8,184	995	12.2	23	0.3	7,519	92.13	77	0.94	642	7.87	0.00
Nelson Diagnostic Laboratory	2,850	601	21.1	44	1.5	2,583	92.05	18	0.64	223	7.95	0.00
Pathlab Waikato	2,769	853	30.8	18	0.7	2,531	92.00	26	0.95	220	8.00	0.00
Rotorua Diagnostic Laboratory†	1,895	438	23.1	11	0.6	1,551	82.32	31	1.65	333	17.68	43.85
Southern Community Laboratory	14,410	1,006	7.0	149	1.0	13,546	94.99	156	1.09	715	5.01	0.05
Taranaki Medlab	4,090	726	17.8	80	2.0	3,732	93.07	40	1.00	278	6.93	0.00
Valley Diagnostic Laboratory	3,653	745	20.4	43	1.2	3,419	94.71	42	1.16	191	5.29	0.60
Total	100,626	20,476	20.4	927	0.9	91,033	91.31	1,196	1.20	8,666	8.69	2.82

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

Unsatisfactory smears excluded.

1.5 Laboratory smear reporting

Table 1-8. The number and proportion of satisfactory or satisfactory but limited smears in broad cytological categories for each laboratory.*

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favour reaction		AGUS favour dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalities† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Hospital-based</i>																	
Canterbury Health Laboratories	745	75.14	113	12.56	73	7.08	1	0.23	0	0.05	2	0.78	25	4.80	215	24.90	960
Healthlab Otago	339	62.20	70	12.84	77	14.13	1	0.18	0	0.00	5	0.92	57	10.46	206	37.80	545
National Women's Hospital Laboratory	1,960	83.62	160	6.83	126	5.38	2	0.09	0	0.00	9	0.38	89	3.80	384	16.38	2,344
Waikato Hospital Laboratory	492	60.15	157	19.19	129	15.77	3	0.37	0	0.00	1	0.12	36	4.40	326	39.85	818
Wellington Hospital Laboratory	175	64.58	65	23.99	20	7.38	2	0.74	0	0.00	3	1.11	8	2.95	96	35.42	271
Rest of Table 1-8 continued on next page																	

* Many abnormal results for Northland women not included (see Methods section in Report 1)

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

Table 1-8 *continued*

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favour reaction		AGUS favour dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalities† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Community-based</i>																	
Diagnostic Medlab Auckland	28,815	94.40	713	2.34	670	2.19	30	0.10	0	0.00	45	0.15	285	0.93	1,710	5.60	30,525
Medical Laboratory Southland	1,103	92.30	37	3.10	36	3.01	3	0.25	2	0.17	4	0.33	8	0.67	92	7.70	1,195
Medical Laboratory Wellington	6,841	90.36	427	5.64	218	2.88	7	0.09	6	0.08	10	0.13	72	0.95	730	9.64	7,571
Medlab Bay of Plenty	3,438	83.04	473	11.43	114	2.75	26	0.63	4	0.10	38	0.92	83	2.00	702	16.96	4,140
Medlab Central, Palmerston North	5,173	91.96	238	4.23	134	2.38	4	0.07	0	0.00	39	0.69	71	1.26	452	8.04	5,625
Medlab Hamilton	5,342	84.25	698	11.01	248	3.91	9	0.14	0	0.00	0	0.00	44	0.69	999	15.75	6,341
Medlab Hawkes Bay	1,729	91.92	81	4.31	41	2.18	2	0.11	0	0.00	7	0.37	28	1.49	152	8.08	1,881
Medlab South Christchurch	7,519	92.13	292	3.58	263	3.22	3	0.04	1	0.01	19	0.23	77	0.94	642	7.87	8,161
Nelson Diagnostic Laboratory	2,583	92.05	130	4.63	62	2.21	9	0.32	1	0.04	13	0.46	18	0.64	223	7.95	2,806
Pathlab Waikato	2,531	92.00	146	5.31	42	1.53	6	0.22	0	0.00	16	0.58	26	0.95	220	8.00	2,751
Rotorua Diagnostic Laboratory†	1,551	82.32	219	11.62	65	3.45	12	0.64	4	0.21	19	1.01	31	1.65	333	17.68	1,884
Southern Community Laboratory	13,546	94.99	242	1.70	307	2.15	2	0.01	2	0.01	11	0.08	156	1.09	715	5.01	14,261
Taranaki Medlab	3,732	93.07	119	2.97	110	2.74	8	0.20	1	0.02	2	0.05	40	1.00	278	6.93	4,010
Valley Diagnostic Laboratory	3,419	94.71	48	1.33	99	2.74	0	0.00	1	0.03	6	0.17	42	1.16	191	5.29	3,610
Total	91,033	91.31	4,428	4.44	2,834	2.84	130	0.13	22	0.02	249	0.25	1,196	1.20	8,666	8.69	99,699

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

1.6 Laboratory cytology turn around time

Table 1-9. Timeliness of the reporting of smears by laboratories.

Laboratory	Within 7 working days	From 8-14 working days		More than 14 working days
	Proportion (%)	Proportion (%)	Cumulative Proportion (%)	Proportion (%)
<i>Hospital-based</i>				
Canterbury Health Laboratories	99.90	0.10	100.00	0.00
Healthlab Otago	93.66	4.53	98.19	1.81
National Women's Hospital Laboratory	73.16	22.81	95.98	4.02
Waikato Hospital Laboratory	88.14	10.76	98.90	1.10
Wellington Hospital Laboratory	100.00	0.00	100.00	0.00
<i>Community-based</i>				
Diagnostic Medlab Auckland	98.12	1.87	99.99	0.01
Medical Laboratory Southland	100.00	0.00	100.00	0.00
Medical Laboratory Wellington	96.16	3.84	100.00	0.00
Medlab Bay of Plenty	0.12	57.03	57.15	42.85
Medlab Central, Palmerston North	99.10	0.90	100.00	0.00
Medlab Hamilton	53.62	45.17	98.79	1.21
Medlab Hawkes Bay	100.00	0.00	100.00	0.00
Medlab South Christchurch	100.00	0.00	100.00	0.00
Nelson Diagnostic Laboratory	96.28	3.72	100.00	0.00
Pathlab Waikato	100.00	0.00	100.00	0.00
Rotorua Diagnostic Laboratory†	0.90	55.25	56.15	43.85
Southern Community Laboratory	99.58	0.37	99.95	0.05
Taranaki Medlab	96.58	3.42	100.00	0.00
Valley Diagnostic Laboratory	74.60	24.80	99.40	0.60
Total	88.15	9.03	97.18	2.82

1.7 Satisfactory but limited and unsatisfactory smears by laboratory

Table 1-10. The number and proportion of satisfactory but limited and unsatisfactory smears reported by laboratory.

Laboratory	Total smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)	
		Number	(%)	Number	(%)
<i>Hospital-based</i>					
Canterbury Health Laboratories	983	248	25.2	23	2.3
Healthlab Otago	552	113	20.5	7	1.3
National Women's Hospital Laboratory	2,411	736	30.5	67	2.8
Waikato Hospital Laboratory	818	62	7.6	0	0.0
Wellington Hospital Laboratory	274	157	57.3	3	1.1
<i>Community-based</i>					
Diagnostic Medlab Auckland	30,772	8,284	26.9	247	0.8
Medical Laboratory Southland	1,197	154	12.9	2	0.2
Medical Laboratory Wellington	7,704	1,453	18.9	133	1.7
Medlab Bay of Plenty	4,166	1,007	24.2	26	0.6
Medlab Central, Palmerston North	5,648	1,191	21.1	23	0.4
Medlab Hamilton	6,358	1,330	20.9	17	0.3
Medlab Hawkes Bay	1,892	377	19.9	11	0.6
Medlab South Christchurch	8,184	995	12.2	23	0.3
Nelson Diagnostic Laboratory	2,850	601	21.1	44	1.5
Pathlab Waikato	2,769	853	30.8	18	0.7
Rotorua Diagnostic Laboratory	1,895	438	23.1	11	0.6
Southern Community Laboratory	14,410	1,006	7.0	149	1.0
Taranaki Medlab	4,090	726	17.8	80	2.0
Valley Diagnostic Laboratory	3,653	745	20.4	43	1.2
Total	100,626	20,476	20.4	927	0.9

1.8 Satisfactory but limited and unsatisfactory smears by smear taker

Table 1-11. The number and proportion (%) of satisfactory but limited and unsatisfactory smears in the quarter by annual volume of smears taken for each smear taker group.

Smear taker group	Annual volume of smears	Total number of smears taken in quarter	Satisfactory smears		Satisfactory but limited smears [target = not more than 20%]		Unsatisfactory smears [target = 0.5 – 2.0%]	
			Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)
Lay	< 30	5	4	80.0	1	20.0	0	0.0
	30-100	8	8	100.0	0	0.0	0	0.0
	> 100	0	0	0.0	0	0.0	0	0.0
	Total	13	12	92.3	1	7.7	0	0.0
Medical	< 30	3,465	2,501	72.2	920	26.6	44	1.3
	30-100	17,833	13,796	77.4	3,885	21.8	152	0.9
	> 100	46,783	36,751	78.6	9,621	20.6	411	0.9
	Total	68,081	53,048	77.9	14,426	21.2	607	0.9
Midwife	< 30	190	110	57.9	79	41.6	1	0.5
	30-100	128	95	74.2	30	23.4	3	2.3
	> 100	134	102	76.1	29	21.6	3	2.2
	Total	452	307	67.9	138	30.5	7	1.5
Nurse	< 30	1,582	1,224	77.4	345	21.8	13	0.8
	30-100	8,107	6,511	80.3	1,522	18.8	74	0.9
	> 100	12,539	10,447	83.3	2,018	16.1	74	0.6
	Total	22,228	18,182	81.8	3,885	17.5	161	0.7
Specialist	< 30	134	91	67.9	41	30.6	2	1.5
	30-100	590	408	69.2	167	28.3	15	2.5
	> 100	9,110	7,163	78.6	1,812	19.9	135	1.5
	Total	9,834	7,662	77.9	2,020	20.5	152	1.5
Total†		100,626	79,223	78.7	20,476	20.3	927	0.9

† Includes smears taken by unknown smear takers

Report 2

2.1 Short interval re-screening

Table 2-1. Short interval re-screening proportion (%) for 20-69 year old women by 5-year age group [target = less than 10%].

Age groups (years)	Number of women with at least one A1† or A2‡ smear	Number of women with more than one A1† or A2‡ smear	Number of women with an abnormal smear (ASCUS or worse)	Proportion (%) with >1 A1† or A2‡ smear amongst women with a normal history*	Proportion (%) with >1 A1† smear amongst women with a normal history
20-24	30,465	10,173	4,420	22.1	10.3
25-29	51,859	14,893	4,630	21.7	10.8
30-34	61,761	17,150	3,799	23.0	12.9
35-39	67,186	17,638	3,336	22.4	13.4
40-44	61,350	15,615	2,891	21.8	12.8
45-49	50,425	13,136	2,236	22.6	13.8
50-54	42,814	10,763	1,562	22.3	13.8
55-59	30,651	7,064	941	20.6	12.4
60-64	24,521	4,959	596	18.2	10.8
65-69	18,305	3,134	344	15.5	9.0
Total 20-69	439,337	114,525	24,755	21.7	12.4

† A1 = satisfactory smear

‡ A2 = satisfactory but limited smear

* = (column 3 – column 4) x 100/(column 2 – column 4)

Table 2-2. Short-interval re-screening proportion (%) for 20-69 year old women for each DHB area [target = less than 10%].

District Health Board area	Smear Adequacy	
	Satisfactory (A1) & satisfactory but limited (A2) smears	Satisfactory (A1) smears only
Auckland	27.9	17.6
Bay of Plenty	18.4	8.1
Canterbury	19.8	13.9
Capital Coast	27.7	14.3
Counties Manakau	23.9	12.7
Hawkes Bay	18.4	10.9
Hutt	23.1	15.0
Lakes	20.8	12.2
MidCentral	18.5	11.1
Nelson/Marlborough	17.6	6.1
Northland	26.6	14.3
Otago	15.5	11.4
South Canterbury	19.4	12.8
Southland	13.9	10.1
Tairāwhiti	25.5	15.2
Taranaki	16.8	6.2
Waikato	15.5	5.8
Wairarapa	20.5	10.7
Waitemata	27.1	16.4
West Coast	14.7	10.1
Whanganui	20.7	11.9
DHB Unspecified	24.0	14.8
Total	21.7	12.4

2.2 Delayed re-screening for women with a high grade abnormality

Table 2-3. Timeliness of the most recent smear among women with a history of a high grade or more serious abnormality.*

[targets = 85% within 15 months and 99% within 18 months]

Time period	Number	Proportion (%)	Cumulative proportion (%)
Less than 15 months	14,716	72.8	72.8
15-18 months	1,020	5.0	77.8
More than 18 months	2,959	14.6	92.4
No smear recorded	1,532	7.6	100.0
Total	20,227		

* Many abnormal results for Northland women not included (see Methods section in Report 2)

2.3 Follow-up of women with HSIL cytology

Table 2-4. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women.* [targets = 90% within 12 weeks and 99% within 52 weeks]

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	2,855	75.7	75.7
13-26 weeks	426	11.3	87.0
27-52 weeks	179	4.7	91.8
More than 52 weeks	51	1.4	93.1
Subtotal	3,511		
No histology recorded	259	6.9	100.0
Total	3,770		

* Many abnormal results for Northland women not included (see Methods section in Report 2)

Table 2-5. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old Maori women.* [targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	399	64.6	64.6
13-26 weeks	97	15.7	80.3
27-52 weeks	48	7.8	88.0
More than 52 weeks	17	2.8	90.8
Subtotal	561		
No histology recorded	57	9.2	100.0
Total	618		

* Many abnormal results for Northland women not included (see Methods section in Report 2)

Table 2-6. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old ‘Other’ women.*
[targets = 90% within 12 weeks and 99% within 52 weeks]

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	2,408	78.4	78.4
13-26 weeks	317	10.3	88.8
27-52 weeks	120	3.9	92.7
More than 52 weeks	33	1.1	93.7
Subtotal	2,878		
No histology recorded	192	6.3	100.0
Total	3,070		

* Many abnormal results for Northland women not included (see Methods section in Report 2)

Table 2-7. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old Pacific women.*
[targets = 90% within 12 weeks and 99% within 52 weeks]

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	48	58.5	58.5
13-26 weeks	12	14.6	73.2
27-52 weeks	11	13.4	86.6
More than 52 weeks	1	1.2	87.8
Subtotal	72		
No histology recorded	10	12.2	100.0
Total	82		

* Many abnormal results for Northland women not included (see Methods section in Report 2)

Table 2-8. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women by NCSP region.* [targets = 90% within 12 weeks and 99% within 52 weeks]

NCSP Region	Time period										Total
	Within 12 weeks		13-26 weeks		27-52 weeks		More than 52 weeks		No histology reported		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Auckland	682	80.4	69	8.1	42	5.0	11	1.3	44	5.2	848
Bay of Plenty	170	60.3	36	12.8	11	3.9	3	1.1	62	22.0	282
Canterbury	410	83.0	37	7.5	14	2.8	10	2.0	23	4.7	494
Hawkes Bay	120	71.4	23	13.7	18	10.7	1	0.6	6	3.6	168
Manawatu/ Wanganui	166	74.1	26	11.6	12	5.4	4	1.8	16	7.1	224
Nelson/ Marlborough	65	63.7	21	20.6	9	8.8	2	2.0	5	4.9	102
Northland*	1	50.0	0	0.0	0	0.0	0	0.0	1	50.0	2
Otago	204	84.0	27	11.1	10	4.1	1	0.4	1	0.4	243
Southland	93	79.5	12	10.3	6	5.1	1	0.9	5	4.3	117
Tairāwhiti	117	85.4	12	8.8	5	3.6	2	1.5	1	0.7	137
Taranaki	114	64.0	42	23.6	10	5.6	4	2.2	8	4.5	178
Waikato	316	81.0	43	11.0	15	3.8	4	1.0	12	3.1	390
Wellington	368	66.8	76	13.8	26	4.7	8	1.5	73	13.2	551
West Coast	29	85.3	2	5.9	1	2.9	0	0.0	2	5.9	34
Total	2,855	75.7	426	11.3	179	4.7	51	1.4	259	6.9	3,770

* Many abnormal results for Northland women not included (see Methods section in Report 2)

Table 2-9. The number of women with no histology result recorded by NCSP-Register status and source of any subsequent smear.*

Women's status	Subsequent smear			Total
	No smear	Smear taken by non- specialist	Smear taken by specialist	
Not signed in	23	19	56	98
Signed in since high grade cytology result	29	51	81	161
Total	52	70	137	259

* Many abnormal results for Northland women not included (see Methods section in Report 2)

2.4 Cytology abnormality reporting

Table 2-10. Reported smear results by specified cytological result category per 1000 smears by 5-year age group [no targets].

Category of cytology result	Age groups (years)															ASR* (20-69 years)
	< 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
Negative for dysplasia or malignancy	807.25	833.19	878.68	910.05	919.29	924.16	933.42	935.08	945.76	951.76	953.37	940.88	942.86	960.78	913.04	909.68
Abnormal – not otherwise specified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.02
ASCUS (excluding ASCUS possible high grade)	82.30	71.71	55.66	44.19	44.34	42.14	41.80	43.41	33.69	30.15	26.23	25.16	32.14	29.41	65.22	46.52
LSIL	90.83	70.18	39.97	23.36	21.28	17.89	13.87	10.69	10.55	6.28	8.38	11.32	14.29	0.00	0.00	26.53
AGUS favour reactive	0.64	0.68	1.05	1.71	2.28	1.92	3.36	2.52	1.85	3.02	2.55	1.26	0.00	0.00	21.74	1.95
AGUS favour dysplasia	0.00	0.09	0.07	0.14	0.21	0.42	0.31	0.25	0.19	0.25	0.73	0.00	0.00	0.00	0.00	0.23
ASCUS possible high grade	3.62	3.32	3.66	4.17	2.99	3.85	1.73	2.77	2.96	2.76	3.64	3.77	3.57	9.80	0.00	3.21
HSIL	15.35	20.76	20.69	16.25	9.54	9.45	5.30	4.66	4.26	4.02	3.64	8.81	3.57	0.00	0.00	11.47
Adenocarcinoma-in-situ	0.00	0.09	0.07	0.14	0.00	0.00	0.00	0.13	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.07
Adenocarcinoma – other	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.13	0.19	0.50	0.73	2.52	0.00	0.00	0.00	0.12
Cancer – not otherwise specified	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.03
Squamous carcinoma of the cervix	0.00	0.00	0.00	0.00	0.07	0.08	0.20	0.25	0.37	1.01	0.36	6.29	3.57	0.00	0.00	0.18
Number smears reported	4,690	11,756	13,386	14,642	14,050	11,959	9,808	7,948	5,402	3,980	2,745	795	280	102	46	101,589

* Age-standardised rates. Age standardised to Segi's World population

Table 2-11. Reported smear results by specified cytological result category per 1000 women by 5-year age group [no targets].

Category of cytology result	Age groups (years)															ASR* (20-69 years)
	< 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
Negative for dysplasia or malignancy	808.73	834.39	880.97	911.37	919.77	924.90	933.99	936.22	946.75	952.43	956.10	943.81	942.24	959.60	911.11	910.81
Abnormal – not otherwise specified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
ASCUS (excluding ASCUS possible high grade)	81.45	71.36	54.42	43.87	44.13	42.01	41.64	42.43	33.26	29.86	24.39	24.27	32.49	30.30	66.67	45.99
LSIL	90.26	69.81	39.40	23.21	21.20	17.85	13.57	10.55	10.46	6.33	7.88	10.22	14.44	0.00	0.00	26.32
AGUS favour reactive	0.64	0.69	1.06	1.72	2.29	1.94	3.39	2.54	1.87	2.78	2.25	1.28	0.00	0.00	22.22	1.93
AGUS favour dysplasia	0.00	0.09	0.08	0.14	0.21	0.42	0.31	0.25	0.19	0.25	0.75	0.00	0.00	0.00	0.00	0.23
ASCUS possible high grade	3.65	3.26	3.40	4.06	3.01	3.62	1.75	2.67	2.99	2.53	3.38	3.83	3.61	10.10	0.00	3.11
HSIL	15.26	20.33	20.53	15.49	9.31	9.09	5.14	4.70	3.92	4.05	3.75	7.66	3.61	0.00	0.00	11.21
Adenocarcinoma-in-situ	0.00	0.09	0.08	0.14	0.00	0.00	0.00	0.13	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.07
Adenocarcinoma – other	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.13	0.19	0.51	0.75	2.55	0.00	0.00	0.00	0.11
Cancer – not otherwise specified	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.03
Squamous carcinoma of the cervix	0.00	0.00	0.00	0.00	0.07	0.08	0.21	0.25	0.37	1.01	0.38	6.39	3.61	0.00	0.00	0.18
Number of women screened	4,653	11,660	13,249	14,521	13,960	11,878	9,726	7,871	5,352	3,952	2,665	783	277	99	45	100,749

* Age-standardised rates. Age standardised to Segi's World population

2.5 Histology abnormality reporting

Table 2-12. The number of histology reports by histological result category by 5-year age group.

Category of histology result	Age groups (years)															Total number of histology reports
	<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
Normal	18	48	104	129	159	186	203	143	80	57	25	28	12	10	1	1,203
Other	19	90	130	150	182	208	214	159	83	70	40	35	13	12	7	1,412
Polyp	1	0	1	3	7	12	28	28	19	6	3	1	3	0	1	113
Atypia/HPV	42	176	171	146	128	100	92	50	30	17	11	3	0	0	0	966
CIN-not otherwise specified	0	1	0	1	2	1	1	0	0	0	0	0	0	0	0	6
LSIL	72	276	234	207	107	123	72	42	23	10	13	2	0	0	0	1,181
HSIL	92	352	440	305	174	136	61	40	21	22	12	11	0	0	0	1,666
Glandular dysplasia	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Adenocarcinoma-in-situ	0	3	6	7	5	2	2	2	1	0	0	0	0	0	0	28
Other cervical cancer	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Invasive adenocarcinoma†	0	0	5	0	2	1	1	4	4	0	3	0	4	2	0	26
Microinvasive squamous carcinoma	0	0	0	2	1	1	0	1	0	0	0	0	0	0	0	5
Invasive squamous carcinoma	0	1	1	7	6	3	1	6	5	2	7	4	4	0	1	48
Metastatic carcinoma‡ or other malignency	0	0	0	0	0	0	2	0	0	1	2	1	0	0	0	6
Total	244	947	1,093	957	773	773	678	475	266	185	116	85	36	24	10	6,662

† Origins of adenocarcinomas were unknown but possible sites include cervical, endometrial and bowel.

‡ Primary site unknown.

Table 2-13. The number of histology reports by most severe histological result category for women by 5-year age group and histology reporting rate per 10,000 women population.

Category of histology result		Age groups (years)														Number of histology reports & ASR (20-69)*	
		<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84		85+
Normal	Number	16	43	87	114	142	175	195	136	73	52	23	26	12	9	1	1,104
	Rate	0.29	3.39	6.27	7.49	8.98	11.46	14.49	10.99	7.72	6.48	3.50	4.12	2.19	2.31	0.29	
Other	Number	15	76	120	137	171	194	207	155	82	66	39	34	13	12	7	1,328
	Rate	0.27	6.00	8.65	9.01	10.81	12.70	15.38	12.52	8.67	8.23	5.93	5.38	2.38	3.08	2.03	
Polyp	Number	1	0	1	3	7	12	28	28	19	6	3	1	3	0	1	113
	Rate	0.02	0.00	0.07	0.20	0.44	0.79	2.08	2.26	2.01	0.75	0.46	0.16	0.55	0.00	0.29	
Atypia/HPV	Number	34	147	146	126	116	88	83	43	29	15	9	1	0	0	0	837
	Rate	0.61	11.60	10.52	8.28	7.33	5.76	6.17	3.47	3.07	1.87	1.37	0.16	0.00	0.00	0.00	
CIN-nos	Number	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	5
	Rate	0.00	0.08	0.00	0.07	0.06	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
LSIL	Number	67	235	201	177	94	107	65	37	23	10	13	2	0	0	0	1,031
	Rate	1.21	18.54	14.48	11.64	5.94	7.01	4.83	2.99	2.43	1.25	1.98	0.32	0.00	0.00	0.00	
HSIL	Number	85	303	367	261	145	115	53	31	16	18	10	8	0	0	0	1,412
	Rate	1.53	23.90	26.44	17.16	9.17	7.53	3.94	2.50	1.69	2.24	1.52	1.27	0.00	0.00	0.00	
Glandular dysplasia	Number	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Adenocarcinoma -in-situ	Number	0	3	4	7	5	2	0	2	1	0	0	0	0	0	0	24
	Rate	0.00	0.24	0.29	0.46	0.32	0.13	0.00	0.16	0.11	0.00	0.00	0.00	0.00	0.00	0.00	
Invasive adenocarcinoma†	Number	0	0	4	0	2	1	1	4	3	0	2	0	4	2	0	23
	Rate	0.00	0.00	0.29	0.00	0.13	0.07	0.07	0.32	0.32	0.00	0.30	0.00	0.73	0.51	0.00	
Microinvasive squamous carcinoma	Number	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	4
	Rate	0.00	0.00	0.00	0.07	0.06	0.07	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Invasive squamous carcinoma	Number	0	1	1	5	5	3	1	5	3	2	6	3	4	0	1	40
	Rate	0.00	0.08	0.07	0.33	0.32	0.20	0.07	0.40	0.32	0.25	0.91	0.48	0.73	0.00	0.29	
Metastatic carcinoma‡	Number	0	0	0	0	0	0	2	0	0	1	2	1	0	0	0	6
	Rate	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.12	0.30	0.16	0.00	0.00	0.00	
Number of histology reports		218	809	932	832	689	699	636	442	249	170	107	76	36	23	10	5,928

† Origins of adenocarcinomas were unknown but possible sites include cervix, endometrium and bowel.

‡ Primary site unknown.

* Age-standardised rates. Age standardised to Segi's World population

2.6 Summary of laboratory indicators

Table 2-14. A summary of laboratory indicators reported quarterly.

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy* (target = not more than 96%)		Total ASCUS* (including ASCUS possible HSIL)		HSIL* (target = not less than 0.6%)		Total abnormalities†** (target = not more than 10%)		Smear turn around time proportion (%)
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
<i>Hospital-based</i>	Number													
Auckland Hospital Laboratory‡	2,244	706	31.5	55	2.5	1,644	75.14	275	12.56	105	4.80	545	24.90	65.91
Canterbury Health Laboratories	868	205	23.6	24	2.8	659	78.08	106	12.56	12	1.42	185	21.92	100.00
Healthlab Otago#	71	8	11.3	0	0.0	8	11.27	21	29.58	9	12.68	63	88.73	64.79
Waikato Hospital Laboratory	629	54	8.6	7	1.1	365	58.68	122	19.61	28	4.50	257	41.32	97.46
Wellington Hospital Laboratory	257	143	55.6	5	2.0	181	71.83	42	16.67	14	5.56	71	28.17	99.61
Rest of Table 2-14 continued on next page														

* Unsatisfactory smears excluded.

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women's Hospital Laboratory.

Ceased reporting smears during the January – March 2001 reporting quarter.

Table 2-14 *continued*

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy* (target = not more than 96%)		Total ASCUS* (including ASCUS possible HSIL)		HSIL* (target = not less than 0.6%)		Total abnormalities†* (target = not more than 10%)		Smear turn around time proportion (%)
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
<i>Community-based</i>	Number	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
Diagnostic Medlab Auckland	31,892	8,865	27.8	258	0.8	29,939	94.64	702	2.22	272	0.86	1,695	5.36	99.93
Medical Laboratory Southland	1,170	144	12.3	5	0.4	1,097	94.16	27	2.32	10	0.86	68	5.84	100.00
Medical Laboratory Wellington	8,414	1,696	20.2	133	1.6	7,660	92.50	385	4.65	53	0.64	621	7.50	97.77
Medlab Bay of Plenty	6,382	1,676	26.3	33	0.5	4,485	70.64	1,187	18.70	247	3.89	1,864	29.36	0.30
Medlab Central, Palmerston North	7,764	1,807	23.3	52	0.7	7,045	91.35	351	4.55	97	1.26	667	8.65	99.95
Medlab Hamilton	6,362	1,458	22.9	16	0.3	5,164	81.37	864	13.61	40	0.63	1,182	18.63	2.17
Medlab South Christchurch	9,046	1,253	13.9	31	0.3	8,312	92.20	343	3.80	87	0.97	703	7.80	100.00
Nelson Diagnostic Laboratory#	2,133	443	20.8	25	1.2	1,962	93.07	89	4.22	16	0.76	146	6.93	99.62
Pathlab Waikato	2,674	843	31.5	20	0.8	2,347	88.43	208	7.84	23	0.87	307	11.57	99.96
SCL** Christchurch	5,341	442	8.3	9	0.2	5,036	94.45	141	2.64	51	0.96	296	5.55	99.93
SCL** Dunedin	8,992	552	6.1	89	1.0	8,444	94.84	152	1.71	79	0.89	459	5.16	99.89
Taranaki Medlab	4,121	813	19.7	82	2.0	3,674	90.96	176	4.36	45	1.11	365	9.04	99.01
Valley Diagnostic Laboratory#	4,144	875	21.1	71	1.7	3,867	94.94	56	1.37	36	0.88	206	5.06	98.72
Total	102,504	21,983	21.5	915	0.9	91,889	90.45	5,247	5.16	1,224	1.20	9,700	9.55	86.61

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

* Unsatisfactory smears excluded.

**SCL = Southern Community Laboratory.

Ceased reporting smears during January – March 2001 reporting quarter.

2.7 Laboratory smear reporting

Table 2-15. The number and proportion of satisfactory or satisfactory but limited smears in broad cytological categories for each laboratory.

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favour reaction		AGUS favour dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalities† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Hospital-based</i>																	
Auckland Hospital Laboratory‡	1,644	75.14	275	12.56	155	7.08	5	0.23	1	0.05	17	0.78	105	4.80	545	24.90	2,189
Canterbury Health Laboratories	659	78.08	106	12.56	63	7.46	4	0.47	0	0.00	3	0.36	12	1.42	185	21.92	844
Healthlab Otago#	8	11.27	21	29.58	33	46.48	0	0.00	0	0.00	1	1.41	9	12.68	63	88.73	71
Waikato Hospital Laboratory	365	58.68	122	19.61	102	16.40	2	0.32	0	0.00	3	0.48	28	4.50	257	41.32	622
Wellington Hospital Laboratory	181	71.83	42	16.67	13	5.16	2	0.79	0	0.00	1	0.40	14	5.56	71	28.17	252
Rest of Table 2-15 continued on next page																	

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women's Hospital Laboratory.

Ceased reporting smears during the January – March 2001 reporting quarter.

Table 2-15 continued

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favour reaction		AGUS favour dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalities† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Community-based</i>																	
Diagnostic Medlab Auckland	29,939	94.64	702	2.22	681	2.15	30	0.09	0	0.00	48	0.15	272	0.86	1,695	5.36	31,634
Medical Laboratory Southland‡	1,097	94.16	27	2.32	29	2.49	1	0.09	1	0.09	2	0.17	10	0.86	68	5.84	1,165
Medical Laboratory Wellington	7,660	92.50	385	4.65	176	2.13	5	0.06	0	0.00	19	0.23	53	0.64	621	7.50	8,281
Medlab Bay of Plenty	4,485	70.64	1,187	18.70	339	5.34	77	1.21	11	0.17	98	1.54	247	3.89	1,864	29.36	6,349
Medlab Central, Palmerston North	7,045	91.35	351	4.55	206	2.67	7	0.09	2	0.03	50	0.65	97	1.26	667	8.65	7,712
Medlab Hamilton	5,164	81.37	864	13.61	268	4.22	9	0.14	0	0.00	14	0.22	40	0.63	1,182	18.63	6,346
Medlab South Christchurch	8,312	92.20	343	3.80	250	2.77	19	0.21	1	0.01	15	0.17	87	0.97	703	7.80	9,015
Nelson Diagnostic Laboratory#	1,962	93.07	89	4.22	35	1.66	3	0.14	2	0.09	9	0.43	16	0.76	146	6.93	2,108
Pathlab Waikato	2,347	88.43	208	7.84	67	2.52	7	0.26	2	0.08	22	0.83	23	0.87	307	11.57	2,654
SCL* Christchurch	5,036	94.45	141	2.64	98	1.84	3	0.06	1	0.02	9	0.17	51	0.96	296	5.55	5,332
SCL* Dunedin	8,444	94.84	152	1.71	217	2.44	8	0.09	0	0.00	12	0.13	79	0.89	459	5.16	8,903
Taranaki Medlab	3,674	90.96	176	4.36	137	3.39	7	0.17	0	0.00	9	0.22	45	1.11	365	9.04	4,039
Valley Diagnostic Laboratory	3,867	94.94	56	1.37	111	2.73	0	0.00	0	0.00	3	0.07	36	0.88	206	5.06	4,073
Total	91,889	90.45	5,247	5.16	2,980	2.93	189	0.19	21	0.02	335	0.33	1,224	1.20	9,700	9.55	101,589

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

Ceased reporting smears during the January – March 2001 reporting quarter.

* SCL = Southern Community Laboratory.

2.8 Laboratory cytology reporting

Table 2-16. Timeliness of the reporting of smears by laboratories.

Laboratory	Within 7 working days	From 8-14 working days		More than 14 working days
	Proportion (%)	Proportion (%)	Cumulative Proportion (%)	Proportion (%)
<i>Hospital-based</i>				
Auckland Hospital Laboratory	65.91	31.33	97.24	2.76
Canterbury Health Laboratories	100.00	0.00	100.00	0.00
Healthlab Otago†	64.79	15.49	80.28	19.72
Waikato Hospital Laboratory	97.46	2.54	100.00	0.00
Wellington Hospital Laboratory	99.61	0.00	99.61	0.39
<i>Community-based</i>				
Diagnostic Medlab Auckland	99.93	0.07	100.00	0.00
Medical Laboratory Southland	100.00	0.00	100.00	0.00
Medical Laboratory Wellington	97.77	2.22	99.99	0.01
Medlab Bay of Plenty	0.30	0.41	0.71	99.29
Medlab Central, Palmerston North	99.95	0.03	99.97	0.03
Medlab Hamilton	2.17	44.39	46.56	53.44
Medlab South Christchurch	100.00	0.00	100.00	0.00
Nelson Diagnostic Laboratory†	99.62	0.23	99.86	0.14
Pathlab Waikato	99.96	0.04	100.00	0.00
Southern Community Laboratory Christchurch	99.93	0.07	100.00	0.00
Southern Community Laboratory Dunedin	99.89	0.06	99.94	0.06
Taranaki Medlab	99.01	0.99	100.00	0.00
Valley Diagnostic Laboratory	98.72	0.89	99.61	0.39
Total	86.61	3.79	90.40	9.60

† Ceased reporting smears during the January – March 2001 reporting quarter.

2.9 Satisfactory but limited and unsatisfactory smears by laboratory

Table 2-17. The number and proportion of satisfactory but limited and unsatisfactory smears by laboratory.

Laboratory	Number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)	
		Number	%	Number	%
<i>Hospital-based</i>					
Auckland Hospital Laboratory	2,244	706	31.5	55	2.5
Canterbury Health Laboratories	868	205	23.6	24	2.8
Healthlab Otago†	71	8	11.3	0	0.0
Waikato Hospital Laboratory	629	54	8.6	7	1.1
Wellington Hospital Laboratory	257	143	55.6	5	2.0
<i>Community-based</i>					
Diagnostic Medlab Auckland	31,892	8,865	27.8	258	0.8
Medical Laboratory Southland	1,170	144	12.3	5	0.4
Medical Laboratory Wellington	8,414	1,696	20.2	133	1.6
Medlab Bay of Plenty	6,382	1,676	26.3	33	0.5
Medlab Central, Palmerston North	7,764	1,807	23.3	52	0.7
Medlab Hamilton	6,362	1,458	22.9	16	0.3
Medlab South Christchurch	9,046	1,253	13.9	31	0.3
Nelson Diagnostic Laboratory†	2,133	443	20.8	25	1.2
Pathlab Waikato	2,674	843	31.5	20	0.8
Southern Community Laboratory Christchurch	5,341	442	8.3	9	0.2
Southern Community Laboratory Dunedin	8,992	552	6.1	89	1.0
Taranaki Medlab	4,121	813	19.7	82	2.0
Valley Diagnostic Laboratory	4,144	875	21.1	71	1.7
Total	102,504	21,983	21.5	915	0.9

† Ceased processing smears during the January – March 2001 reporting quarter.

2.10 Cytology reports predicting HSIL (positive predictive value)

Table 2-18. Cytology reports predicting HSIL by laboratory [targets = 65-85%].

Laboratory	Number of HSIL or invasive carcinoma cytology reports with a follow up histology report	Proportion (%) of HSIL or invasive carcinoma cytology reports confirmed on histology	Proportion of all HSIL or invasive carcinoma cytology reports without a follow up histology report
<i>Hospital-based</i>			
Canterbury Health Laboratories	29	79.3	6.5
Healthlab Otago†	25	96.0	7.4
National Women's Hospital Laboratory	127	74.0	13.6
Waikato Hospital Laboratory	57	63.2	9.5
Wellington Hospital Laboratory	8	87.5	27.3
<i>Community-based</i>			
Diagnostic Medlab Auckland	458	81.2	11.1
Medical Laboratory Southland	24	75.0	7.7
Medical Laboratory Wellington	68	75.0	13.9
Medlab Bay of Plenty	77	75.3	36.9
Medlab Central, Palmerston North	144	73.6	12.7
Medlab Hamilton	88	81.8	7.4
Medlab Hawkes Bay	33	69.7	15.4
Medlab South Christchurch	115	71.3	7.3
Nelson Diagnostic Laboratory†	61	68.9	3.2
Northland Pathology Laboratory	16	81.3	5.9
Pathlab Waikato	35	82.9	2.8
Rotorua Diagnostic Laboratory	42	59.5	25.0
Southern Community Laboratory	328	82.0	6.3
Taranaki Medlab	65	80.0	16.7
Valley Diagnostic Laboratory	65	75.4	17.7
Total	1,865	77.5	12.2

† Ceased processing smears during the January – March 2001 reporting quarter.

2.11 Satisfactory but limited and unsatisfactory smears by smear taker

Table 2-19. The number and proportion (%) of satisfactory but limited and unsatisfactory smears in the quarter by annual volume of smears taken for each smear taker group.

Smear taker group	Annual volume of smears	Total number of smears taken in quarter	Satisfactory smears		Satisfactory but limited smears [target = not more than 20%]		Unsatisfactory smears [target = 0.5 – 2.0%]	
			Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)
Lay	< 30	0	0	0.0	0	0.0	0	0.0
	30-100	28	27	96.4	1	3.6	0	0.0
	> 100	0	0	0.0	0	0.0	0	0.0
	Total	28	27	96.4	1	3.6	0	0.0
Medical	< 30	4,091	2,911	71.2	1,125	27.5	55	1.3
	30-100	19,049	14,493	76.1	4,363	22.9	193	1.0
	> 100	47,410	36,738	77.5	10,299	21.7	373	0.8
	Total	70,550	54,142	76.7	15,787	22.4	621	0.9
Midwife	< 30	154	82	53.2	69	44.8	3	1.9
	30-100	117	92	78.6	25	21.4	0	0.0
	> 100	193	163	84.5	28	14.5	2	1.0
	Total	464	337	72.6	122	26.3	5	1.1
Nurse	< 30	1,499	1,183	78.9	306	20.4	10	0.7
	30-100	8,180	6,557	80.2	1,581	19.3	42	0.5
	> 100	12,843	10,474	81.6	2,291	17.8	78	0.6
	Total	22,522	18,214	80.9	4,178	18.6	130	0.6
Specialist	< 30	188	143	76.1	37	19.7	8	4.3
	30-100	617	404	65.5	190	30.8	23	3.7
	> 100	8,135	6,339	77.9	1,668	20.5	128	1.6
	Total	8,940	6,886	77.0	1,895	21.2	159	1.8
Total		102,504	79,606	77.7	21,983	21.5	915	0.9

Report 3

3.1 Short interval re-screening

Table 3-1. Short interval re-screening proportion (%) for 20-69 year old women by 5-year age group [target = less than 10%].

Age groups (years)	Number of women with at least one A1† or A2‡ smear	Number of women with more than one A1† or A2‡ smear	Number of women with an abnormal smear (ASCUS or worse)	Proportion (%) with >1 A1† or A2‡ smear amongst women with a normal history*	Proportion (%) with >1 A1† smear amongst women with a normal history
20-24	29,857	9,737	4,312	21.2	9.5
25-29	50,835	14,226	4,562	20.9	10.3
30-34	61,206	16,802	3,867	22.6	12.6
35-39	66,761	17,149	3,365	21.7	13.0
40-44	61,974	15,486	2,991	21.2	12.6
45-49	50,971	13,018	2,276	22.1	13.4
50-54	43,231	10,613	1,604	21.6	13.4
55-59	31,132	7,066	960	20.2	12.0
60-64	25,070	5,063	608	18.2	10.8
65-69	18,569	3,155	370	15.3	8.6
Total 20-69	439,606	112,315	24,915	21.1	12.1

† A1 = satisfactory smear

‡ A2 = satisfactory but limited smear

* = (column 3 – column 4) x 100/(column 2 – column 4)

Table 3-2. Short-interval re-screening proportion (%) for 20-69 year old women for each DHB area [target = less than 10%].

District Health Board area	Smear Adequacy	
	Satisfactory (A1) & satisfactory but limited (A2) smears	Satisfactory (A1) smears only
Auckland	27.8	17.4
Bay of Plenty	17.3	6.4
Canterbury	19.0	13.5
Capital Coast	26.7	14.0
Counties Manakau	24.0	12.7
Hawkes Bay	17.4	10.7
Hutt	21.9	14.1
Lakes	19.2	10.0
MidCentral	17.5	10.3
Nelson/Marlborough	16.9	5.7
Northland	25.9	14.5
Otago	14.8	11.1
South Canterbury	19.2	12.9
Southland	13.3	10.1
Tairāwhiti	25.1	14.3
Taranaki	16.2	5.9
Waikato	15.0	5.3
Wairarapa	20.4	10.7
Waitemata	27.1	16.7
West Coast	14.3	9.8
Whanganui	19.0	10.9
DHB Unspecified	22.7	13.1
Total	21.1	12.1

3.2 Delayed re-screening for women with a high grade abnormality

Table 3-3. Timeliness of the most recent smear among women with a history of a high grade or more serious abnormality [targets = 85% within 15 months and 99% within 18 months].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Less than 15 months	15,368	72.5	72.5
15-18 months	1,127	5.3	77.8
More than 18 months	3,129	14.8	92.6
No smear recorded	1,574	7.4	100.0
Total	21,198		

3.3 Follow-up of women with HSIL cytology

Table 3-4. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women [targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	3,142	75.7	75.7
13-26 weeks	469	11.3	87.0
27-52 weeks	210	5.1	92.1
More than 52 weeks	51	1.2	93.3
Subtotal	3,872		
No histology recorded	278	6.7	100.0
Total	4,150		

Table 3-5. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old Maori women [targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	437	64.7	64.7
13-26 weeks	111	16.4	81.2
27-52 weeks	57	8.4	89.6
More than 52 weeks	21	3.1	92.7
Subtotal	626		
No histology recorded	49	7.3	100.0
Total	675		

Table 3-6. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old ‘Other’ women
[targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	2,645	78.3	78.3
13-26 weeks	343	10.1	88.4
27-52 weeks	142	4.2	92.6
More than 52 weeks	29	0.9	93.5
Subtotal	3,159		
No histology recorded	221	6.5	100.0
Total	3,380		

Table 3-7. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old Pacific women
[targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	60	63.2	63.2
13-26 weeks	15	15.8	78.9
27-52 weeks	11	11.6	90.5
More than 52 weeks	1	1.1	91.6
Subtotal	87		
No histology recorded	8	8.4	100.0
Total	95		

Table 3-8. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women by NCSP region [targets = 90% within 12 weeks and 99% within 52 weeks].

NCSP Region	Time period										
	Within 12 weeks		13-26 weeks		27-52 weeks		More than 52 weeks		No histology reported		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Auckland	829	79.9	87	8.4	54	5.2	9	0.9	58	5.6	1,037
Bay of Plenty	183	55.0	60	18.0	20	6.0	7	2.1	63	18.9	333
Canterbury	404	83.5	36	7.4	16	3.3	5	1.0	23	4.8	484
Hawkes Bay	121	75.6	17	10.6	14	8.8	1	0.6	7	4.4	160
Manawatu/ Wanganui	191	75.2	25	9.8	12	4.7	5	2.0	21	8.3	254
Nelson/ Marlborough	72	61.5	30	25.6	10	8.5	1	0.9	4	3.4	117
Northland	79	66.9	18	15.3	10	8.5	3	2.5	8	6.8	118
Otago	225	84.6	27	10.2	10	3.8	1	0.4	3	1.1	266
Southland	97	82.2	10	8.5	4	3.4	2	1.7	5	4.2	118
Tairāwhiti	106	84.8	13	10.4	5	4.0	1	0.8	0	0.0	125
Taranaki	123	68.7	37	20.7	10	5.6	1	0.6	8	4.5	179
Waikato	337	81.8	43	10.4	16	3.9	5	1.2	11	2.7	412
Wellington	353	67.8	65	12.5	28	5.4	10	1.9	65	12.5	521
West Coast	22	84.6	1	3.8	1	3.8	0	0.0	2	7.7	26
Total	3,142	75.7	469	11.3	210	5.1	51	1.2	278	6.7	4,150

Table 3-9. The number of women with no histology result recorded by NCSP-Register status and source of any subsequent smear.

Women's status	Subsequent smear			Total
	No smear	Smear taken by non- specialist	Smear taken by specialist	
Not signed in	29	23	63	115
Signed in since high grade cytology result	34	51	78	163
Total	63	74	141	278

3.4 Cytology abnormality reporting

Table 3-10. Reported smear results by specified cytological result category per 1000 smears by 5-year age group [no targets].

Category of cytology result	Age groups (years)															ASR* (20-69 years)
	<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
Negative for dysplasia or malignancy	818.16	846.61	891.79	921.61	930.50	937.20	938.08	947.74	957.75	962.01	962.25	955.08	930.60	955.56	902.44	921.00
Abnormal – not otherwise specified	0.00	0.00	0.00	0.07	0.14	0.00	0.10	0.00	0.17	0.22	0.00	0.00	0.00	0.00	0.00	0.06
ASCUS (excluding ASCUS possible high grade)	71.35	61.64	45.87	36.29	35.95	36.18	39.65	32.50	29.73	23.55	22.84	24.82	31.55	11.11	24.39	39.15
LSIL	90.57	68.61	38.91	23.43	20.52	15.24	13.25	10.80	6.51	6.44	6.03	13.00	15.77	0.00	24.39	25.33
AGUS favour reactive	0.93	1.07	1.16	1.11	0.96	1.67	1.82	2.07	1.17	0.67	1.27	1.18	3.15	22.22	0.00	1.30
AGUS favour dysplasia	0.00	0.00	0.08	0.21	0.28	0.30	0.10	0.46	0.17	0.44	0.32	1.18	0.00	0.00	24.39	0.21
ASCUS possible high grade	3.24	2.77	2.63	2.83	1.65	1.97	2.59	1.61	1.67	2.00	2.22	2.36	0.00	0.00	0.00	2.27
HSIL	15.75	19.30	19.42	14.31	9.57	7.13	4.13	4.36	2.51	3.78	3.17	2.36	3.15	11.11	0.00	10.30
Adenocarcinoma-in-situ	0.00	0.00	0.15	0.14	0.28	0.23	0.00	0.23	0.17	0.22	0.00	0.00	0.00	0.00	0.00	0.14
Adenocarcinoma – other	0.00	0.00	0.00	0.00	0.00	0.08	0.19	0.11	0.00	0.22	0.95	0.00	12.62	0.00	0.00	0.11
Cancer – not otherwise specified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Squamous carcinoma of the cervix	0.00	0.00	0.00	0.00	0.14	0.00	0.10	0.00	0.17	0.44	0.95	0.00	3.15	0.00	24.39	0.12
Number of smears taken	4,317	11,194	12,928	14,466	14,519	13,185	10,416	8,707	5,988	4,501	3,152	846	317	90	41	104,667

* Age-standardised rates. Age standardised to Segi's World population

Table 3-11. Reported smear results by specified cytological result category per 1000 women by 5-year age group [no targets].

Category of cytology result	Age groups (years)															ASR* (20-69 years)
	<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
Negative for dysplasia or malignancy	820.84	849.39	893.19	923.04	932.07	937.83	939.04	948.26	958.35	963.89	963.76	955.74	931.82	954.55	897.44	922.39
Abnormal – not otherwise specified	0.00	0.00	0.00	0.07	0.07	0.00	0.10	0.00	0.17	0.22	0.00	0.00	0.00	0.00	0.00	0.05
ASCUS (excluding ASCUS possible high grade)	69.84	60.86	45.54	36.25	35.46	36.01	39.41	32.53	29.51	22.21	21.49	23.92	29.22	11.36	25.64	38.71
LSIL	89.70	67.36	38.26	23.21	20.30	14.99	13.11	10.53	6.41	6.28	5.77	13.16	16.23	0.00	25.64	24.92
AGUS favour reactive	0.93	1.08	1.17	1.05	0.97	1.61	1.84	2.08	1.18	0.45	1.28	1.20	3.25	22.73	0.00	1.28
AGUS favour dysplasia	0.00	0.00	0.08	0.21	0.21	0.31	0.10	0.46	0.00	0.45	0.32	1.20	0.00	0.00	25.64	0.19
ASCUS possible high grade	3.27	2.62	2.58	2.72	1.60	1.99	2.43	1.62	1.52	1.79	2.25	2.39	0.00	0.00	0.00	2.18
HSIL	15.42	18.69	19.01	13.31	8.97	6.96	3.69	4.05	2.53	3.81	3.21	2.39	3.25	11.36	0.00	9.90
Adenocarcinoma-in-situ	0.00	0.00	0.16	0.14	0.21	0.23	0.00	0.23	0.17	0.22	0.00	0.00	0.00	0.00	0.00	0.13
Adenocarcinoma – other	0.00	0.00	0.00	0.00	0.00	0.08	0.19	0.12	0.00	0.22	0.96	0.00	12.99	0.00	0.00	0.11
Cancer – not otherwise specified	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Squamous carcinoma of the cervix	0.00	0.00	0.00	0.00	0.14	0.00	0.10	0.00	0.17	0.45	0.96	0.00	3.25	0.00	25.64	0.12
Number of women screened	4,281	11,075	12,780	14,345	14,382	13,078	10,301	8,639	5,930	4,458	3,118	836	308	88	39	103,658

* Age-standardised rates. Age standardised to Segi's World population

3.5 Histology abnormality reporting

Table 3-12. The number of histology reports by histological result category by 5-year age group.

Category of histology result	Age groups (years)															Total number of histology reports
	<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
Normal	14	68	105	132	193	197	206	137	79	63	32	26	19	8	4	1,283
Other non neoplastic	22	118	114	135	165	203	197	179	81	50	43	28	21	10	5	1,371
Polyp	0	1	3	11	21	35	35	40	31	16	9	3	2	2	0	209
Atypia/HPV	41	198	199	183	159	140	107	71	36	17	12	4	2	1	1	1,171
CIN-not otherwise specified	1	1	3	1	3	2	1	0	1	1	0	0	0	0	0	14
LSIL	82	292	274	215	157	151	81	49	28	15	6	5	1	2	0	1,358
HSIL	90	434	442	342	204	160	59	42	16	20	13	8	0	0	0	1,830
Glandular dysplasia	1	0	0	1	0	1	2	1	0	0	0	1	0	0	0	7
Adenocarcinoma-in-situ	0	2	7	6	4	4	1	0	1	1	1	0	0	0	0	27
Other cervical cancer	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4
Invasive adenocarcinoma†	0	1	3	2	3	3	2	2	2	4	4	1	2	0	1	30
Adenosquamous carcinoma	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Microinvasive squamous carcinoma	0	0	2	2	0	0	0	0	1	0	0	0	0	0	0	5
Invasive squamous carcinoma	0	0	2	9	11	7	8	3	0	3	1	5	0	1	1	51
Metastatic carcinoma‡	0	0	0	0	0	0	1	0	1	1	0	1	2	0	1	7
Total	251	1,115	1,154	1,039	920	903	702	527	277	191	121	82	50	24	13	7,369

† Origins of adenocarcinomas were unknown but possible sites include cervix, endometrium and bowel.

‡ Primary site unknown.

Table 3-13. The number of histology reports by most severe histological result category for women by 5-year age group and quarterly histology reporting rate per 10,000 women population.

Category of histology result		Age groups (years)														Number of histology reports and ASR (20-69)*	
		<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84		85+
Normal	Number	11	51	80	108	156	170	185	122	70	55	26	24	17	8	4	1,087
	Rate	0.20	4.02	5.76	7.10	9.86	11.13	13.74	9.86	7.40	6.86	3.95	3.80	3.11	2.06	1.16	
Other non neoplastic	Number	19	91	94	116	152	185	180	164	79	46	43	25	21	9	5	1,229
	Rate	0.34	7.18	6.77	7.63	9.61	12.11	13.37	13.25	8.35	5.73	6.54	3.96	3.84	2.31	1.45	
Polyp	Number	0	1	3	11	20	35	35	40	31	16	9	3	2	2	0	208
	Rate	0.00	0.08	0.22	0.72	1.26	2.29	2.60	3.23	3.28	1.99	1.37	0.48	0.37	0.51	0.00	
Atypia/HPV	Number	33	170	166	152	133	123	99	66	32	15	10	4	2	1	1	1,007
	Rate	0.59	13.41	11.96	9.99	8.41	8.05	7.36	5.33	3.38	1.87	1.52	0.63	0.37	0.26	0.29	
CIN-not otherwise specified	Number	1	0	3	1	3	2	0	0	1	1	0	0	0	0	0	12
	Rate	0.02	0.00	0.22	0.07	0.19	0.13	0.00	0.00	0.11	0.12	0.00	0.00	0.00	0.00	0.00	
LSIL	Number	75	244	238	185	131	128	74	48	26	15	6	5	1	2	0	1,178
	Rate	1.35	19.25	17.15	12.16	8.28	8.38	5.50	3.88	2.75	1.87	0.91	0.79	0.18	0.51	0.00	
HSIL	Number	82	374	353	275	167	133	47	35	14	17	12	5	0	0	0	1,514
	Rate	1.48	29.50	25.43	18.08	10.56	8.71	3.49	2.83	1.48	2.12	1.83	0.79	0.00	0.00	0.00	
Glandular dysplasia	Number	1	0	0	0	0	1	2	1	0	0	0	1	0	0	0	6
	Rate	0.02	0.00	0.00	0.00	0.00	0.07	0.15	0.08	0.00	0.00	0.00	0.16	0.00	0.00	0.00	
Adenocarcinoma -in-situ	Number	0	2	7	4	4	4	1	0	1	1	1	0	0	0	0	25
	Rate	0.00	0.16	0.50	0.26	0.25	0.26	0.07	0.00	0.11	0.12	0.15	0.00	0.00	0.00	0.00	
Other cervical cancer	Rate	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
	Number	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.18	0.00	0.00	
Invasive adenocarcinoma†	Number	0	1	3	1	1	1	1	2	2	3	4	1	2	0	1	23
	Rate	0.00	0.08	0.22	0.07	0.06	0.07	0.07	0.16	0.21	0.37	0.61	0.16	0.37	0.00	0.29	
Rest of Table 3-13 continued on next page																	

* Age-standardised rates. Age standardised to Segi's World population

† Origins of adenocarcinomas were unknown but possible sites include cervix, endometrium and bowel.

Table 3-13 *continued*

Category of histology result		Age groups (years)														Number of histology reports and ASR (20-69)*	
		<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84		85+
Adenosquamous carcinoma	Number	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	Rate	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Microinvasive squamous carcinoma	Number	0	0	2	2	0	0	0	0	1	0	0	0	0	0	0	5
	Rate	0.00	0.00	0.14	0.13	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Invasive squamous carcinoma	Number	0	0	2	5	7	6	5	2	0	3	1	5	0	1	1	38
	Rate	0.00	0.00	0.14	0.33	0.44	0.39	0.37	0.16	0.00	0.37	0.15	0.79	0.00	0.26	0.29	0.23
Metastatic carcinoma‡	Number	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	6
	Rate	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.11	0.12	0.00	0.16	0.18	0.00	0.29	0.02
Total		222	934	951	860	774	788	631	482	258	173	112	74	47	23	13	6,342

* Age-standardised rates. Age standardised to Segi's World population

‡ Primary site unknown.

3.6 Summary of laboratory indicators

Table 3-14. A summary of laboratory indicators reported quarterly.

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy* (target = not more than 96%)		HSIL* (target = not less than 0.6%)		Total abnormalities+* (target = not more than 10%)		Positive predictive value of HSIL (target range = 65%-85%)		Smear turn around time proportion (%)
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Hospital-based</i>	Number													Within 7 days
Auckland Hospital Laboratory‡	2,410	676	28.0	69	2.9	1,712	73.13	128	5.47	629	26.87	136	74.3	92.86
Canterbury Health Laboratories	827	196	23.7	18	2.2	624	77.13	27	3.34	185	22.87	26	84.6	100.00
Healthlab Otago#	-	-	-	-	-	-	-	-	-	-	-	36	86.1	-
Waikato Hospital Laboratory	795	121	15.2	13	1.6	481	61.51	26	3.32	301	38.49	53	66.0	94.09
Wellington Hospital Laboratory	302	181	59.9	4	1.3	200	67.11	20	6.71	98	32.89	10	90.0	98.34
<i>Community-based</i>														
Diagnostic Medlab Auckland	32,559	7,784	23.9	206	0.6	30,790	95.17	243	0.75	1,563	4.83	432	78.7	98.57
Medical Laboratory Southland	1,127	154	13.7	6	0.5	1,062	94.74	8	0.71	59	5.26	20	80.0	100.00
Rest of Table 3-14 continued on next page														

* Unsatisfactory smears excluded.

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women’s Hospital Laboratory.

This laboratory has ceased reporting smears, but it was doing so during the time period for which the positive predictive value of HSIL cytology reports indicator was calculated.

Table 3-14 continued

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy* (target = not more than 96%)		HSIL* (target = not less than 0.6%)		Total abnormalities†* (target = not more than 10%)		Positive predictive value of HSIL (target range = 65%-85%)		Smear turn around time proportion (%) Within 7 days
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Community-based</i>	Number	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
Medical Laboratory Wellington	10,520	2,304	21.9	192	1.8	9,434	91.34	64	0.62	894	8.66	85	76.5	91.40
Medlab Bay of Plenty	6,765	1,771	26.2	50	0.7	5,335	79.45	142	2.11	1,380	20.55	98	70.4	1.24
Medlab Central, Palmerston North	7,673	1,680	21.9	27	0.4	7,068	92.44	70	0.92	578	7.56	113	77.9	99.93
Medlab Hamilton	6,757	1,241	18.4	19	0.3	6,269	93.04	43	0.64	469	6.96	62	85.5	66.43
Medlab Hawkes Bay#	-	-	-	-	-	-	-	-	-	-	-	44	63.6	-
Medlab South Christchurch	9,761	1,343	13.8	54	0.6	9,103	93.78	42	0.43	604	6.22	120	68.3	100.00
Nelson Diagnostic Laboratory#	-	-	-	-	-	-	-	-	-	-	-	48	62.5	-
Pathlab Waikato	2,870	926	32.3	25	0.9	2,264	79.58	43	1.51	581	20.42	40	70.0	99.37
SCL** Christchurch	5,363	500	9.3	22	0.4	5,090	95.30	46	0.86	251	4.70	33	66.7	99.94
SCL** Dunedin	9,264	619	6.7	89	1.0	8,769	95.57	112	1.22	406	4.43	297	81.8	99.91
Taranaki Medlab	4,410	1,063	24.1	103	2.3	3,921	91.04	50	1.16	386	8.96	69	81.2	95.12
Valley Diagnostic Laboratory	4,208	739	17.6	47	1.1	3,962	95.22	38	0.91	199	4.78	49	81.6	92.23
Total	105,611	21,298	20.2	944	0.9	96,084	91.80	1,102	1.05	8,583	8.20	1,771	76.7	89.47

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes. * Unsatisfactory smears excluded.

**SCL = Southern Community Laboratory.

These two laboratories have ceased reporting smears, but they were doing so during the time period for which the positive predictive value of HSIL cytology reports indicator was calculated.

3.7 Laboratory smear reporting

Table 3-15. The number and proportion of satisfactory or satisfactory but limited smears in broad cytological categories for each laboratory.

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favour reaction		AGUS favour dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalities† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Hospital-based</i>																	
Auckland Hospital Laboratory‡	1,712	73.13	302	12.90	185	7.90	7	0.30	2	0.09	13	0.56	128	5.47	629	26.87	2341
Canterbury Health Laboratories	624	77.13	90	11.12	66	8.16	1	0.12	0	0.00	2	0.25	27	3.34	185	22.87	809
Waikato Hospital Laboratory	481	61.51	164	20.97	108	13.81	1	0.13	0	0.00	5	0.64	26	3.32	301	38.49	782
Wellington Hospital Laboratory	200	67.11	65	21.81	12	4.03	0	0.00	1	0.34	9	3.02	20	6.71	98	32.89	298
Rest of Table 3-15 continued on next page																	

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women's Hospital Laboratory.

Table 3-15 *continued*

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favour reaction		AGUS favour dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalitie† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Community-based</i>																	
Diagnostic Medlab Auckland	30,790	95.17	658	2.03	633	1.96	19	0.06	0	0.00	47	0.15	243	0.75	1,563	4.83	32,353
Medical Laboratory Southland	1,062	94.74	24	2.14	21	1.87	2	0.18	1	0.09	2	0.18	8	0.71	59	5.26	1,121
Medical Laboratory Wellington	9,434	91.34	565	5.47	249	2.41	10	0.10	4	0.04	19	0.18	64	0.62	894	8.66	10,328
Medlab Bay of Plenty	5,335	79.45	924	13.76	255	3.80	48	0.71	5	0.07	33	0.49	142	2.11	1,380	20.55	6,715
Medlab Central, Palmerston North	7,068	92.44	294	3.85	192	2.51	10	0.13	4	0.05	34	0.44	70	0.92	578	7.56	7,646
Medlab Hamilton	6,269	93.04	211	3.13	211	3.13	4	0.06	0	0.00	7	0.10	43	0.64	469	6.96	6,738
Medlab South Christchurch	9,103	93.78	305	3.14	244	2.51	8	0.08	3	0.03	13	0.13	42	0.43	604	6.22	9,707
Pathlab Waikato	2,264	79.58	398	13.99	125	4.39	13	0.46	1	0.04	21	0.74	43	1.51	581	20.42	2,845
SCL* Christchurch	5,090	95.30	104	1.95	98	1.83	2	0.04	1	0.02	7	0.13	46	0.86	251	4.70	5,341
SCL* Dunedin	8,769	95.57	95	1.04	195	2.13	2	0.02	1	0.01	13	0.14	112	1.22	406	4.43	9,175
Taranaki Medlab	3,921	91.04	194	4.50	129	3.00	11	0.26	0	0.00	9	0.21	50	1.16	386	8.96	4,307
Valley Diagnostic Laboratory	3,962	95.22	46	1.11	113	2.72	0	0.00	0	0.00	5	0.12	38	0.91	199	4.78	4,161
Total	96,084	91.80	4,439	4.24	2,836	2.71	138	0.13	23	0.02	239	0.23	1,102	1.05	8,583	8.20	104,667

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

* SCL = Southern Community Laboratory.

3.8 Laboratory cytology turn around time

Table 3-16. Timeliness of smear reporting by laboratories [targets = 90% within 7 working days and 100% within 14 working days].

Laboratory	Within 7 working days	From 8-14 working days		More than 14 working days
	Proportion (%)	Proportion (%)	Cumulative Proportion (%)	Proportion (%)
<i>Hospital-based</i>				
Auckland Hospital Laboratory	92.86	6.68	99.54	0.46
Canterbury Health Laboratories	100.00	0.00	100.00	0.00
Waikato Hospital Laboratory	94.09	5.91	100.00	0.00
Wellington Hospital Laboratory	98.34	0.33	98.68	1.32
<i>Community-based</i>				
Diagnostic Medlab Auckland	98.57	1.40	99.97	0.03
Medical Laboratory Southland	100.00	0.00	100.00	0.00
Medical Laboratory Wellington	91.40	8.58	99.98	0.02
Medlab Bay of Plenty	1.24	46.83	48.07	51.93
Medlab Central, Palmerston North	99.93	0.07	100.00	0.00
Medlab Hamilton	66.43	19.98	86.41	13.59
Medlab South Christchurch	100.00	0.00	100.00	0.00
Pathlab Waikato	99.37	0.63	100.00	0.00
Southern Community Laboratory Christchurch	99.94	0.04	99.98	0.02
Southern Community Laboratory Dunedin	99.91	0.04	99.96	0.04
Taranaki Medlab	95.12	4.88	100.00	0.00
Valley Diagnostic Laboratory	92.23	7.15	99.38	0.62
Total	89.47	6.28	96.46	4.25

3.9 Satisfactory but limited and unsatisfactory smears by laboratory

Table 3-17. The number and proportion of satisfactory but limited and unsatisfactory smears reported by laboratory.

Laboratory	Total smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)	
	Number	Number	(%)	Number	(%)
<i>Hospital-based</i>					
Auckland Hospital Laboratory	2,410	676	28.0	69	2.9
Canterbury Health Laboratories	827	196	23.7	18	2.2
Waikato Hospital Laboratory	795	121	15.2	13	1.6
Wellington Hospital Laboratory	302	181	59.9	4	1.3
<i>Community-based</i>					
Diagnostic Medlab Auckland	32,559	7,784	23.9	206	0.6
Medical Laboratory Southland†	1,127	154	13.7	6	0.5
Medical Laboratory Wellington	10,520	2,304	21.9	192	1.8
Medlab Bay of Plenty	6,765	1,771	26.2	50	0.7
Medlab Central, Palmerston North	7,673	1,680	21.9	27	0.4
Medlab Hamilton	6,757	1,241	18.4	19	0.3
Medlab South Christchurch	9,761	1,343	13.8	54	0.6
Pathlab Waikato	2,870	926	32.3	25	0.9
Southern Community Laboratory Christchurch	5,363	500	9.3	22	0.4
Southern Community Laboratory Dunedin	9,264	619	6.7	89	1.0
Taranaki Medlab	4,410	1,063	24.1	103	2.3
Valley Diagnostic Laboratory	4,208	739	17.6	47	1.1
Total	105,611	21,298	20.2	944	0.9

3.10 Cytology reports predicting HSIL (positive predictive value)

Table 3-18. Cytology reports predicting HSIL by laboratory [targets = 65-85%].

Laboratory	Number of HSIL or invasive carcinoma cytology reports with a follow up histology report	Proportion (%) of HSIL or invasive carcinoma cytology reports confirmed on histology	Proportion of all HSIL or invasive carcinoma cytology reports without a follow up histology report
<i>Hospital-based</i>			
Canterbury Health Laboratories	31	83.9	8.8
Healthlab Otago	41	85.4	6.8
National Women's Hospital Laboratory	144	74.3	13.3
Waikato Hospital Laboratory	54	66.7	10.0
Wellington Hospital Laboratory	10	90.0	0.0
<i>Community-based</i>			
Diagnostic Medlab Auckland	446	78.7	8.4
Medical Laboratory Southland	21	81.0	4.5
Medical Laboratory Wellington	86	75.6	14.9
Medlab Bay of Plenty	100	70.0	27.5
Medlab Central, Palmerston North	121	77.7	10.4
Medlab Hamilton	64	85.9	16.9
Medlab Hawkes Bay	47	63.8	7.8
Medlab South Christchurch	123	68.3	7.5
Nelson Diagnostic Laboratory	49	63.3	5.8
Pathlab Waikato	41	70.7	4.7
Rotorua Diagnostic Laboratory	35	65.7	27.1
Southern Community Laboratory	317	80.4	9.9
Taranaki Medlab	77	77.9	18.1
Valley Diagnostic Laboratory	53	79.2	23.2
Total	1,860	76.3	12.1

3.11 Satisfactory but limited and unsatisfactory smears by smear taker

Table 3-19. The number and proportion (%) of satisfactory but limited and unsatisfactory smears in the quarter by annual volume of smears taken for each smear taker group.

Smear taker group	Annual volume of smears	Total number of smears taken in quarter	Satisfactory smears		Satisfactory but limited smears [target = not more than 20%]		Unsatisfactory smears [target = 0.5 – 2.0%]	
			Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)
Lay	< 30	0	0	0.0	0	0.0	0	0.0
	30-100	23	19	82.6	4	17.4	0	0.0
	> 100	0	0	0.0	0	0.0	0	0.0
	Total	23	19	82.6	4	17.4	0	0.0
Medical	< 30	3,696	2,645	71.6	998	27.0	53	1.4
	30-100	19,742	15,344	77.7	4,206	21.3	192	1.0
	> 100	47,619	37,670	79.1	9,567	20.1	382	0.8
	Total	71,057	55,659	78.3	14,771	20.8	627	0.9
Midwife	< 30	178	111	62.4	64	36.0	3	1.7
	30-100	97	76	78.4	20	20.6	1	1.0
	> 100	94	72	76.6	20	21.3	2	2.1
	Total	369	259	70.2	104	28.2	6	1.6
Nurse	< 30	2,026	1,606	79.3	406	20.0	14	0.7
	30-100	9,064	7,342	81.0	1,667	18.4	55	0.6
	> 100	13,188	10,803	81.9	2,316	17.6	69	0.5
	Total	24,278	19,751	81.4	4,389	18.1	138	0.6
Specialist	< 30	157	122	77.7	32	20.4	3	1.9
	30-100	642	429	66.8	196	30.5	17	2.6
	> 100	9,085	7,130	78.5	1,802	19.8	153	1.7
	Total	9,884	7,681	77.7	2,030	20.5	173	1.8
Total		105,611	83,369	78.9	21,298	20.2	944	0.9

Report 4

4.1 Short interval re-screening

Table 4-1. Short interval re-screening proportion (%) for 20-69 year old women by 5-year age group [target = less than 10%].

Age groups (years)	Number of women with at least one A1† or A2‡ smear	Number of women with more than one A1† or A2‡ smear	Number of women with an abnormal smear (ASCUS or worse)	Proportion (%) with >1 A1† or A2‡ smear amongst women with a normal history*	Proportion (%) with >1 A1† smear amongst women with a normal history
20-24	29,294	9,608	4,320	21.2	9.3
25-29	50,184	13,907	4,628	20.4	9.7
30-34	61,011	16,563	3,938	22.1	12.3
35-39	66,316	16,785	3,446	21.2	12.5
40-44	62,813	15,662	3,114	21.0	12.3
45-49	51,574	13,041	2,368	21.7	13.1
50-54	43,723	10,687	1,657	21.5	13.2
55-59	31,585	7,158	988	20.2	11.9
60-64	25,622	5,139	622	18.1	10.6
65-69	18,868	3,200	394	15.2	8.3
Total 20-69	440,990	111,750	25,475	20.8	11.7

† A1 = satisfactory smear

‡ A2 = satisfactory but limited smear

* = (column 3 – column 4) x 100/(column 2 – column 4)

Table 4-2. Short-interval re-screening proportion (%) for 20-69 year old women for each DHB area [target = less than 10%].

District Health Board area	Smear Adequacy	
	Satisfactory (A1) & satisfactory but limited (A2) smears	Satisfactory (A1) smears only
Auckland	27.8	17.2
Bay of Plenty	17.9	5.9
Canterbury	18.4	13.1
Capital Coast	25.3	12.8
Counties Manakau	24.2	13.0
Hawkes Bay	17.0	10.3
Hutt	20.8	12.9
Lakes	18.9	9.0
MidCentral	17.2	9.8
Nelson/Marlborough	16.7	5.3
Northland	24.9	14.7
Otago	14.7	11.2
South Canterbury	18.9	12.6
Southland	13.0	9.9
Tairāwhiti	25.3	14.2
Taranaki	15.7	5.4
Waikato	15.0	4.9
Wairarapa	20.5	10.8
Waitemata	27.2	16.5
West Coast	14.1	10.4
Whanganui	18.2	10.1
DHB Unspecified	22.5	14.0
Total	20.8	11.7

4.2 Delayed re-screening for women with a high grade abnormality

Table 4-3. Timeliness of the most recent smear among women with a history of a high grade or more serious abnormality
[targets = 85% within 15 months and 99% within 18 months].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Less than 15 months	16,043	72.6	72.6
15-18 months	1,131	5.1	77.7
More than 18 months	3,358	15.2	92.9
No smear recorded	1,578	7.1	100.0
Total	22,105		

4.3 Follow-up of women with HSIL cytology

Table 4-4. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women [targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	3,499	76.3	76.3
13-26 weeks	484	10.6	86.8
27-52 weeks	234	5.1	91.9
More than 52 weeks	50	1.1	93.0
Subtotal	4,267		
No histology recorded	320	7.0	100
Total	4,587		

Table 4-5. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old Maori women [targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	499	67.0	67.0
13-26 weeks	113	15.2	82.1
27-52 weeks	62	8.3	90.5
More than 52 weeks	16	2.1	92.6
Subtotal	690		
No histology recorded	55	7.4	100
Total	745		

Table 4-6. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old ‘Other’ women
[targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	2,931	78.6	78.6
13-26 weeks	356	9.5	88.1
27-52 weeks	160	4.3	92.4
More than 52 weeks	32	0.9	93.2
Subtotal	3,479		
No histology recorded	252	6.8	100.0
Total	3,731		

Table 4-7. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old Pacific women
[targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	69	62.2	62.2
13-26 weeks	15	13.5	75.7
27-52 weeks	12	10.8	86.5
More than 52 weeks	2	1.8	88.3
Subtotal	98		
No histology recorded	13	11.7	100.0
Total	111		

Table 4-8. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women by NCSP region [targets = 90% within 12 weeks and 99% within 52 weeks].

NCSP Region	Time period										
	Within 12 weeks		13-26 weeks		27-52 weeks		More than 52 weeks		No histology reported		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Auckland	987	79.1	96	7.7	71	5.7	10	0.8	84	6.7	1,248
Bay of Plenty	244	57.3	66	15.5	28	6.6	9	2.1	79	18.5	426
Canterbury	430	83.8	38	7.4	13	2.5	6	1.2	26	5.1	513
Hawkes Bay	121	73.3	15	9.1	16	9.7	3	1.8	10	6.1	165
Manawatu/ Wanganui	237	80.1	22	7.4	12	4.1	4	1.4	21	7.1	296
Nelson/ Marlborough	101	65.6	39	25.3	10	6.5	1	0.6	3	1.9	154
Northland	108	74.0	20	13.7	8	5.5	1	0.7	9	6.2	146
Otago	245	86.0	28	9.8	8	2.8	0	0.0	4	1.4	285
Southland	110	80.3	15	10.9	6	4.4	2	1.5	4	2.9	137
Tairāwhiti	91	84.3	10	9.3	6	5.6	1	0.9	0	0.0	108
Taranaki	121	73.3	26	15.8	7	4.2	1	0.6	10	6.1	165
Waikato	327	82.0	41	10.3	18	4.5	3	0.8	10	2.5	399
Wellington	356	68.6	67	12.9	29	5.6	9	1.7	58	11.2	519
West Coast	21	80.8	1	3.8	2	7.7	0	0.0	2	7.7	26
Total	3,499	76.3	484	10.6	234	5.1	50	1.1	320	7.0	4,587

Table 4-9. The number of women with no histology result recorded by NCSP-Register status and source of any subsequent smear.

Women's status	Subsequent smear			Total
	No smear	Smear taken by non- specialist	Smear taken by specialist	
Not signed in	44	44	59	147
Signed in since high grade cytology result	41	61	71	173
Total	85	105	130	320

4.4 Summary of laboratory indicators

Table 4-10. A summary of laboratory indicators reported quarterly.

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy* (target = not more than 96%)		Total ASCUS* (including ASCUS possible HSIL)		HSIL* (target = not less than 0.6%)		Total abnormalities†** (target = not more than 10%)		Smear turn around time proportion (%)
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Hospital-based</i>	Number	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
Auckland Hospital Laboratory‡	2,068	579	28.0	70	3.4	1,431	71.62	314	15.72	100	5.01	567	28.38	98.36
Canterbury Health Laboratories	1,396	257	18.4	19	1.4	1,149	83.44	83	6.03	43	3.12	228	16.56	100.00
Waikato Hospital Laboratory	155	28	18.1	1	0.7	123	79.87	19	12.34	4	2.60	31	20.13	100.00
Rest of Table 4-10 continued on next page														

* Unsatisfactory smears excluded.

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women's Hospital Laboratory.

Table 4-10 continued

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy* (target = not more than 96%)		Total ASCUS* (including ASCUS possible HSIL)		HSIL* (target = not less than 0.6%)		Total abnormalities†* (target = not more than 10%)		Smear turn around time proportion (%)
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
<i>Community-based</i>	Number													
Diagnostic Medlab Auckland	31,230	6,945	22.2	218	0.7	29,539	95.25	608	1.96	208	0.67	1,473	4.75	99.42
Medical Laboratory Southland‡	1,146	133	11.6	5	0.4	1,055	92.46	37	3.24	12	1.05	86	7.54	100.00
Medical Laboratory Wellington#	9,021	2,044	22.7	160	1.8	7,995	90.23	485	5.47	75	0.85	866	9.77	87.87
Medlab Bay of Plenty	6,933	1,929	27.8	47	0.7	5,811	84.39	708	10.28	91	1.32	1,075	15.61	92.43
Medlab Central, Palmerston North	7,810	1,623	20.8	36	0.5	7,140	91.84	304	3.91	69	0.89	634	8.16	99.99
Medlab Hamilton	7,509	1,587	21.1	23	0.3	6,740	90.03	348	4.65	72	0.96	746	9.97	100.00
Medlab South Christchurch	9,486	1,342	14.2	35	0.4	8,749	92.57	319	3.38	78	0.83	702	7.43	100.00
Pathlab Waikato	2,831	892	31.5	21	0.7	2,297	81.74	348	12.38	54	1.92	513	18.26	99.89
SCL** Christchurch	5,038	474	9.4	16	0.3	4,783	95.24	75	1.49	52	1.04	239	4.76	99.94
SCL** Dunedin	9,576	646	6.8	92	1.0	9,007	94.97	89	0.94	122	1.29	477	5.03	99.89
Taranaki Medlab	4,465	855	19.2	91	2.0	3,896	89.07	238	5.44	58	1.33	478	10.93	99.78
Valley Diagnostic Laboratory#	3,233	565	17.5	78	2.4	2,987	94.68	58	1.84	22	0.70	168	5.32	82.59
Total	101,897	19,899	19.5	912	0.9	92,702	91.80	4,033	3.99	1,060	1.05	8,283	8.20	97.62

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

* Unsatisfactory smears excluded.

**SCL = Southern Community Laboratory.

‡ Medical Laboratory Southland ceased reporting smears in August 2001 and data presented for this laboratory also includes some smears processed by Medlab South after August 2001.

The results of some smears processed at these laboratories during the quarter were not recorded on the NCSP-Register due to staffing issues at the Wellington NCSP regional site.

4.5 Laboratory smear reporting

Table 4-11. The number and proportion of satisfactory or satisfactory but limited smears in broad cytological categories for each laboratory.

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favour reaction		AGUS favour dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalities† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Hospital-based</i>																	
Auckland Hospital Laboratory‡	1,431	71.62	314	15.72	134	6.71	10	0.50	1	0.05	11	0.55	100	5.01	567	28.38	1,998
Canterbury Health Laboratories	1,149	83.44	83	6.03	91	6.61	4	0.29	1	0.07	12	0.87	43	3.12	228	16.56	1,377
Waikato Hospital Laboratory	123	79.87	19	12.34	8	5.19	0	0.00	0	0.00	0	0.00	4	2.60	31	20.13	154
Rest of Table 4-11 continued on next page																	

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women's Hospital Laboratory.

Table 4-11 *continued*

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favour reaction		AGUS favour dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalitie† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Community-based</i>																	
Diagnostic Medlab Auckland	29,539	95.25	608	1.96	631	2.03	15	0.05	0	0.00	49	0.16	208	0.67	1,473	4.75	31,012
Medical Laboratory Southland‡	1,055	92.46	37	3.24	32	2.80	3	0.26	0	0.00	3	0.26	12	1.05	86	7.54	1,141
Medical Laboratory Wellington#	7,995	90.23	485	5.47	283	3.19	13	0.15	6	0.07	30	0.34	75	0.85	866	9.77	8,861
Medlab Bay of Plenty	5,811	84.39	708	10.28	237	3.44	34	0.49	1	0.01	10	0.15	91	1.32	1,075	15.61	6,886
Medlab Central, Palmerston North	7,140	91.84	304	3.91	241	3.10	6	0.08	7	0.09	51	0.66	69	0.89	634	8.16	7,774
Medlab Hamilton	6,740	90.03	348	4.65	315	4.21	7	0.09	0	0.00	6	0.08	72	0.96	746	9.97	7,486
Medlab South Christchurch	8,749	92.57	319	3.38	278	2.94	12	0.13	4	0.04	18	0.19	78	0.83	702	7.43	9,451
Pathlab Waikato	2,297	81.74	348	12.38	102	3.63	7	0.25	1	0.04	10	0.36	54	1.92	513	18.26	2,810
SCL* Christchurch	4,783	95.24	75	1.49	104	2.07	5	0.10	0	0.00	7	0.14	52	1.04	239	4.76	5,022
SCL* Dunedin	9,007	94.97	89	0.94	260	2.74	4	0.04	0	0.00	20	0.21	122	1.29	477	5.03	9,484
Taranaki Medlab	3,896	89.07	238	5.44	171	3.91	10	0.23	1	0.02	13	0.30	58	1.33	478	10.93	4,374
Valley Diagnostic Laboratory#	2,987	94.68	58	1.84	88	2.79	0	0.00	0	0.00	2	0.06	22	0.70	168	5.32	3,155
Total	92,702	91.80	4,033	3.99	2,975	2.95	130	0.13	22	0.02	242	0.24	1,060	1.05	8,283	8.20	100,985

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

* SCL = Southern Community Laboratory.

‡ Medical Laboratory Southland ceased processing smears in August 2001 and data presented for this laboratory also includes some smears processed by Medlab South after August 2001.

The results of some smears processed at these laboratories during the quarter were not recorded on the NCSP-Register due to staffing issues at the Wellington NCSP regional site.

4.6 Laboratory cytology turn around time

Table 4-12. Timeliness of smear reporting by laboratories [targets = 90% within 7 working days and 100% within 14 working days].

Laboratory	Within 7 working days	From 8-14 working days		More than 14 working days
	Proportion (%)	Proportion (%)	Cumulative Proportion (%)	Proportion (%)
<i>Hospital-based</i>				
Auckland Hospital Laboratory	98.36	1.45	99.81	0.19
Canterbury Health Laboratories	100.00	0.00	100.00	0.00
Waikato Hospital Laboratory	100.00	0.00	100.00	0.00
<i>Community-based</i>				
Diagnostic Medlab Auckland	99.42	0.56	99.98	0.02
Medical Laboratory Southland†	100.00	0.00	100.00	0.00
Medical Laboratory Wellington‡	87.87	12.13	100.00	0.00
Medlab Bay of Plenty	92.43	7.57	100.00	0.00
Medlab Central, Palmerston North	99.99	0.01	100.00	0.00
Medlab Hamilton	100.00	0.00	100.00	0.00
Medlab South Christchurch	100.00	0.00	100.00	0.00
Pathlab Waikato	99.89	0.11	100.00	0.00
Southern Community Laboratory Christchurch	99.94	0.02	99.96	0.04
Southern Community Laboratory Dunedin	99.89	0.05	99.94	0.06
Taranaki Medlab	99.78	0.22	100.00	0.00
Valley Diagnostic Laboratory‡	82.59	17.32	99.91	0.09
Total	97.62	2.36	99.98	0.02

† Medical Laboratory Southland ceased processing smears in August 2001 and data presented for this laboratory also includes some smears processed by Medlab South after August 2001.

‡ The results of some smears processed at these laboratories during the quarter were not recorded on the NCSP-Register due to staffing issues at the Wellington NCSP regional site.

4.7 Laboratory histology turn around time

Table 4-13. Timeliness of the reporting of histology by laboratory [targets = 90% within 5 working days and 100% within a reasonable period of time].

Laboratory	Number of histology specimens	Within 5 working days	6-10 working days	11 or more working days
		Proportion (%)	Proportion (%)	Proportion (%)
<i>Hospital-based</i>				
Auckland Hospital Laboratory	195	69.9	20.1	10.0
Canterbury Health Laboratories	671	99.9	0.1	0.0
Healthlab Otago	291	96.7	2.3	1.0
Hutt Hospital Laboratory	158	91.3	6.9	1.7
Memorial Hospital Hastings Lab	83	94.3	4.5	1.1
Middlemore Hospital Laboratory	146	100.0	0.0	0.0
North Shore Hospital Laboratory	380	99.5	0.5	0.0
Rotorua Hospital Laboratory	76	76.0	9.0	15.0
Southland Hospital Laboratory	84	94.4	4.5	1.1
Taranaki Base Hospital Laboratory	112	69.1	8.6	22.2
Waikato Hospital Laboratory	658	96.2	3.1	0.7
Wanganui Hospital Laboratory	70	97.2	2.8	0.0
Wellington Hospital Laboratory	209	77.1	21.0	1.8
Whangarei Hospital Laboratory	128	85.3	12.0	2.7
<i>Community-based</i>				
Diagnostic Medlab Auckland	1,123	98.4	1.4	0.2
Medical Laboratory Southland	53	96.4	1.8	1.8
Medical Laboratory Wellington	166	94.9	4.0	1.1
Medlab Bay of Plenty	546	95.6	4.0	0.4
Medlab Central, Palmerston North	517	89.8	10.2	0.0
Medlab Hamilton	65	95.6	4.4	0.0
Medlab South Christchurch	72	100.0	0.0	0.0
Medlab South working for Timaru	87	100.0	0.0	0.0
Nelson Diagnostic Laboratory	193	75.7	23.9	0.4
Northland Pathology Laboratory	57	93.4	3.3	3.3
Pathlab Waikato	157	100.0	0.0	0.0
SCL Christchurch	179	99.4	0.6	0.0
SCL Dunedin	152	100.0	0.0	0.0
SCL Hawkes Bay	30	100.0	0.0	0.0
Taranaki Medlab	86	100.0	0.0	0.0
Valley Diagnostic Laboratory	82	100.0	0.0	0.0
Total	6,826	93.3	5.2	1.5

4.8 Satisfactory but limited and unsatisfactory smears by laboratory

Table 4-14. The number and proportion of satisfactory but limited and unsatisfactory smears reported by laboratory.

Laboratory	Total smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)	
		Number	(%)	Number	(%)
<i>Hospital-based</i>					
Auckland Hospital Laboratory	2,068	579	28.0	70	3.4
Canterbury Health Laboratories	1,396	257	18.4	19	1.4
Waikato Hospital Laboratory	155	28	18.1	1	0.7
<i>Community-based</i>					
Diagnostic Medlab Auckland	31,230	6,945	22.2	218	0.7
Medical Laboratory Southland†	1,146	133	11.6	5	0.4
Medical Laboratory Wellington‡	9,021	2,044	22.7	160	1.8
Medlab Bay of Plenty	6,933	1,929	27.8	47	0.7
Medlab Central, Palmerston North	7,810	1,623	20.8	36	0.5
Medlab Hamilton	7,509	1,587	21.1	23	0.3
Medlab South Christchurch	9,486	1,342	14.2	35	0.4
Pathlab Waikato	2,831	892	31.5	21	0.7
Southern Community Laboratory Christchurch	5,038	474	9.4	16	0.3
Southern Community Laboratory Dunedin	9,576	646	6.8	92	1.0
Taranaki Medlab	4,465	855	19.2	91	2.0
Valley Diagnostic Laboratory‡	3,233	565	17.5	78	2.4
Total	101,897	19,899	19.5	912	0.9

† Medical Laboratory Southland ceased processing smears in August 2001 and data presented for this laboratory also includes some smears processed by Medlab South after August 2001.

‡ The results of some smears processed at these laboratories during the quarter were not recorded on the NCSP-Register due to staffing issues at the Wellington NCSP regional site.

4.9 Satisfactory but limited and unsatisfactory smears by smear taker

Table 4-15. The number and proportion (%) of satisfactory but limited and unsatisfactory smears in the quarter by annual volume of smears taken for each smear taker group.

Smear taker group	Annual volume of smears	Total number of smears taken in quarter	Satisfactory smears		Satisfactory but limited smears [target = not more than 20%]		Unsatisfactory smears [target = 0.5 – 2.0%]	
			Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)
Lay	< 30	0	0	0.0	0	0.0	0	0.0
	30-100	12	11	91.7	1	8.3	0	0.0
	> 100	0	0	0.0	0	0.0	0	0.0
	Total	12	11	91.7	1	8.3	0	0.0
Medical	< 30	3,378	2,437	72.1	894	26.5	47	1.4
	30-100	18,624	14,566	78.2	3,864	20.7	194	1.0
	> 100	44,491	35,446	79.7	8,678	19.5	367	0.8
	Total	66,493	52,449	78.9	13,436	20.2	608	0.9
Midwife	< 30	224	158	70.5	64	28.6	2	0.9
	30-100	70	56	80.0	14	20.0	0	0.0
	> 100	177	165	93.2	12	6.8	0	0.0
	Total	471	379	80.5	90	19.1	2	0.9
Nurse	< 30	1,512	1,198	79.2	302	20.0	12	0.8
	30-100	9,711	7,785	80.2	1,866	19.2	60	0.6
	> 100	13,995	11,632	83.1	2,301	16.4	62	0.4
	Total	25,218	20,615	81.7	4,469	17.7	134	0.5
Specialist	< 30	121	89	73.6	29	24.0	3	2.5
	30-100	655	464	70.8	173	26.4	18	2.7
	> 100	8,927	7,079	79.3	1,701	19.1	147	1.6
	Total	9,703	7,632	78.7	1,903	19.6	168	1.7
Total		101,897	81,086	79.6	19,899	19.5	912	0.9

Report 5

5.1 Short interval re-screening

Table 5-1. Short interval re-screening proportion (%) by 5-year age groups for the 33 months to 31 December 2001 [target = less than 10%].

Age groups (years)	Number of women with a normal history and at least one A1† or A2‡ smear	Number of women with more than one A1† or A2‡ smear	Number of women with an abnormal A1† or A2‡ smear (ASCUS or more serious)	Proportion (%) with >1 A1† or A2‡ smear amongst women with a normal history*	Proportion (%) with >1 A1† smear amongst women with a normal history
20-24	28,940	9,592	4,436	21.0	9.1
25-29	48,927	13,598	4,626	20.3	9.4
30-34	60,430	16,382	4,041	21.9	12.0
35-39	65,838	16,867	3,511	21.4	12.4
40-44	63,379	15,896	3,157	21.2	12.4
45-49	52,295	13,485	2,482	22.1	13.3
50-54	43,964	10,972	1,732	21.9	13.6
55-59	32,673	7,476	1,042	20.3	12.1
60-64	26,351	5,318	663	18.1	10.5
65-69	19,485	3,434	419	15.8	8.6
Total 20-69	442,282	113,020	26,109	20.9	11.8

† A1 = satisfactory smear

‡ A2 = satisfactory but limited smear

* = (column 3 – column 4) x 100/(column 2 – column 4)

Table 5-2. Short-interval re-screening proportion (%) for 20-69 year old women for each DHB area [target = less than 10%].

District Health Board area	Smear Adequacy	
	Satisfactory (A1) & satisfactory but limited (A2) smears	Satisfactory (A1) smears only
Auckland	28.0	17.2
Bay of Plenty	18.7	5.8
Canterbury	17.9	12.8
Capital Coast	25.5	13.2
Counties Manakau	24.6	12.9
Hawkes Bay	17.0	10.4
Hutt	21.3	13.4
Lakes	19.3	8.7
MidCentral	17.1	9.9
Nelson-Marlborough	16.7	5.1
Northland	24.3	14.8
Otago	14.5	11.2
South Canterbury	18.3	12.7
Southland	13.2	10.0
Tairāwhiti	25.9	15.1
Taranaki	15.7	5.8
Waikato	15.5	5.3
Wairarapa	20.8	11.3
Waitemata	27.5	16.5
West Coast	13.4	10.0
Whanganui	17.7	10.2
DHB Unspecified	22.8	13.5
Total	20.9	11.8

5.2 Delayed re-screening for women with a high grade abnormality

Table 5-3. Timeliness of the most recent smear among women with a previous high grade or more serious abnormality [targets = 85% within 15 months and 99% within 18 months].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Less than 15 months	16,515	72.5	72.5
15-18 months	1,234	5.4	77.9
More than 18 months	3,505	15.4	93.3
No smear	1,516	6.7	100.0
Total	22,770	100.0	

The data in table 5-3 are the same as those published in Report 5, July 2002.

5.3 Follow-up of women with HSIL cytology

Table 5-4. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women [targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	3,655	74.6	74.6
13-26 weeks	585	11.9	86.5
27-52 weeks	246	5.0	91.6
More than 52 weeks	54	1.1	92.7
Subtotal	4,540	92.7	
No histology reported	359	7.3	100.0
Total	4,899		

Table 5-5. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old Maori women [targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	511	63.7	63.7
13-26 weeks	144	18.0	81.7
27-52 weeks	73	9.1	90.8
More than 52 weeks	10	1.2	92.0
Subtotal	738	92.0	
No histology reported	64	8.0	100.0
Total	802		

The data in table 5-5 are the same as those published in Report 5, July 2002.

Table 5-6. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old ‘Other’ women
[targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	3,066	77.2	77.2
13-26 weeks	419	10.6	87.8
27-52 weeks	161	4.1	91.8
More than 52 weeks	42	1.1	92.9
Subtotal	3,688	93.0	
No histology reported	283	7.1	100.0
Total	3,971		

Table 5-7. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old Pacific women
[targets = 90% within 12 weeks and 99% within 52 weeks].

Time period	Number	Proportion (%)	Cumulative proportion (%)
Within 12 weeks	78	61.9	61.9
13-26 weeks	22	17.5	79.4
27-52 weeks	12	9.5	88.9
More than 52 weeks	2	1.6	90.5
Subtotal	114	90.5	
No histology reported	12	9.5	100.0
Total	126		

Table 5-8. Timeliness of histology reports after an HSIL cytology result for enrolled 20-69 year old women by NCSP region [targets = 90% within 12 weeks and 99% within 52 weeks].

NCSP Region	Time period										
	Within 12 weeks		13-26 weeks		27-52 weeks		More than 52 weeks		No histology reported		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Auckland	1,074	77.5	139	10.0	74	5.3	12	0.9	87	6.3	1,386
Bay of Plenty	267	51.1	113	21.6	32	6.1	11	2.1	100	19.1	523
Canterbury	434	81.6	43	8.1	15	2.8	9	1.7	31	5.8	532
Hawkes Bay	136	73.1	20	10.8	16	8.6	1	0.5	13	7.0	186
Manawatu Wanganui	274	81.8	20	6.0	14	4.2	2	0.6	25	7.5	335
Nelson/Marlborough	107	64.8	43	26.1	12	7.3	1	0.6	2	1.2	165
Northland	114	71.7	25	15.7	11	6.9	3	1.9	6	3.8	159
Otago	259	84.1	33	10.7	9	2.9	0	0.0	7	2.3	308
Southland	109	81.3	14	10.4	6	4.5	1	0.7	4	3.0	134
Tairāwhiti	78	86.7	8	8.9	4	4.4	0	0.0	0	0.0	90
Taranaki	128	75.3	24	14.1	8	4.7	1	0.6	9	5.3	170
Waikato	315	80.2	42	10.7	17	4.3	2	0.5	17	4.3	393
Wellington	341	69.2	60	12.2	26	5.3	10	2.0	56	11.4	493
West Coast	19	76.0	1	4.0	2	8.0	1	4.0	2	8.0	25
Total	3,655	74.6	585	11.9	246	5.0	54	1.1	359	7.3	4,899

Table 5-9. The number of women with no histology result recorded by NCSP-Register status and source of any subsequent smear.

Women's status	Subsequent smear			Total
	No smear	Smear taken by non- specialist	Smear taken by specialist	
Not signed in	52	51	70	173
Signed in since high grade cytology result	37	80	69	186
Total	89	131	139	359

5.4 Summary of laboratory indicators

Table 5-10. A summary of laboratory indicators reported.

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy* (target = not more than 96%)		HSIL* (target = not less than 0.6%)		Total abnormalities†* (target = not more than 10%)		Positive predictive value of HSIL (target range = 65%-85%)		Smear turn around time proportion (%) (target = 90%)
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
<i>Hospital-based</i>	Number													
Auckland Hospital Laboratory	2,193	411	18.7	61	2.8	1,630	76.45	107	5.02	502	23.55	149	73.2	99.13
Canterbury Health Laboratories	1,504	214	14.2	30	2.0	1,234	83.72	50	3.39	240	16.28	21	85.7	100.00
Healthlab Otago#	-	-	-	-	-	-	-	-	-	-	-	4	100.0	-
Waikato Hospital Laboratory#	-	-	-	-	-	-	-	-	-	-	-	48	62.5	-
Wellington Hospital Laboratory#	-	-	-	-	-	-	-	-	-	-	-	7	85.7	-
Rest of table 5-10 continued on next page														

* Unsatisfactory smears excluded.

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women's Hospital Laboratory.

These three laboratories no longer report smears, but they were doing so during the time period for which the positive predictive value of HSIL cytology reports indicator was calculated.

Table 5-10 *continued*

Laboratory	Total number of smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)		Negative for dysplasia or malignancy* (target = not more than 96%)		HSIL* (target = not less than 0.6%)		Total abnormalities†** (target = not more than 10%)		Positive predictive value of HSIL (target range = 65%-85%)		Smear turn around time proportion (%) (target = 90%)
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
<i>Community-based</i>	Number	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Within 7 days
Diagnostic Medlab Auckland	31,112	6,782	21.8	217	0.7	29,487	95.44	191	0.62	1,408	4.56	373	74.5	99.99
Medical Laboratory Southland#	-	-	-	-	-	-	-	-	-	-	-	15	80.0	-
Medical Laboratory Wellington‡	9,918	2,547	25.7	256	2.6	8,787	90.94	84	0.87	875	9.06	77	76.6	81.76
Medlab Bay of Plenty	7,678	1,744	22.7	39	0.5	6,481	84.84	96	1.26	1,158	15.16	239	57.7	98.44
Medlab Central, Palmerston North	7,792	1,424	18.3	44	0.6	7,184	92.72	53	0.68	564	7.28	137	67.2	93.02
Medlab Hamilton	7,283	945	13.0	32	0.4	6,635	91.50	71	0.98	616	8.50	58	77.6	98.06
Medlab South Christchurch	10,508	1,307	12.4	32	0.3	9,740	92.97	102	0.97	736	7.03	106	78.3	100.00
Nelson Diagnostic Laboratory#	-	-	-	-	-	-	-	-	-	-	-	11	72.7	-
Pathlab Waikato	3,054	677	22.2	33	1.1	2,665	88.22	32	1.06	356	11.78	48	54.2	99.93
SCL** Christchurch	5,224	505	9.7	8	0.2	4,930	94.52	62	1.19	286	5.48	81	75.3	99.98
SCL** Dunedin	10,386	328	3.2	87	0.8	9,806	95.21	137	1.33	493	4.79	169	84.6	99.89
Taranaki Medlab‡	4,652	811	17.4	67	1.4	4,144	90.38	58	1.26	441	9.62	78	82.1	99.89
Valley Diagnostic Laboratory	3,810	684	18.0	45	1.2	3,533	93.84	47	1.25	232	6.16	47	68.1	85.07
Total	105,114	18,379	17.5	951	0.9	96,256	92.41	1,090	1.05	7,907	7.59	1,668	72.4	96.93

‡ Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

* Unsatisfactory smears excluded.

**SCL = Southern Community Laboratory.

These two laboratories have ceased reporting smears, but they were doing so during the time period for which the positive predictive value of HSIL cytology reports indicator was calculated.

‡ About 700 smears sent to Medical Laboratory Wellington for processing were read by Taranaki Medlab, but they were included in Medical Laboratory Wellington results as they were not identifiable.

5.5 Laboratory smear reporting

Table 5-11. The number and proportion of satisfactory and satisfactory but limited smears in broad cytological categories for each laboratory.

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favouring reactive		AGUS favouring dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalities† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Hospital-based</i>																	
Auckland Hospital Laboratory‡	1,630	76.45	188	8.82	189	8.86	9	0.42	0	0.00	12	0.56	107	5.02	502	23.55	2,132
Canterbury Health Laboratories	1,234	83.72	84	5.70	96	6.51	4	0.27	2	0.14	2	0.14	50	3.39	240	16.28	1,474
Rest of table 5-11 continued on next page																	

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

‡ Auckland Hospital Laboratory was previously known as National Women's Hospital Laboratory.

Table 5-11 *continued*

Laboratory	Negative for dysplasia or malignancy (target = not more than 96%)		Total ASCUS (including ASCUS possible HSIL)		LSIL		AGUS favouring reactive		AGUS favouring dysplasia		ASCUS possible HSIL		HSIL (target = not less than 0.6%)		Total abnormalities† (target = not more than 10%)		Total number of smears
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<i>Community-based</i>																	
Diagnostic Medlab Auckland	29,487	95.44	609	1.97	582	1.88	18	0.06	1	0.00	40	0.13	191	0.62	1,408	4.56	30,895
Medical Laboratory Wellington‡	8,787	90.94	483	5.00	293	3.03	10	0.10	2	0.02	14	0.14	84	0.87	875	9.06	9,662
Medlab Bay of Plenty	6,481	84.84	748	9.79	276	3.61	32	0.42	4	0.05	10	0.13	96	1.26	1,158	15.16	7,639
Medlab Central, Palmerston North	7,184	92.72	259	3.34	235	3.03	6	0.08	6	0.08	50	0.65	53	0.68	564	7.28	7,748
Medlab Hamilton	6,635	91.50	251	3.46	287	3.96	5	0.07	0	0.00	9	0.12	71	0.98	616	8.50	7,251
Medlab South Christchurch	9,740	92.97	366	3.49	239	2.28	18	0.17	3	0.03	22	0.21	102	0.97	736	7.03	10,476
Pathlab Waikato	2,665	88.22	249	8.24	68	2.25	4	0.13	2	0.07	4	0.13	32	1.06	356	11.78	3,021
SCL* Christchurch	4,930	94.52	111	2.13	111	2.13	0	0.00	0	0.00	4	0.08	62	1.19	286	5.48	5,216
SCL* Dunedin	9,806	95.21	53	0.51	290	2.82	4	0.04	2	0.02	16	0.16	137	1.33	493	4.79	10,299
Taranaki Medlab‡	4,144	90.38	206	4.49	166	3.62	8	0.17	2	0.04	8	0.17	58	1.26	441	9.62	4,585
Valley Diagnostic Laboratory	3,533	93.84	63	1.67	120	3.19	2	0.05	0	0.00	6	0.16	47	1.25	232	6.16	3,765
Total	96,256	92.41	3,670	3.52	2,952	2.83	120	0.12	24	0.02	197	0.19	1,090	1.05	7,907	7.59	104,163

† Includes all smears with a diagnosis code of ASCUS or more serious according to the hierarchy of codes.

* SCL = Southern Community Laboratory.

‡ About 700 smears sent to Medical Laboratory Wellington for processing were read by Taranaki Medlab, but they were included in Medical Laboratory Wellington results as they were not identifiable.

5.6 Laboratory cytology reporting

Table 5-12. Timeliness of the reporting of smears by laboratories [targets = 90% within 7 working days and 100% within 14 working days].

Laboratory	Within 7 working days	From 8-14 working days		More than 14 working days
	Proportion (%)	Proportion (%)	Cumulative Proportion (%)	Proportion (%)
<i>Hospital-based</i>				
Auckland Hospital Laboratory	99.13	0.82	99.95	0.05
Canterbury Health Laboratories	100.00	0.00	100.00	0.00
<i>Community-based</i>				
Diagnostic Medlab Auckland	99.99	0.01	100.00	0.00
Medical Laboratory Wellington†	81.76	18.24	100.00	0.00
Medlab Bay of Plenty	98.44	1.56	100.00	0.00
Medlab Central, Palmerston North	93.02	6.97	99.99	0.01
Medlab Hamilton	98.06	1.94	100.00	0.00
Medlab South Christchurch	100.00	0.00	100.00	0.00
Pathlab Waikato	99.93	0.03	99.97	0.03
Southern Community Laboratory Christchurch	99.98	0.02	100.00	0.00
Southern Community Laboratory Dunedin	99.89	0.05	99.94	0.06
Taranaki Medlab†	99.89	0.11	100.00	0.00
Valley Diagnostic Laboratory	85.07	14.80	99.87	0.13
Total	96.93	3.05	98.17	0.01

† About 700 smears sent to Medical Laboratory Wellington for processing were read by Taranaki Medlab, but they were included in Medical Laboratory Wellington results as they were not identifiable.

5.7 Laboratory histology reporting

Table 5-13. Timeliness of the reporting of histology by laboratory [targets = 90% within 5 working days and 100% within a reasonable period of time].

Laboratory	Number of histology specimens	Within 5 working days	6-10 working days	11 or more working days
		Proportion (%)	Proportion (%)	Proportion (%)
<i>Hospital-based</i>				
Auckland Hospital Laboratory	364	65.9	23.1	11.0
Canterbury Health Laboratories	616	95.6	1.6	2.8
Healthlab Otago	154	81.2	15.6	3.2
Hutt Hospital Laboratory	120	93.3	5.8	0.8
Memorial Hospital Hastings Lab	102	97.1	2.0	1.0
Middlemore Hospital Laboratory	68	100.0	0.0	0.0
Nelson Hospital Laboratory	64	79.7	20.3	0.0
North Shore Hospital Laboratory	424	99.5	0.5	0.0
Rotorua Hospital Laboratory	88	40.9	19.3	39.8
Southland Hospital Laboratory	126	87.3	11.1	1.6
Taranaki Base Hospital Laboratory	195	92.8	2.6	4.6
Waikato Hospital Laboratory	549	95.4	3.8	0.7
Wanganui Hospital Laboratory	59	91.5	8.5	0.0
Wellington Hospital Laboratory	238	84.0	13.4	2.5
Whangarei Hospital Laboratory	192	90.6	8.9	0.5
<i>Community-based</i>				
Diagnostic Medlab Auckland	1,168	98.4	1.3	0.3
Medical Laboratory Southland	40	100.0	0.0	0.0
Medical Laboratory Wellington	210	92.4	7.6	0.0
Medlab Bay of Plenty	475	99.4	0.6	0.0
Medlab Central, Palmerston North	470	93.0	3.8	3.2
Medlab Hamilton	78	93.6	6.4	0.0
Medlab South Christchurch	50	100.0	0.0	0.0
Medlab South working for Timaru	124	100.0	0.0	0.0
Nelson Diagnostic Laboratory	192	96.4	3.6	0.0
Northland Pathology Laboratory	63	92.1	7.9	0.0
Pathlab Waikato	163	100.0	0.0	0.0
SCL Christchurch	197	99.5	0.0	0.5
SCL Dunedin	196	99.0	0.0	1.0
Taranaki Medlab	76	100.0	0.0	0.0
Valley Diagnostic Laboratory	91	97.8	2.2	0.0
Total	6,952	93.3	4.7	2.1

5.8 Satisfactory but limited and unsatisfactory smears by laboratory

Table 5-14. The number and proportion of satisfactory but limited and unsatisfactory smears by laboratory.

Laboratory	Smears processed	Satisfactory but limited smears (target = not more than 20%)		Unsatisfactory smears (target = 0.5 – 2.0%)	
	Number	Number	(%)	Number	(%)
<i>Hospital-based</i>					
Auckland Hospital Laboratory	2,193	411	18.7	61	2.8
Canterbury Health Laboratories	1,504	214	14.2	30	2.0
<i>Community-based</i>					
Diagnostic Medlab Auckland	31,112	6,782	21.8	217	0.7
Medical Laboratory Wellington†	9,918	2,547	25.7	256	2.6
Medlab Bay of Plenty	7,678	1,744	22.7	39	0.5
Medlab Central, Palmerston North	7,792	1,424	18.3	44	0.6
Medlab Hamilton	7,283	945	13.0	32	0.4
Medlab South Christchurch	10,508	1,307	12.4	32	0.3
Pathlab Waikato	3,054	677	22.2	33	1.1
Southern Community Laboratory Christchurch	5,224	505	9.7	8	0.2
Southern Community Laboratory Dunedin	10,386	328	3.2	87	0.8
Taranaki Medlab†	4,652	811	17.4	67	1.4
Valley Diagnostic Laboratory	3,810	684	18.0	45	1.2
Total	105,114	18,379	17.5	951	0.9

† About 700 smears sent to Medical Laboratory Wellington for processing were read by Taranaki Medlab, but they were included in Medical Laboratory Wellington results as they were not identifiable.

5.9 Cytology reports predicting HSIL (positive predictive value)

Table 5-15. Cytology reports predicting HSIL (positive predictive value) by laboratory [target = 65-85%].

Laboratory	Number of HSIL or invasive carcinoma cytology reports with a follow up histology report	Proportion (%) of HSIL or invasive carcinoma cytology reports confirmed on histology	Proportion of all HSIL or invasive carcinoma cytology reports without a follow up histology report
<i>Hospital-based</i>			
Auckland Hospital Laboratory	149	73.2	10.2
Canterbury Health Laboratories	21	85.7	16.0
Healthlab Otago†	4	100.0	33.3
Waikato Hospital Laboratory	48	62.5	5.9
Wellington Hospital Laboratory	7	85.7	12.5
<i>Community-based</i>			
Diagnostic Medlab Auckland	373	74.5	10.3
Medical Laboratory Southland	15	80.0	16.7
Medical Laboratory Wellington	77	76.6	16.3
Medlab Bay of Plenty	239	57.7	28.9
Medlab Central, Palmerston North	137	67.2	9.9
Medlab Hamilton	58	77.6	14.7
Medlab South Christchurch	106	78.3	10.9
Nelson Diagnostic Laboratory†	11	72.7	8.3
Pathlab Waikato	48	54.2	21.3
SCL Christchurch	81	75.3	8.0
SCL Dunedin	169	84.6	6.6
Taranaki Medlab	78	82.1	7.1
Valley Diagnostic Laboratory	47	68.1	13.0
Total	1,668	72.4	13.9

† Ceased reporting smears April 2001.

5.10 Satisfactory but limited and unsatisfactory smears by smear taker

Table 5-16. The number and proportion (%) of satisfactory but limited and unsatisfactory smears for each smear taker group.

Smear taker group	Annual volume of smears	Total number of smears taken in quarter	Satisfactory smears		Satisfactory but limited smears [target = not more than 20%]		Unsatisfactory smears [target = 0.5 – 2.0%]	
			Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)
Lay	< 30	0	0	0.0	0	0.0	0	0.0
	30-100	16	12	75.0	4	25.0	0	0.0
	> 100	0	0	0.0	0	0.0	0	0.0
	Total	16	12	75.0	4	25.0	0	0.0
Medical	< 30	3,723	2,852	76.6	822	22.1	49	1.3
	30-100	18,370	14,703	80.0	3,470	18.9	197	1.1
	> 100	47,180	38,240	81.1	8,528	18.1	412	0.9
	Total	69,273	55,795	80.5	12,820	18.5	658	0.9
Midwife	< 30	204	139	68.1	62	30.4	3	1.5
	30-100	57	46	80.7	11	19.3	0	0.0
	> 100	171	150	87.7	19	11.1	2	1.2
	Total	432	335	77.3	92	21.3	5	1.2
Nurse	< 30	1,453	1,167	80.3	280	19.3	6	0.4
	30-100	9,246	7,790	84.3	1,440	15.1	56	0.6
	> 100	15,072	12,860	85.3	2,141	14.2	71	0.5
	Total	25,771	21,817	84.7	3,821	14.8	133	0.5
Specialist	< 30	87	63	72.4	22	25.3	2	2.3
	30-100	665	504	75.8	147	22.1	14	2.1
	> 100	8,870	7,258	81.8	1,473	16.6	139	1.6
	Total	9,622	7,825	81.3	1,642	17.1	155	1.6
Total		105,114	85,784	81.6	18,379	17.5	951	0.9