

*Quarterly Monitoring Report 17*

*National Cervical Screening Programme*

*October to December 2004*

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Massey University  
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Technical terms are used throughout this report, and an understanding of these terms may be necessary to interpret some parts of this report.

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## Contents

1. Executive Summary .....	6
2. Background .....	9
3. Abbreviations .....	10
4. Recommendations .....	11
4.1 General issues .....	11
4.2 Data issues .....	11
4.3 Service issues .....	11
4.4 Previous recommendations .....	13
5. Methods.....	15
6. Results.....	16
6.1 Follow-up of women with high grade cytology.....	16
6.2 Laboratory smear reporting.....	27
6.3 Laboratory cytology turn around time .....	33
6.4 Laboratory histology turn around time .....	37
6.5 Satisfactory but limited and unsatisfactory smears by laboratory .....	41
6.6 Satisfactory but limited and unsatisfactory smears by smear taker .....	45
6.7 Waiting time for colposcopic assessment for HSIL or ASCUS-HG .....	50
6.8 Waiting time for colposcopic assessment for LSIL or ASCUS.....	53
Appendix 1: Summary of the Revised Bethesda Coding Standard (1998).....	56

## List of Tables

Table 1: Timeliness of a histology report after a high grade cytology result for enrolled 20 to 69 year old women .....	20
Table 2: Timeliness of a histology report after a high grade cytology result for enrolled 20 to 69 year old women by ethnicity .....	21
Table 3: Timeliness of a histology report after a high grade cytology result for enrolled 20 to 69 year old women by NCSP Region.....	22
Table 4: The number of women with high grade cytology but no histology result recorded, by NCSP Register status and source of any subsequent smear .....	23
Table 5: The number and proportion of satisfactory or satisfactory but limited smears in broad cytological categories for each laboratory.....	30
Table 6: Timeliness of the reporting of smears by laboratory .....	35
Table 7: Timeliness of the reporting of histology by laboratory .....	39
Table 8: The number and proportion of satisfactory but limited and unsatisfactory smears by laboratory.....	43
Table 9: The number and proportion of satisfactory but limited and unsatisfactory smears for each smear taker group .....	47
Table 10: Waiting time for colposcopic assessment of HSIL or ASCUS possible high grade by DHB colposcopy service .....	52
Table 11: Waiting time for colposcopic assessment of LSIL or ASCUS by DHB colposcopy service.....	55

## List of Figures

Figure 1: Timeliness of a histology report after a high grade cytology result for enrolled 20 to 69 year old women .....	24
Figure 2: Timeliness of a histology report within 12 weeks of a high grade cytology result for enrolled 20 to 69 year old women by ethnicity.....	25
Figure 3: Timeliness of a histology report within 52 weeks of a high grade cytology result for enrolled 20 to 69 year old women by ethnicity.....	25
Figure 4: Timeliness of a histology report within 12 weeks of a high grade cytology result for enrolled 20 to 69 year old women by NCSP Region .....	26
Figure 5: Timeliness of a histology report within 52 weeks of a high grade cytology result for enrolled 20 to 69 year old women by NCSP Region .....	26
Figure 6: The proportion of satisfactory or satisfactory but limited smears reported as negative for dysplasia or malignancy for each laboratory.....	31
Figure 7: The proportion of satisfactory or satisfactory but limited smears reported as HSIL for each laboratory .....	31
Figure 8: The proportion of satisfactory or satisfactory but limited smears reported as total abnormalities for each laboratory .....	32
Figure 9: Proportion of smears reported on within seven working days .....	36
Figure 10: Laboratory histology five-day turn around time .....	40
Figure 11: Satisfactory but limited smears by laboratory .....	44
Figure 12: Unsatisfactory smears by laboratory .....	44
Figure 13: Satisfactory but limited smears by smear taker.....	49
Figure 14: Unsatisfactory smears by smear taker .....	49

## 1. Executive Summary

This report provides data on performance indicators of the National Cervical Screening Programme (NCSP) for the period 1 October 2004 to 31 December 2004. For reasons described, not all indicators are included in this report. For the indicators used, there has been little change, for better or worse, in any of the indicators (except for the positive predictive value which is due to a change in the method of calculation, see Section 6.9 for further details). Where changes have occurred, these are described in the text.

### *Follow-up of women with high grade cytology*

In total, 4,571 women had a high grade cytology result recorded on the NCSP Register between 1 January 2003 and 31 December 2003. More than three-quarters (79.4%) of these women were recorded as having had a histology specimen taken within 12 weeks of their high grade smear being taken. This was less than the target of 90%. The proportion of women who had a histological specimen taken within 52 weeks of the high grade cytology was also below the 99% target (93.0%). For 269 (5.9%) of the 4,571 women, a subsequent histology result was not recorded on the NCSP Register. This is almost identical to the proportion reported in the last quarter (5.7%). The proportions of women who had no histology recorded on the NCSP Register varied widely amongst the NCSP regions and by ethnicity.

### *Laboratory smear reporting*

Ten laboratories reported cervical cytology during this quarter. Overall, of the 97,151 satisfactory or satisfactory but limited smears processed during the quarter, 7.8% were reported as abnormal, which was within the target of not more than 10%. Five laboratories, including two hospital laboratories, reported abnormalities outside this target, with the highest reporting abnormalities in 21.4% of smears read. The overall proportion of smears reported as negative for dysplasia or malignancy was 92.2%, and all except two of the laboratories met the target of not more than 96%. The overall proportion of smears reported as high grade squamous intra-epithelial lesion (HSIL) was 1.2%, which was within the target of not less than 0.6%. One laboratory was outside this target, and reported 0.2% of the smears they read as HSIL.

***Laboratory cytology turn around time***

Eight of the 10 laboratories reporting cervical cytology met the seven-day cytology turn around time target (90%) in this reporting quarter. Two laboratories met the 14-day turn around time target of 100%. A further six laboratories reported over 99.9%, and the lab with the lowest reported proportion of smears read within 14 days had read 99.4% of their smears in that time.

***Laboratory histology turn around time***

Twenty-four laboratories reported cervical histology during the quarter. Five laboratories did not meet the five-day histology turn around time target of 90%, and four of these have consistently fallen below this target over the previous year. Fourteen laboratories reported 100% of histology results within 10 working days of the specimen arriving at the laboratory.

***Satisfactory but limited and unsatisfactory smears***

The proportion of smears reported as satisfactory but limited varied considerably among the laboratories. Two laboratories exceeded the target of not more than 20% of smears being satisfactory but limited. Two laboratories reported below the 0.5 to 2.0% target range for unsatisfactory smears, and one reported above the target range.

All smear taker groups (lay, medical, nurse, specialist and midwife) met the target for satisfactory but limited smears. When split by annual smear taking volume, smear taker subgroups who took greater volumes of smears appeared to do better in terms of satisfactory but limited smears compared to those with a low annual volume. Almost all smear taker groups and subgroups split by annual smear volume met the target for the proportion of unsatisfactory smears.

***Colposcopic assessment***

The colposcopic service indicators were unable to be calculated because the data required were not available. One colposcopy unit did not provide any data for this reporting period. The highest reported number of women with a HSIL or ASCUS-HG cytology abnormality waiting longer than 4 weeks at the end of each month was 112.

The highest reported number of women with a low grade cytology abnormality waiting longer than 26 weeks at the end of each month was 84.

## **2. Background**

The Independent Monitoring Group (IMG) of the National Cervical Screening Programme (NCSP) has been responsible for providing independent quantitative monitoring of the NCSP since 2001. Part of this responsibility is to produce quarterly reports of the national indicators for the NCSP. These indicators were established in 2000.

In 2005 the Centre for Public Health Research (CPHR), Massey University was appointed through an open tender process to carry out the independent monitoring. The current report, Quarterly Report 17, is the fourth to be produced under this contract. The raw data from which the indicators included in these reports are calculated were provided to the CPHR by the National Screening Unit (NSU), with the exception of the colposcopy data. The colposcopy data were provided by the NSU and reformatted by the CPHR.

### 3. Abbreviations

The following abbreviations are used in this report:

ASCUS:	Atypical squamous cells of undetermined significance
ASCUS-HG:	Atypical squamous cells of undetermined significance, possible high grade
CIN:	Cervical intra-epithelial neoplasia; I: low grade; II, III: high grade
DHB:	District Health Board
HPV:	Human papilloma virus
HSIL:	High grade squamous intra-epithelial lesion
ISC:	Invasive Squamous Carcinoma
LSIL:	Low grade squamous intra-epithelial lesion
MoH:	Ministry of Health
NCSP:	National Cervical Screening Programme
NSU:	National Screening Unit of the Ministry of Health
SCL:	Southern Community Laboratories

## 4. Recommendations

### 4.1 General issues

- IMG recommends that relevant advisory groups (i.e. Maori, Pacific, Consumer Reference & NCSP) are sent IMG reports for consideration in terms of ethnic disparities.
- NSU is to report on status of their investigation of ethnicity data collection to the IMG.

### 4.2 Data issues

#### *Section 6.2 Laboratory smear reporting*

- For all of Table 5: There is a discrepancy between the figures reported here and Valley Diagnostic Laboratory's own figures and this is currently being investigated by the NSU. The IMG would like the results of this investigation, including the 42 month look back statistics, to be reported back to them.<sup>1</sup>

#### *Section 6.4 Laboratory histology turn around time*

- NSU is to investigate delayed reporting of histology by North Shore Hospital.

#### *Sections 6.7 and 6.8 Waiting time for colposcopic assessment*

- IMG have concerns about the non-reporting of and the accuracy of the reported colposcopy data. The NSU should investigate this as a matter of urgency.

### 4.3 Service issues

#### *Section 6.1 Follow-up of women with a high grade cytology*

- NSU should address ethnic disparities in timeliness of follow-up of high grade smears with urgency. Prioritise investigation of reasons for ethnic inequalities in outcomes. Researchers with Maori/Pacific expertise should lead this analysis.

<sup>1</sup> The IMG note that figures provided by Valley Diagnostic Laboratory show that part of the reason for the laboratory not meeting these targets was late reporting of some smears to the NCSP Register. When these smears are included VDL's own figures show that they met the target for HSIL.

- NSU is to seek an explanation from Auckland, Bay of Plenty, and Waikato regions as to why their timeliness of histology reporting following a high grade smear at 12 weeks has consistently been well below the target for the last four reports.
- NSU is to investigate women with no subsequent histology result recorded on the NCSP register following a high grade cytology result. Priority is to be given to Pacific women, then by region, ordering these from those with the highest to the lowest percentage of no follow-up after a high grade cytology result.

*Section 6.2 Laboratory smear reporting*

- NSU is to investigate why SCL Christchurch and Valley Diagnostic Laboratory were above the target for smears reported as negative for dysplasia or malignancy.
- NSU is to request that Auckland Hospital Laboratory produce figures for total abnormalities for non-hospital based satisfactory or satisfactory but limited smears for the period of Report 17 to be reported within six months from their receipt of this recommendation.<sup>2</sup>
- NSU is to investigate why the total abnormalities reporting pattern is consistently higher than the target for MedLab Bay of Plenty and MedLab Central.

*Section 6.3 Laboratory cytology turn around time*

- Due to circumstances explained by the NSU the IMG is not making a recommendation relating to MedLab Central's seven-day turnaround time for cytology reporting.
- NSU is to seek explanation as to why MedLab Bay of Plenty is below the seven-day target for timeliness of cytology reporting.
- NSU is to seek explanations as to why SCL Christchurch, Diagnostic MedLab Auckland, and MedLab Central are below the 14-day target for cytology reporting.

<sup>2</sup> Having received the requested information, the IMG is now satisfied that Auckland Hospital Laboratory's non-hospital based smears are meeting the total abnormalities target.

*Section 6.4 Laboratory histology turn around time*

- IMG request that Rotorua Hospital provide a relevant response to the histology turnaround time recommendation from Report 14 through to Report 17.

**4.4 Previous recommendations**

Recommendations made at the 26 September 2005 meeting based on discussions about Reports 15 and 16, April to September 2004:

Data issues*Sections 6.7 and 6.8 Waiting time for colposcopic assessment*

- There are concerns with the non-reporting and with the accuracy of reported colposcopy data. The NSU should investigate this as a matter of urgency.

Service issues*Section 6.1 Follow-up of women with a high grade cytology*

- The NSU is to investigate women with no subsequent histology result recorded on the NCSP register following a high grade cytology. Priority is to be given to regions from the lowest to the highest percentage of follow-up histology.
- The NSU is to investigate the reasons for ethnic disparities in histology follow-up times and look at the extent to which this contributes to inequalities in outcomes.

*Section 6.2 Laboratory smear reporting*

- The NSU is to seek an explanation from MedLab Wellington and SCL Christchurch as to why their HSIL rates were below the target.
- The NSU is to investigate why Auckland Hospital, MedLab Central and Canterbury Health Laboratories are above the total abnormalities target.

*Section 6.3 Laboratory cytology turn around time*

- The NSU is to seek individual explanations from the appropriate laboratories for why 22 smears were not reported on within 14 days (Report 16).

*Section 6.4 Laboratory histology turn around time*

- The NSU is to investigate the reasons behind the slow histology turn around times of Auckland, Hutt, Rotorua and Wellington hospital

laboratories, and to clarify why any laboratories should still have outstanding specimens to report on at 11 or more working days. Note that this recommendation is only for the 49 specimens in Report 16 that were reported on after 11 working days.

## 5. Methods

The NSU of the Ministry of Health (MoH), through a committee of experts and a consultation process, established national indicators for the NCSP in 2000. Where it was considered appropriate and feasible, the NSU set targets for the indicators. Each indicator is described in the results section under separate headings that identify the specific indicators. The results for each indicator are discussed in relation to the set targets. For indicators with and without a target, changes over time are described.

To calculate the indicators for this report anonymised data, provided by the NSU, of women enrolled on the NCSP Register were used. This report includes results for Māori and Pacific women. Both the National Kaitiaki Group and the Pacific Women's Data Advisory Group approved the use of data for enrolled women recorded as identifying with Māori and Pacific ethnic groups, respectively, on the NCSP Register. For the purposes of the monitoring reports, women recorded on the NCSP Register as being not Māori or Pacific were grouped together as the non-Māori, non-Pacific group. This group includes women whose ethnic group was unknown, estimated as 9% of the total number of women on the NCSP Register.

Unless otherwise stated, a woman's age at the end of the reporting quarter was used when calculating the indicators. The registration status and demographic details of each woman at the time of the data download were used for all calculations. Women were assigned to both a NCSP region and a District Health Board (DHB) area by the NCSP Register. Each woman was allocated to the NCSP region and DHB area in which they lived, with two exceptions. Women whose address was unknown were allocated to the NCSP region according to their last known smear taker, or according to the NCSP regional service office if the smear taker has indicated that the woman is no longer a patient there. Women who usually had their smears in a NCSP region other than the one where they lived were allocated to the NCSP region where they usually had their smears. For women in either of these situations, if the NCSP regions to which they were allocated had boundaries identical to a DHB area, then they were allocated to that DHB, otherwise the DHB area in which they lived was recorded as unspecified.

## 6. Results

### 6.1 Follow-up of women with high grade cytology

#### *Definition*

High grade cytology is defined as a cytology result of ASCUS possible high grade (ASCUS-HG), HSIL or more serious abnormality according to the hierarchy of the Revised Bethesda Coding System (1998) (Appendix 1). The timeliness of the follow-up of women with a high grade cytology result is estimated using the time elapsed before a histology specimen is taken following the high grade cytology result.

#### *Targets*

The targets for the follow-up of women with high grade cytology are as follows:

- 90% of women should have a histology specimen taken within 12 weeks of the smear being taken

and

- 99% of women should have a histology specimen taken within 52 weeks of the smear being taken.

#### *Calculation*

The number of enrolled women aged 20 to 69 years at 31 December 2004 who had a high grade cytology result recorded on the NCSP Register between 1 January 2003 and 31 December 2003 was calculated. For each of these women the time between the date that the smear was taken and the date that the subsequent histology specimen was taken (including specimens taken up to five days before the smear) was calculated.

The numbers of women with a histology specimen taken within 12 weeks, between 13 and 26 weeks, between 27 and 52 weeks and more than 52 weeks after their ASCUS-HG, HSIL or more serious cytology result were expressed as proportions of the total number of women with a high grade cytology taken between 1 January 2003 and 31 December 2003. The number and proportion of women with no histology result recorded on the NCSP Register following their high grade cytology were also calculated. Women without a subsequent histology recorded on the NCSP Register were also described in two ways: whether they had been signed back into the

programme since their high grade smear and whether they had a subsequent smear taken by either a non-specialist or specialist. This indicator was calculated for women of all ethnic groups, and separately for Māori, Pacific and non-Māori, non-Pacific women. It was also calculated for each NCSP region.

### ***Results***

The timeliness with which a histology specimen was taken amongst women who had a high grade cytology result is shown in Table 1. Between 1 January 2003 and 31 December 2003, 4,571 women had a high grade cytology result. Of these, 3,630 (79.4%) had a histological specimen taken within 12 weeks of the abnormal cytology, compared to the target of 90%. This value is similar to that reported in the previous two quarters (79.7% and 79.4%). The proportion of women who had a histological specimen taken within 52 weeks of the high grade cytology was 93.0% (n=4,249). This value is similar to those reported in the previous two quarters (93.2% and 92.6%). There was no histology reported on the NCSP Register for 269 (5.9%) women who had a high grade cytological abnormality.

The timeliness of having a histological specimen taken following a high grade smear differed by ethnicity, as shown in Table 2. Compared to non-Māori, non-Pacific women, Māori and Pacific women were less likely to have a histological specimen taken within the recommended time periods. For example, at 12 weeks, 81.5% of non-Māori, non-Pacific women had a report of a histological specimen, compared to 72.1% of Māori and 61.0% of Pacific women. These figures are similar to those reported in the last quarter (81.8%, 71.2% and 64.1%, respectively). The differences by ethnicity persisted for all time periods following a high grade smear. Statistical tests showed the differences between the groups are very unlikely to be due to chance ( $P < 0.001$ ).

The timeliness of having a histological specimen taken following a high grade smear differed by NCSP region, see Table 3. No region achieved the target of 90% of women having a histological specimen taken within 12 weeks of the smear. The region with the highest proportion of women who had a histological report within this time period was West Coast (89.7%, n=26). The poorest performers were Bay of

Plenty (73.1%) and Auckland (74.9%). For all regions combined the proportion of women who had histological reports within 12 weeks of the smear was 79.4%.

No region reached the target of 99% of women having a histological specimen taken within 52 weeks of a high grade smear. For all regions combined the proportion of women who had a high grade smear result with a subsequent histology taken within 52 weeks was 93.0%. All of the regions have similar timeliness in reporting histological results for women with high grade smears compared to the previous quarter.

A relatively large number of women (n=269, 5.9%) had no histology report recorded on the NCSP Register following a high grade smear. The absence of such a report was more common in Pacific women (13.0%) compared to Māori (6.1%) and non-Māori, non-Pacific women (5.6%), see Table 2. There were also differences by region in the absence of a histological report following a high grade smear, see Table 3. Such an absence was common (above 6%) in Auckland, Canterbury and Waikato. In the last two reports, the absence of a histological report following a high grade smear was also common in these three regions.

Further details of the 269 women who had no histology result recorded on the NCSP Register following a high grade smear are shown in Table 4. Of these, 74 (27.5%) had no subsequent smear recorded and 84 (31.2%) had a follow-up smear taken by a non-specialist. Of these 158 women who had either no follow-up smear or a smear taken by a non-specialist, 65 (41.1%) were recorded on the register as having been 'signed in' following their high grade smear result, indicating that they were being recalled by the NCSP. The remaining 93 (58.9%) women did not appear to have been signed in, indicating that their follow-up was less clear.

Possible reasons for these women not being signed in include having:

- had further investigations and treatment, but their histology reports were erroneously omitted from the NCSP Register
- moved overseas and had follow-up there
- no indications for biopsy at colposcopic examination
- chosen not to have their histology results recorded on the NCSP Register.

***Recommendations***

- NSU should address ethnic disparities in timeliness of follow-up of high grade smears with urgency. Prioritise investigation of reasons for ethnic inequalities in outcomes. Researchers with Maori/Pacific expertise should lead this analysis.
- IMG recommends that relevant advisory groups (i.e. Maori, Pacific, Consumer Reference & NCSP) are sent IMG reports for consideration in terms of ethnic disparities.
- NSU is to report on status of their investigation of ethnicity data collection to the IMG.
- NSU is to seek an explanation from Auckland, Bay of Plenty, and Waikato regions as to why their timeliness of histology reporting following a high grade smear at 12 weeks has consistently been well below the target for the last four reports.
- NSU is to investigate women with no subsequent histology result recorded on the NCSP register following a high grade cytology result. Priority is to be given to Pacific women, then by region, ordering these from those with the highest to the lowest percentage of no follow-up after a high grade cytology result.

**Table 1: Timeliness of a histology report after a high grade cytology result for enrolled 20 to 69 year old women**

Time period	n	Proportion %	Cumulative Proportion %
Within 12 weeks	3,630	79.4	79.4
13 to 26 weeks	440	9.6	89.0
27 to 52 weeks	179	3.9	93.0
More than 52 weeks	53	1.2	
Subtotal	4,302		94.1
No histology recorded on NCSP Register	269	5.9	100
<b>Total</b>	<b>4,571</b>		

Target: 90% with histology report within 12 weeks and 99% within 52 weeks of a high grade smear

**Table 2: Timeliness of a histology report after a high grade cytology result for enrolled 20 to 69 year old women by ethnicity**

Time Period	Māori women			Pacific women			Non-Māori, non-Pacific women		
	n	Proportion %	Cumulative Proportion %	n	Proportion %	Cumulative Proportion %	n	Proportion %	Cumulative Proportion %
Within 12 weeks	498	72.1	72.1	89	61.0	61.0	3,043	81.5	81.5
13 to 26 weeks	96	13.9	86.0	21	14.4	75.3	323	8.7	90.1
27 to 52 weeks	42	6.1	92.0	13	8.9	84.2	124	3.3	93.5
More than 52 weeks	13	1.9		4	2.7		36	1.0	
<b>Subtotal</b>	<b>649</b>		93.9	<b>127</b>		87.0	<b>3,526</b>		94.4
No histology recorded on NCSP Register	42	6.1	100	19	13.0	100	208	5.6	100
<b>Total</b>	<b>691</b>			<b>146</b>			<b>3,734</b>		

Difference between ethnic groups  $P < 0.001$

Target: 90% with histology report within 12 weeks and 99% within 52 weeks of a high grade smear

Note: the follow-up of the 269 women with no histology recorded on the NCSP Register is shown in Table 4

**Table 3: Timeliness of a histology report after a high grade cytology result for enrolled 20 to 69 year old women by NCSP Region**

NCSP region	Time Periods										Total
	Within 12 weeks		13 to 26 weeks		27 to 52 weeks		Within 52 weeks		No Histology		
	n	%	n	%	n	%	n	%	n	%	
Auckland	1,084	74.9	156	10.8	64	4.4	1,304	90.1	121	8.4	1,447
Bay of Plenty	242	73.1	54	16.3	16	4.8	312	94.3	15	4.5	331
Canterbury	477	83.8	34	6.0	16	2.8	527	92.6	37	6.5	569
Hawke's Bay	169	83.7	18	8.9	5	2.5	192	95.0	7	3.5	202
Manawatu / Wanganui	204	84.3	14	5.8	9	3.7	227	93.8	13	5.4	242
Nelson / Marlborough	123	80.9	21	13.8	2	1.3	146	96.1	5	3.3	152
Northland	153	82.3	16	8.6	7	3.8	176	94.6	4	2.2	186
Otago/Southland	395	85.3	35	7.6	15	3.2	445	96.1	15	3.2	463
Tairāwhiti	50	86.2	4	6.9	0	0.0	54	93.1	3	5.2	58
Taranaki	93	80.2	7	6.0	8	6.9	108	93.1	7	6.0	116
Waikato	254	77.2	34	10.3	13	4.0	301	91.5	24	7.3	329
Wellington	360	80.5	45	10.1	24	5.4	429	96.0	17	3.8	447
West Coast	26	89.7	2	6.9	0	0.0	28	96.6	1	3.5	29
<b>Total</b>	<b>3,630</b>	<b>79.4</b>	<b>440</b>	<b>9.6</b>	<b>179</b>	<b>3.9</b>	<b>4,249</b>	<b>93.0</b>	<b>269</b>	<b>5.9</b>	<b>4,571</b>

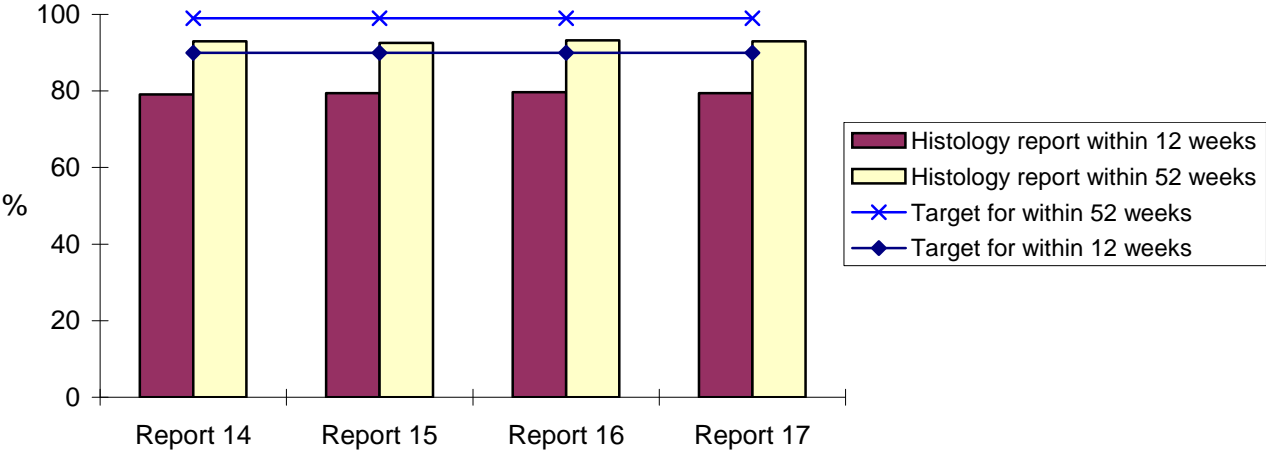
Difference between NCSP regions  $P < 0.001$

Target: 90% with histology report within 12 weeks and 99% within 52 weeks of a high grade smear

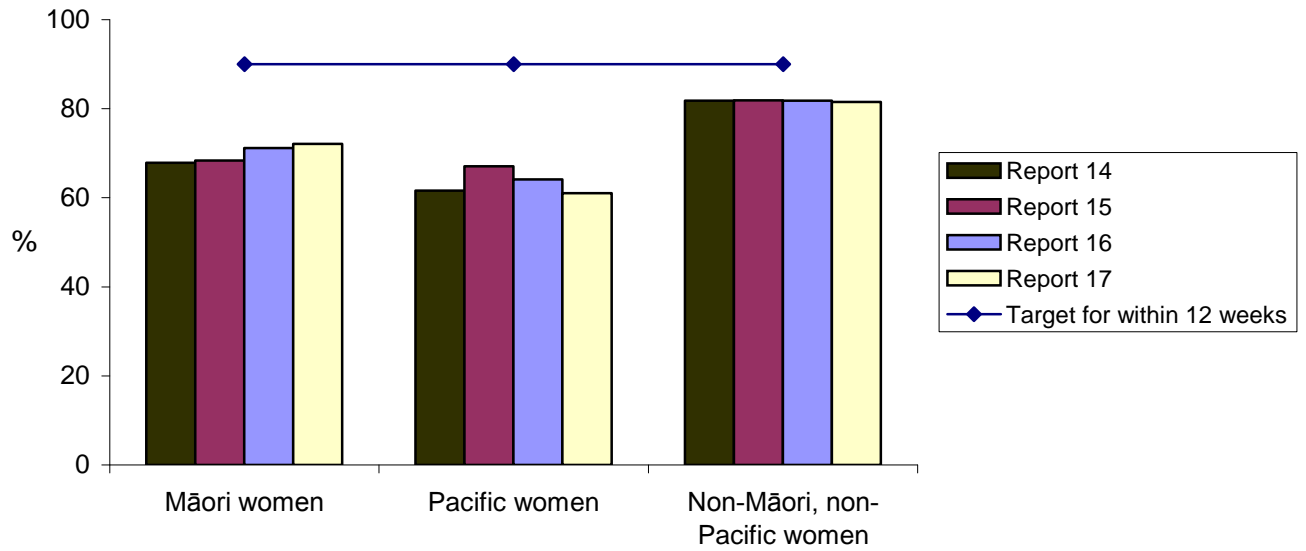
**Table 4: The number of women with high grade cytology but no histology result recorded, by NCSP Register status and source of any subsequent smear**

Subsequent smear	Women's status since high grade cytology result		
	Not signed in	Signed in	Total
	n	n	n (%)
No subsequent smear	37	37	74 (27.5)
Subsequent smear taken by non-specialist	56	28	84 (31.2)
Smear taken by specialist	44	67	111 (41.3)
<b>Total</b>	<b>137</b>	<b>132</b>	<b>269</b>

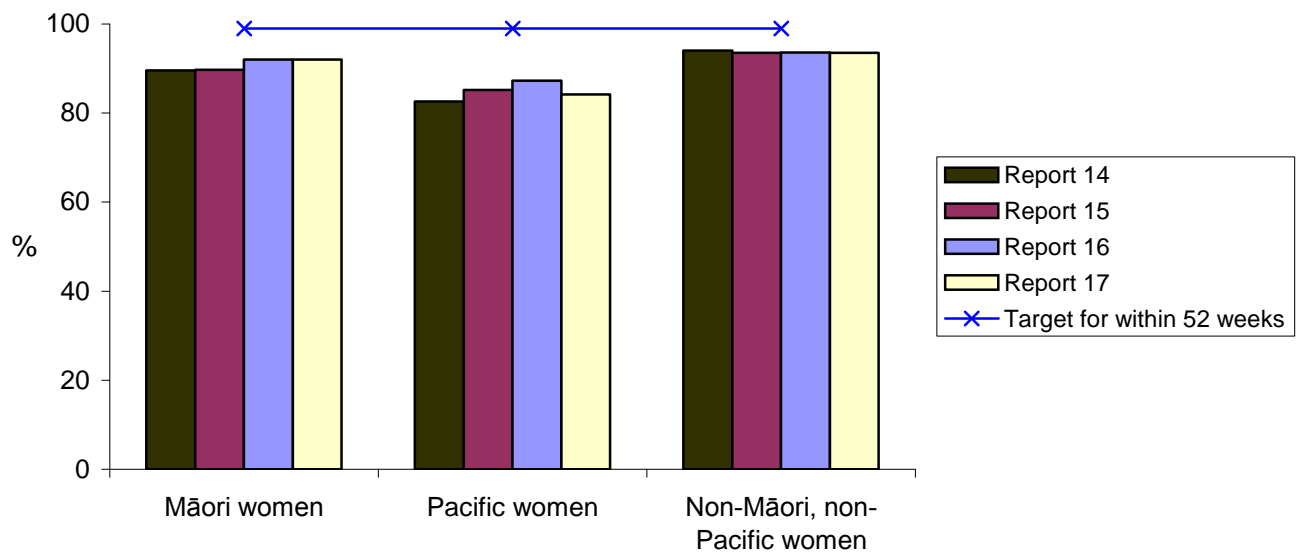
**Figure 1: Timeliness of a histology report after a high grade cytology result for enrolled 20 to 69 year old women**



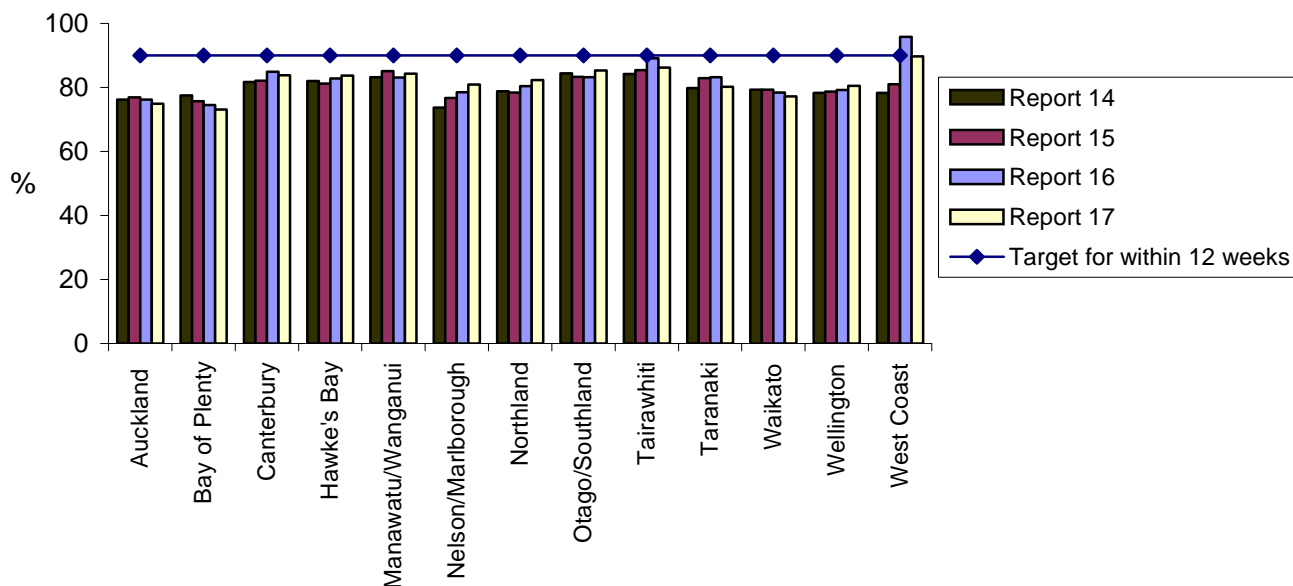
**Figure 2: Timeliness of a histology report within 12 weeks of a high grade cytology result for enrolled 20 to 69 year old women by ethnicity**



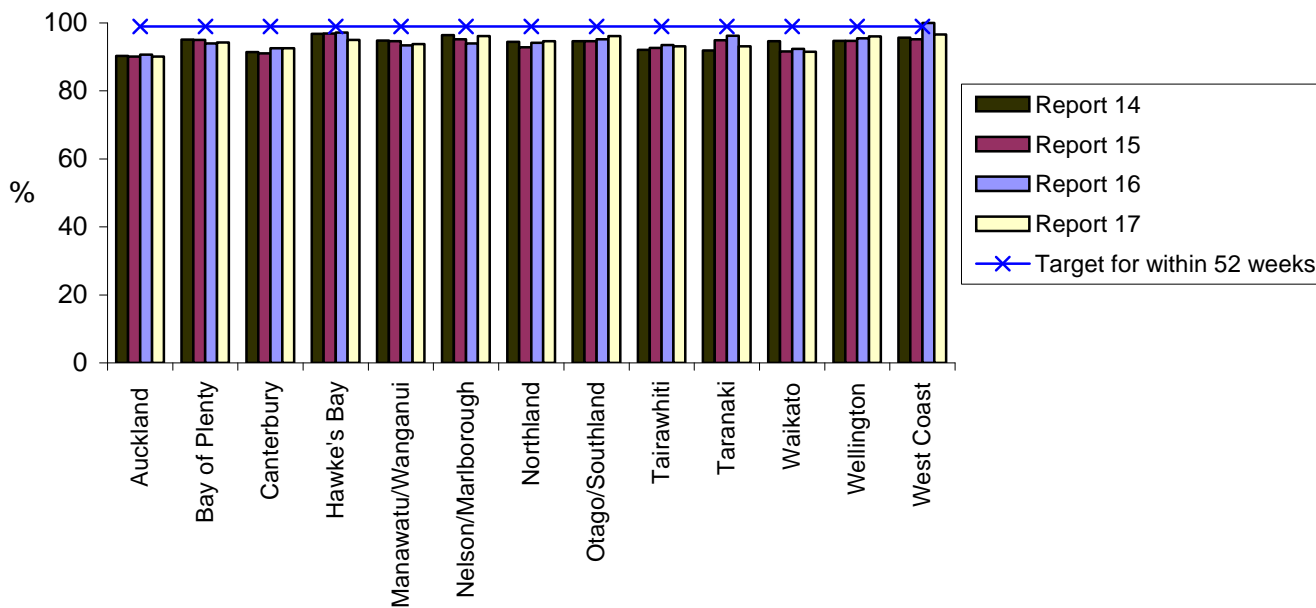
**Figure 3: Timeliness of a histology report within 52 weeks of a high grade cytology result for enrolled 20 to 69 year old women by ethnicity**



**Figure 4: Timeliness of a histology report within 12 weeks of a high grade cytology result for enrolled 20 to 69 year old women by NCSP Region**



**Figure 5: Timeliness of a histology report within 52 weeks of a high grade cytology result for enrolled 20 to 69 year old women by NCSP Region**



## 6.2 Laboratory smear reporting

### *Definition*

Laboratory smear reporting is measured by the number and proportion of satisfactory or satisfactory but limited smears in the following broad cytological categories:

1. Negative for dysplasia or malignancy
2. ASCUS
3. ASCUS-HG
4. LSIL (CIN 1 and/or HPV)
5. HSIL
6. Total abnormalities (smears reported as ASCUS or more serious)

### *Targets*

There are targets for laboratory smear reporting for three of the broad categories:

1. Negative for dysplasia or malignancy: not more than 96%
2. HSIL: not less than 0.6%
3. Total abnormalities: not more than 10%

### *Calculation*

The Bethesda diagnosis codes, as recorded on the NCSP Register, of satisfactory or satisfactory but limited smears taken during the reporting quarter were used to calculate the number of smears in each broad cytological category for each laboratory. These were expressed as proportions of the total number of satisfactory or satisfactory but limited smears reported by each laboratory. Where a single smear had more than one diagnosis code, the most serious ranked code was used according to the hierarchy of codes (see Appendix 1). Total abnormalities included all smears with a diagnosis code of ASCUS or more serious abnormality according to the hierarchy of broad cytological categories. Smear results for women of all ages were included. Smears recorded as being unsatisfactory for evaluation were excluded.

### *Results*

During the quarter, 97,151 satisfactory or satisfactory but limited smears were taken. The results of these, by laboratory, are shown in Table 5. The number of such smears

reported by each laboratory ranged from 2,953 for Auckland Hospital Laboratory to 27,949 for Diagnostic MedLab Auckland. Overall, 89,611 (92.2%) smears were reported as negative for dysplasia or malignancy, which was almost identical to the proportion reported in the last two quarters. Two of the laboratories, SCL Christchurch (96.7%) and Valley Diagnostic (98.5%) did not meet the target of not more than 96% of smears being negative for dysplasia or malignancy. Auckland Hospital Laboratory reported 2,321 (78.6%) smears as negative for dysplasia or malignancy, a lower proportion than the other laboratories.

The proportion of smears reported with a HSIL abnormality was 1.2% for all laboratories combined. This figure met the target of not less than 0.6% and was almost identical to that reported for the previous reporting quarter (1.3%). One laboratory did not meet this target; Valley Diagnostic (n=6) reported 0.2% of smears with a HSIL abnormality. Auckland Hospital Laboratory reported 154 (5.2%) smears with a HSIL abnormality, a higher proportion than the other laboratories.

For all laboratories combined, the target of not more than 10% of smears reported as abnormal was not exceeded. This proportion was 7.8%, similar to the previous two quarters (7.7% and 7.9%). Auckland Hospital Laboratory reported 632 (21.4%) smears processed as abnormal, and reported similar high proportions for the previous two quarters (25.6% and 24.5%). The other laboratories to report more than 10% total abnormalities were Canterbury Health Laboratories (11.4%), MedLab Bay of Plenty (12.3%), MedLab Central (10.7%) and MedLab Wellington (10.6%). Canterbury Health Laboratories, MedLab Bay of Plenty and MedLab Central also exceeded the 10% target in the previous two quarters.

The proportion of smears reported as LSIL varied between laboratories, but was between 0.9% and 4.0% for all laboratories, with the exception of MedLab Central (5.7%), Canterbury Health Laboratories (5.4%) and Auckland Hospital Laboratory (8.3%). Auckland Hospital Laboratory also reported a high proportion of LSIL abnormalities in the last two quarters. Note that no target is set for proportion of smears reported as LSIL.

***Recommendations***

- NSU is to investigate why SCL Christchurch and Valley Diagnostic Laboratory were above the target for smears reported as negative for dysplasia or malignancy.
- For all of Table 5: There is a discrepancy between the figures reported here and Valley Diagnostic Laboratory's own figures and this is currently being investigated by the NSU. The IMG would like the results of this investigation, including the 42 month look back statistics, to be reported back to them.
- NSU is to request that Auckland Hospital Laboratory produce figures for total abnormalities for non-hospital based satisfactory or satisfactory but limited smears for the period of Report 17 to be reported within six months from their receipt of this recommendation.
- NSU is to investigate why the total abnormalities reporting pattern is consistently higher than the target for MedLab Bay of Plenty and MedLab Central.

**Table 5: The number and proportion of satisfactory or satisfactory but limited smears in broad cytological categories for each laboratory**

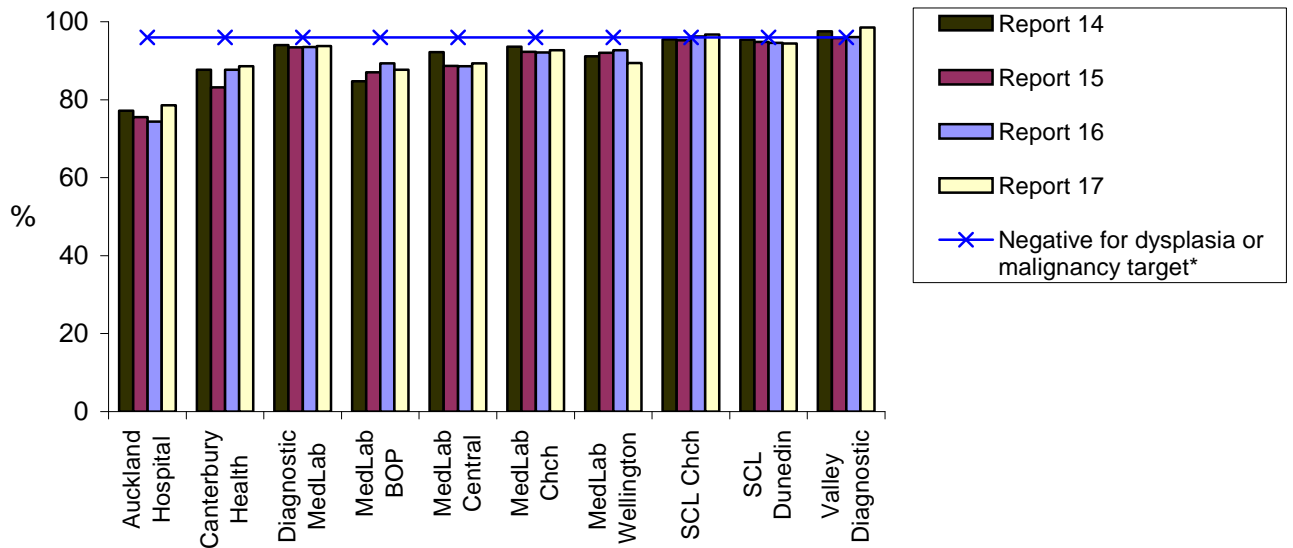
Laboratory	Negative for dysplasia or malignancy <sup>1</sup>		ASCUS		ASCUS-HG		LSIL		HSIL <sup>2</sup>		Total Abnormalities <sup>3</sup>		Total smears
	n	%	n	%	n	%	n	%	n	%	n	%	
Auckland Hospital Lab.	2,321	78.6	202	6.8	21	0.7	244	8.3	154	5.2	632	21.4	2,953
Canterbury Health Lab.	2,974	88.6	134	4.0	25	0.7	181	5.4	40	1.2	383	11.4	3,357
Diagnostic MedLab Auckland	26,229	93.8	823	2.9	73	0.3	530	1.9	262	0.9	1,720	6.2	27,949
MedLab Bay of Plenty	8,098	87.7	600	6.5	21	0.2	370	4.0	111	1.2	1,132	12.3	9,230
MedLab Central	6,237	89.3	183	2.6	10	0.1	397	5.7	139	2.0	747	10.7	6,984
MedLab Christchurch	7,894	92.7	280	3.3	49	0.6	211	2.5	71	0.8	624	7.3	8,518
MedLab Wellington	8,185	89.4	517	5.6	55	0.6	304	3.3	77	0.8	972	10.6	9,157
SCL* Christchurch	6,180	96.7	64	1.0	2	0.0	102	1.6	41	0.6	212	3.3	6,392
SCL* Dunedin	18,057	94.4	15	0.1	114	0.6	605	3.2	300	1.6	1,064	5.6	19,121
Valley Diagnostic Lab.	3,436	98.5	16	0.5	0	0.0	30	0.9	6	0.2	54	1.5	3,490
<b>Total</b>	<b>89,611</b>	<b>92.2</b>	<b>2,834</b>	<b>2.9</b>	<b>370</b>	<b>0.4</b>	<b>2,974</b>	<b>3.1</b>	<b>1,201</b>	<b>1.2</b>	<b>7,540</b>	<b>7.8</b>	<b>97,151</b>

\* SCL: Southern Community Laboratories

MedLab Hamilton has finished reporting smears and Report 16 was their last reporting period

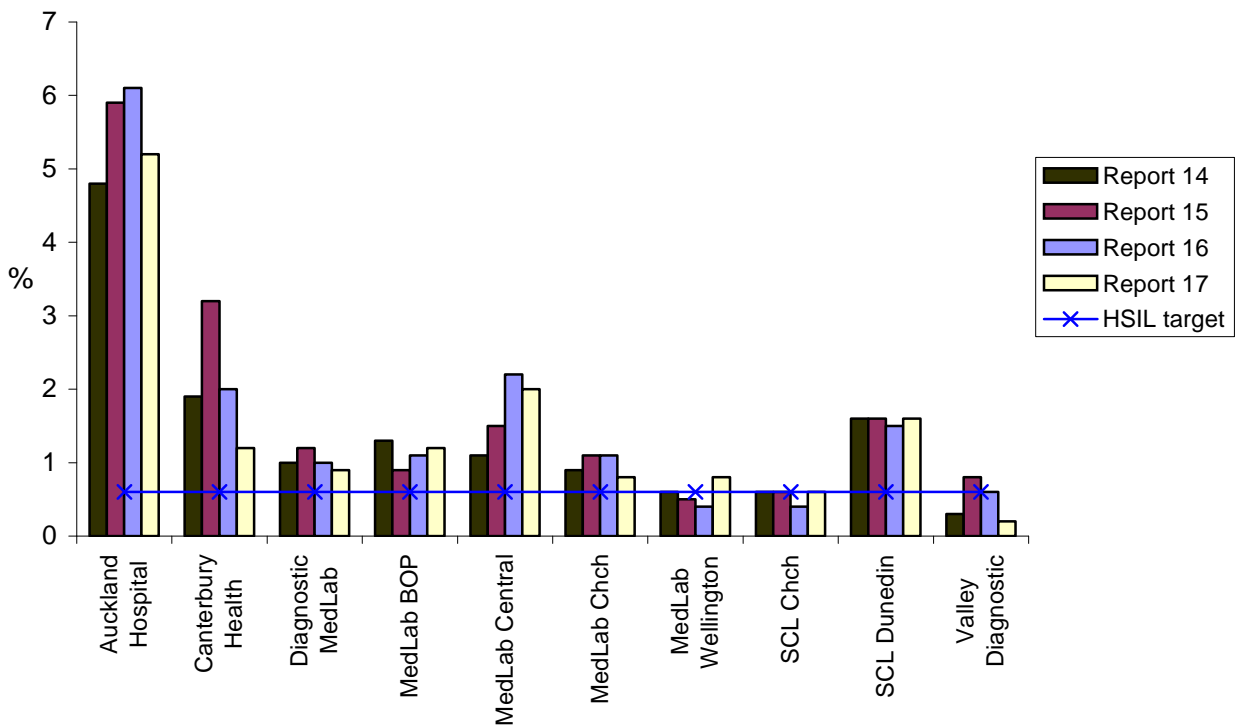
Targets are: <sup>1</sup> not more than 96%, <sup>2</sup> not less than 0.6%, <sup>3</sup> not more than 10%

**Figure 6: The proportion of satisfactory or satisfactory but limited smears reported as negative for dysplasia or malignancy for each laboratory**

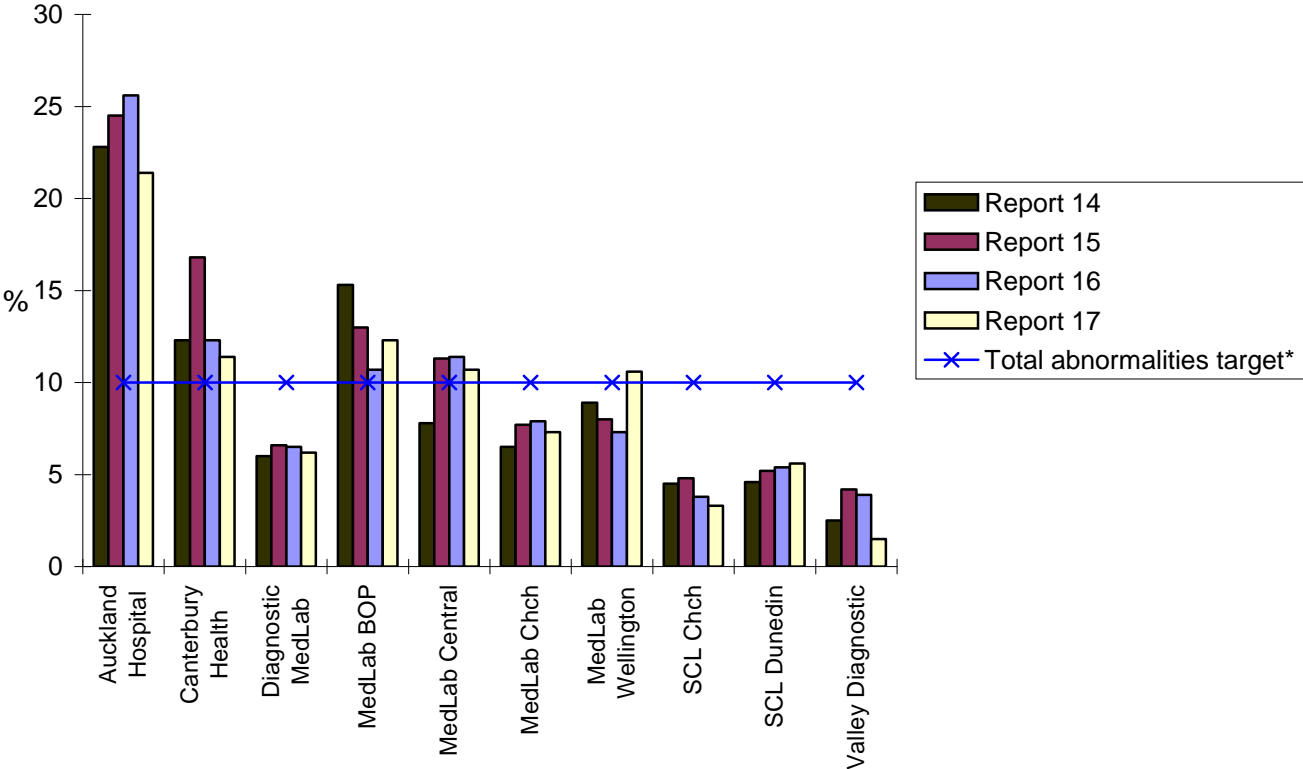


\*Negative for dysplasia or malignancy target is not more than 96% so laboratories should be under the target line

**Figure 7: The proportion of satisfactory or satisfactory but limited smears reported as HSIL for each laboratory**



**Figure 8: The proportion of satisfactory or satisfactory but limited smears reported as total abnormalities for each laboratory**



\* Total abnormalities target is not more than 10% so laboratories should be under the target line

### 6.3 Laboratory cytology turn around time

#### *Definition*

Laboratory cytology turn around time is the period of time between a smear being received by the laboratory and the report being issued by the laboratory to the smear taker.

#### *Targets*

The targets for the laboratory cytology turn around time are:

- 90% of cytology reports issued to the smear taker within seven working days of the smear being received by the laboratory
- and
- 100% of cytology reports issued to the smear taker within 14 working days of the smear being received by the laboratory.

#### *Calculation*

The difference between the date that the smear was received and the date that the smear was reported by the laboratory, as recorded by the NCSP Register, was used to measure the laboratory turn around time. The numbers of smears reported within seven working days (Monday to Friday), between eight and 14 working days and more than 14 working days were expressed as a proportion of the total number of smears processed by the laboratory during the quarter. Smears taken from enrolled women of all ages during the reporting period as recorded on the NCSP Register were included.

#### *Results*

The proportion of smears received and reports issued within specified time periods during the period 1 October to 31 December 2004 for each laboratory processing cervical cytology are shown in Table 6. Overall, 95.3% of the 98,081 smears received by laboratories were reported within seven working days. This was greater than the target of 90%, as was the proportion reported in the last two quarters (99.7% and 97.2%). All reporting laboratories achieved the seven-day target of 90% except for MedLab Bay of Plenty (85.4%) and MedLab Central (59.1%).

Overall, the 14-day target of 100% was almost achieved, with 82 (<0.1%) smears not reported within 14 working days. All laboratories were close to the target and all reported over 99% of smears within 14 working days. The reporting time for the 82 smears that were outside the 14-day target ranged from 15 working days to 50 working days, with the median time being 22 working days.

### ***Recommendations***

- Due to circumstances explained by the NSU the IMG is not making a recommendation relating to MedLab Central's seven-day turnaround time for cytology reporting.
- NSU is to seek explanation as to why MedLab Bay of Plenty is below the seven-day target for timeliness of cytology reporting.
- NSU is to seek explanations as to why SCL Christchurch, Diagnostic MedLab Auckland, and MedLab Central are below the 14-day target for cytology reporting.

**Table 6: Timeliness of the reporting of smears by laboratory**

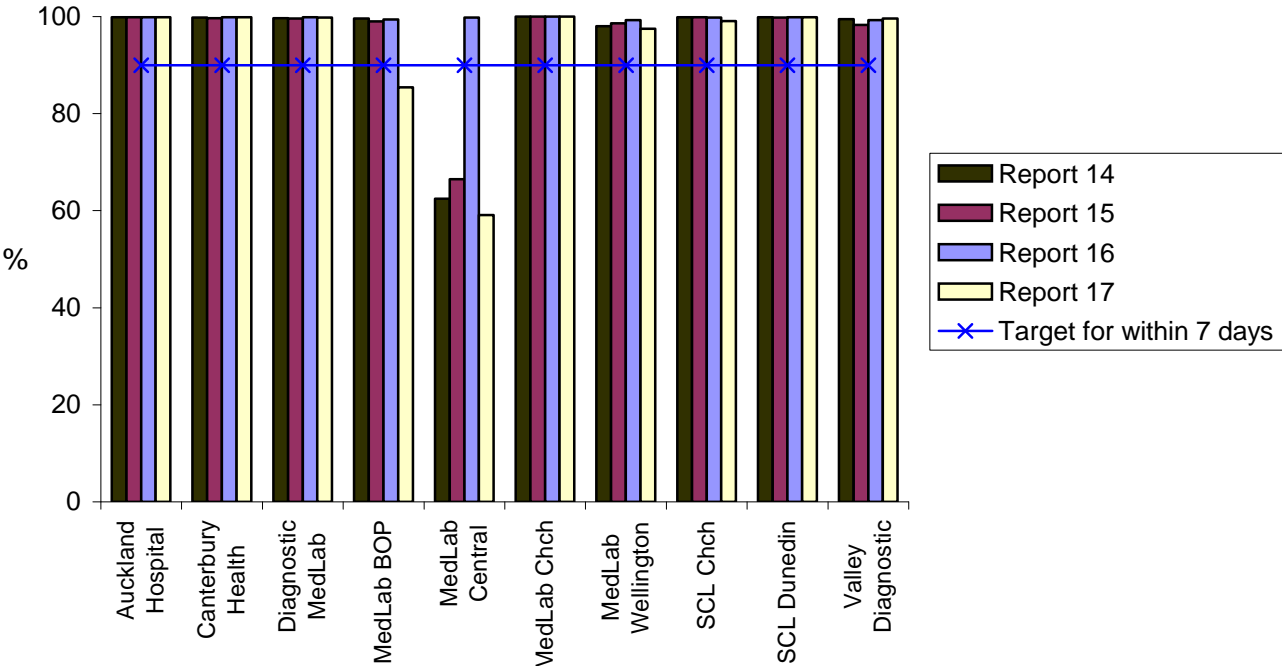
Laboratory	Number of smears processed	Within 7 working days (%)		From 8 to 14 working days (%)		Within 14 working days (cumulative %)		More than 14 working days (%)	
		n	%	n	%	n	%	n	%
Auckland Hospital Lab.	2,982	2,981	>99.9	0	0.0	2,981	>99.9	1	<0.1
Canterbury Health Lab.	3,375	3,374	>99.9	1	<0.1	3,375	100.0	0	0.0
Diagnostic MedLab Auckland	28,143	28,098	99.8	27	0.1	28,125	>99.9	18	<0.1
MedLab Bay of Plenty	9,297	7,936	85.4	1,359	14.6	9,295	>99.9	2	<0.1
MedLab Central	7,025	4,152	59.1	2,854	40.6	7,006	99.7	19	0.3
MedLab Christchurch	8,703	8,703	100.0	0	0.0	8,703	100.0	0	0.0
MedLab Wellington	9,330	9,098	97.5	231	2.5	9,329	>99.9	1	<0.1
SCL* Christchurch	6,417	6,358	99.1	22	0.3	6,380	99.4	37	0.6
SCL* Dunedin	19,312	19,298	>99.9	12	<0.1	19,310	>99.9	2	<0.1
Valley Diagnostic Lab.	3,497	3,483	99.6	12	0.3	3,495	>99.9	2	<0.1
<b>Total</b>	<b>98,081</b>	<b>93,481</b>	<b>95.3</b>	<b>4,518</b>	<b>4.6</b>	<b>97,999</b>	<b>&gt;99.9</b>	<b>82</b>	<b>&lt;0.1</b>

\* SCL: Southern Community Laboratories

MedLab Hamilton has finished reporting smears and Report 16 was their last reporting period

Targets are 90% within seven working days and 100% within 14 working days

Figure 9: Proportion of smears reported on within seven working days



## 6.4 Laboratory histology turn around time

### *Definition*

Laboratory histology turn around time is the period of time between a cervical or vaginal histology specimen being received in the laboratory and the report being issued by the laboratory to the clinician. Histology specimens include diagnostic biopsies, treatment biopsies, cervical polyps and cervical tissue of total hysterectomy specimens.

### *Targets*

The targets for the laboratory histology turn around time are 90% of final histology reports issued within five working days of the specimen being received by the laboratory, and 100% of final histology reports issued within “a reasonable time period” of the specimen being received by the laboratory. A reasonable time period is not defined, but the NCSP Operational Policy and Quality Standards (2000) states that “If it is likely to take more than 10 days for the result to be reported, the colposcopist should be informed”.

### *Calculation*

The difference between the date that the cervical histology specimen was received and the date that the histology result was reported by the laboratory, as recorded on the NCSP Register, was calculated for each laboratory that processed cervical histology. For each laboratory, the numbers of cervical histology specimens received during the quarter and reported within five working days, six to 10 working days or more than 10 working days were expressed as proportions of the total number of cervical histology specimens received by each laboratory during the quarter. Cervical histology specimens taken from enrolled women of all ages during the reporting period as recorded on the NCSP Register were included.

### *Results*

The timeliness of histology reporting by the 24 laboratories that provided results to the NCSP Register in this quarter is shown in Table 7. There were a total of 5,965 histology specimens recorded on the NCSP Register, compared to 6,530 in the

previous quarter. The number of specimens reported by each laboratory varied considerably, ranging from 23 in SCL Hawke's Bay to 925 in Diagnostic MedLab Auckland. For all laboratories combined, the proportion of histological specimens reported on within five working days was 92.9%, exceeding the target of 90%, and similar to the figures reported in the last two quarters (94.8% and 94.1%).

Five laboratories did not meet the five-day 90% target: Auckland Hospital Laboratory (63.6%), Hutt Hospital (60.8%), North Shore Hospital (78.5%), Rotorua Hospital (78.8%) and Wellington Hospital (73.1%). Four of these five laboratories also did not meet this target in the two previous quarters, Auckland Hospital (72.2% and 74.9%), Hutt Hospital (75.4% and 75.2%), Rotorua Hospital (89.1% and 88.4%) and Wellington Hospital (71.7% and 71.2%).

Auckland Hospital Laboratory (32.5%), Hutt Hospital (39.2%) and Wellington Hospital (26.9%) reported the greatest proportion of histology results six to 10 working days from the specimens being received. Most laboratories had reported all or almost all histology results within 10 working days of the specimen arriving at the laboratory. Overall, 111 (1.9%) specimens were reported more than 10 working days after the time they were received by the laboratory, a higher figure than that reported in the last quarter (0.8%, n=49). The reporting time for these 111 specimens ranged from 11 days to 57 days, with the median time being 12 days. North Shore Hospital (16.0%) and Rotorua Hospital (11.6%) reported the greatest proportion of histology results 11 or more working days from the specimens being received.

### ***Recommendations***

- NSU is to investigate delayed reporting of histology by North Shore Hospital.
- IMG request that Rotorua Hospital provide a relevant response to the histology turnaround time recommendation from Report 14 through to Report 17.

**Table 7: Timeliness of the reporting of histology by laboratory**

Laboratory	Number of specimens processed n	Within 5 working days		6 to 10 working days		11 or more working days	
		n	%	n	%	n	%
Auckland Hospital Lab.	283	180	63.6	92	32.5	11	3.9
Canterbury Health Laboratories	535	524	97.9	11	2.1	0	0.0
Diagnostic MedLab Auckland	925	894	96.7	22	2.4	9	1.0
Hutt Hospital	130	79	60.8	51	39.2	0	0.0
MedLab Bay of Plenty	518	504	97.3	12	2.3	2	0.4
MedLab Central	479	453	94.6	22	4.6	4	0.8
MedLab Taranaki	160	160	100.0	0	0.0	0	0.0
MedLab Wellington	186	175	94.1	7	3.8	4	2.2
Memorial Hospital Hastings	85	85	100.0	0	0.0	0	0.0
Middlemore Hospital	265	264	99.6	1	0.4	0	0.0
Nelson Diagnostic Lab.	45	41	91.1	4	8.9	0	0.0
Nelson Hospital	199	185	93.0	10	5.0	4	2.0
North Shore Hospital	362	284	78.5	20	5.5	58	16.0
Northland Pathology	188	185	98.4	2	1.1	1	0.5
PathLab Waikato	197	181	91.9	16	8.1	0	0.0
Rotorua Hospital	146	115	78.8	14	9.6	17	11.6
SCL* Christchurch	186	186	100.0	0	0.0	0	0.0
SCL* Dunedin	406	403	99.3	3	0.7	0	0.0
SCL* Hawke's Bay	23	22	95.7	1	4.4	0	0.0
Southland Hospital	156	155	99.4	1	0.6	0	0.0
Valley Diagnostic Lab.	53	53	100.0	0	0.0	0	0.0
Waikato Hospital	363	348	95.9	14	3.9	1	0.3
Wanganui Hospital	49	47	95.9	2	4.1	0	0.0
Wellington Hospital	26	19	73.1	7	26.9	0	0.0
<b>Total</b>	<b>5,965</b>	<b>5,542</b>	<b>92.9</b>	<b>312</b>	<b>5.2</b>	<b>111</b>	<b>1.9</b>

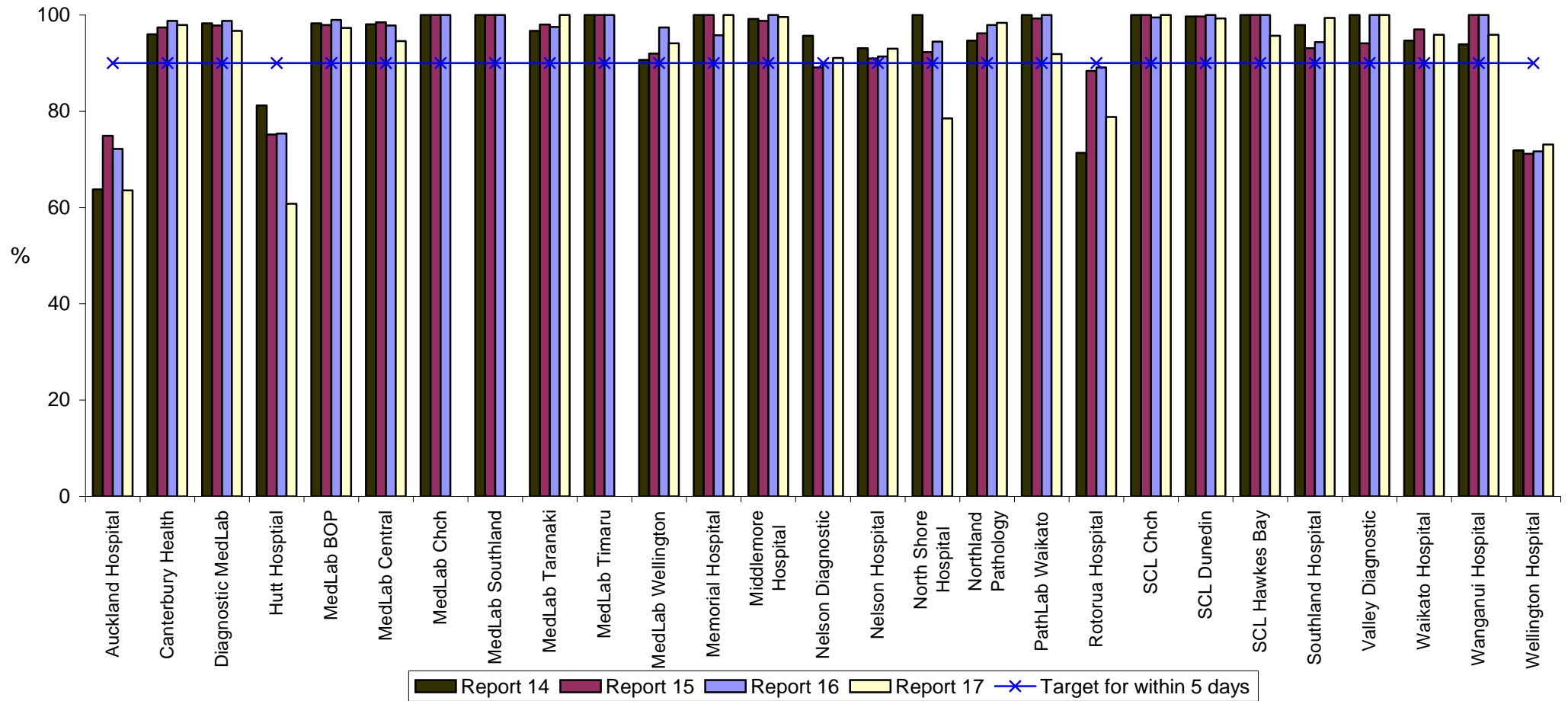
Targets: 90% within five working days and 100% within a reasonable period of time

\* SCL: Southern Community Laboratories

MedLab Hamilton has finished reporting histology and Report 16 was their last reporting period

MedLab Timaru, MedLab Southland and MedLab Christchurch were all reporting histologies during this period. However, none of the histologies that were taken during this quarter by these labs were reported to the register prior to the NCSP Register extract for the IMG report for this quarter.

Figure 10: Laboratory histology five-day turn around time



## **6.5 Satisfactory but limited and unsatisfactory smears by laboratory**

### ***Definition***

Satisfactory but limited smears are those smears reported with a Bethesda adequacy code of A2. Unsatisfactory smears are those smears reported with a Bethesda adequacy of A3 (Revised Bethesda Coding System, 1998). It is important to note that the adequacy coding of a smear is influenced by both smear taking technique and laboratory reporting practice. The revised Bethesda System 2001 no longer includes a satisfactory but limited category. When the NCSP adopts the revised Bethesda System 2001 (from July 2005), consideration will be given to changing the current target for unsatisfactory smears.

### ***Targets***

The target for satisfactory but limited smears is not more than 20% of all smears reported for a given laboratory. The target for unsatisfactory smears is not less than 0.5% and not more than 2.0% of all smears reported for a given laboratory.

### ***Calculation***

All smears taken during the reporting quarter for which there was a result recorded on the NCSP Register were used to calculate these indicators. The number of satisfactory but limited smears and the number of unsatisfactory smears reported were both expressed as a proportion of the total number of smears processed during the quarter by each cytology reporting laboratory.

### ***Results***

The number and proportion of satisfactory but limited and unsatisfactory smears taken during the quarter and reported by each cytology laboratory is shown in Table 8. Overall, 98,081 smears were processed, of which 17.2% were reported as satisfactory but limited, a similar figure to that reported for the last quarter (16.8%) and within the target of not more than 20%. Among the laboratories, the proportion of satisfactory but limited smears varied considerably. This proportion ranged from 8.2% for SCL Dunedin to 23.7% for Diagnostic MedLab Auckland, which along with MedLab

Christchurch (20.7%) exceeded the target of not more than 20% of smears read as satisfactory but limited.

Overall, 930 (1.0%) of the 98,081 smears processed were reported as unsatisfactory for evaluation. This is identical to the proportion reported in the last quarter (1.0%) and is within the target range of 0.5 to 2.0%. Each laboratory reported unsatisfactory smears in this target range with the exception of MedLab Christchurch (2.1%), SCL Christchurch (0.4%) and Valley Diagnostic (0.2%). MedLab Christchurch (2.3%) was also outside the target range for unsatisfactory smears in the previous quarter.

### ***Recommendations***

No recommendations were made, since the “satisfactory but limited” category is no longer in use. This indicator will continue to be reported on, since the proportion of unsatisfactory smears is still of interest.

**Table 8: The number and proportion of satisfactory but limited and unsatisfactory smears by laboratory**

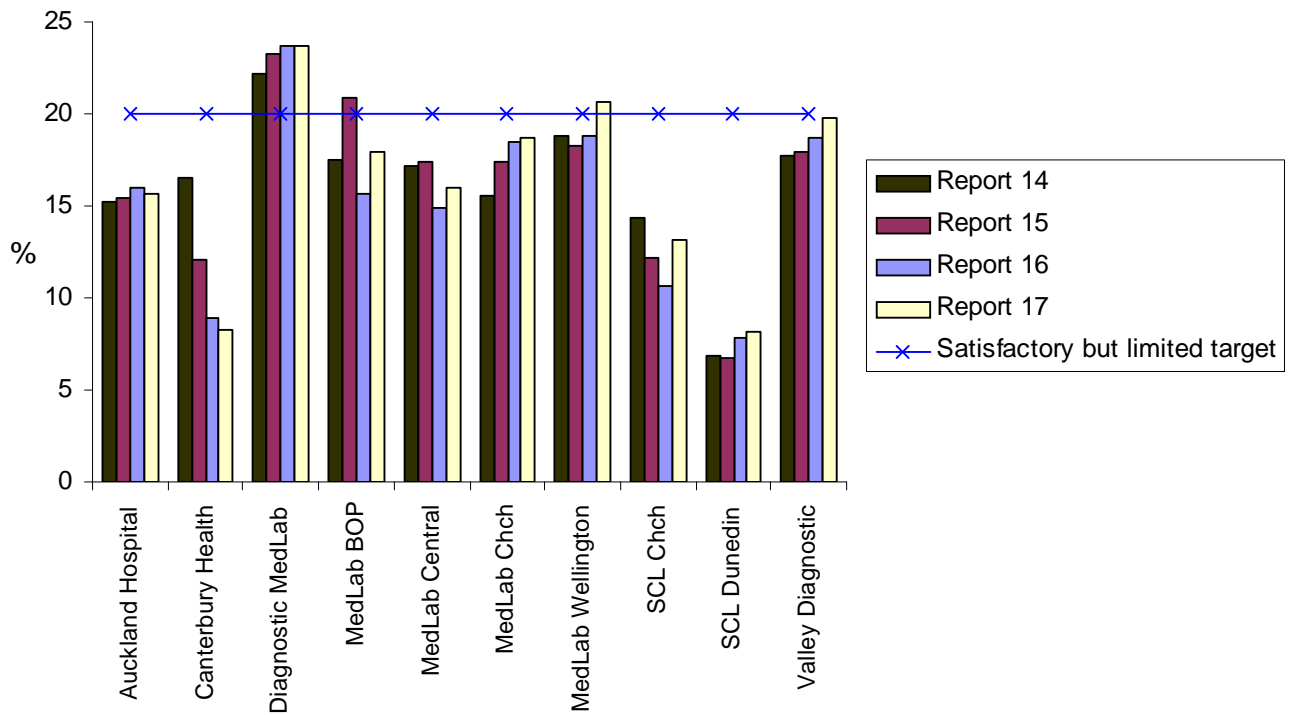
Laboratory	Smears processed	Satisfactory but limited smears <sup>1</sup>		Unsatisfactory smears <sup>2</sup>	
	n	n	%	n	%
Auckland Hospital Lab.	2,982	464	15.6	29	1.0
Canterbury Health Lab.	3,375	281	8.3	18	0.5
Diagnostic MedLab Auckland	28,143	6,662	23.7	194	0.7
MedLab Bay of Plenty	9,297	1,664	17.9	67	0.7
MedLab Central	7,025	1,122	16.0	41	0.6
MedLab Christchurch	8,703	1,630	18.7	185	2.1
MedLab Wellington	9,330	1,935	20.7	173	1.9
SCL* Christchurch	6,417	842	13.1	25	0.4
SCL* Dunedin	19,312	1,578	8.2	191	1.0
Valley Diagnostic Lab.	3,497	691	19.8	7	0.2
<b>Total</b>	<b>98,081</b>	<b>16,869</b>	<b>17.2</b>	<b>930</b>	<b>1.0</b>

Targets: <sup>1</sup>not more than 20%, <sup>2</sup> 0.5 to 2.0%

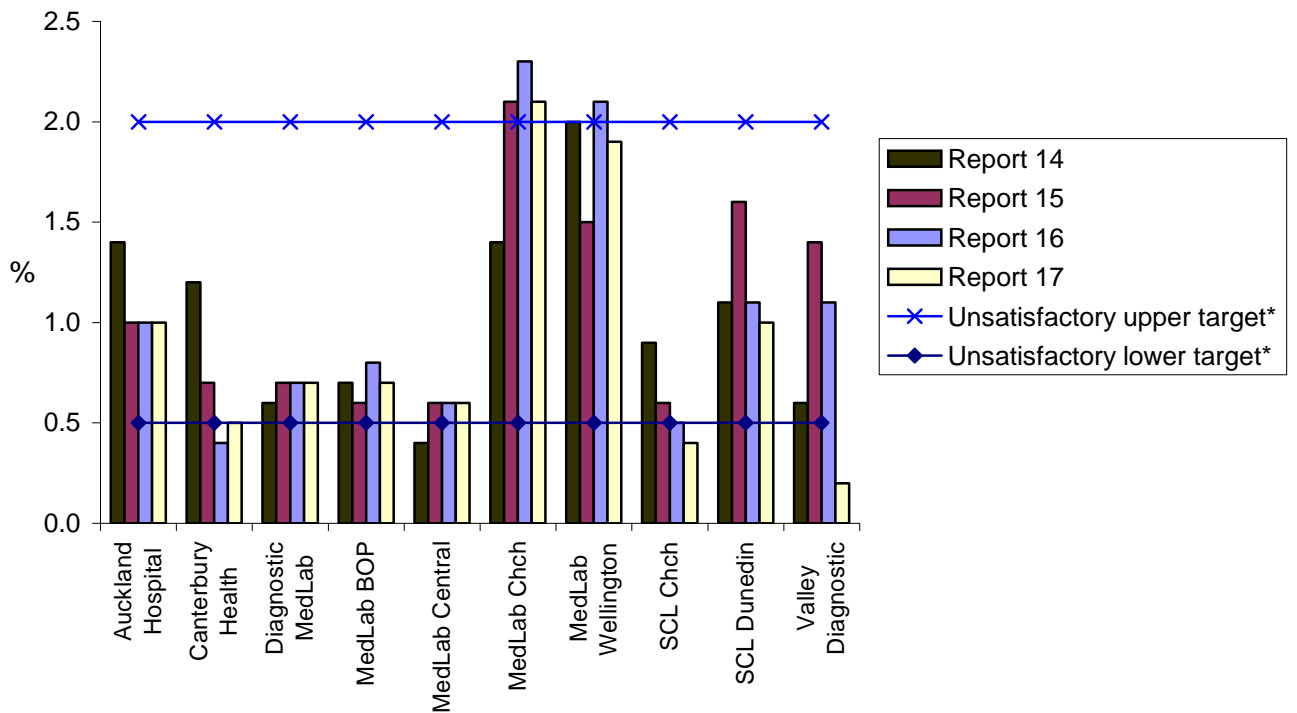
\* SCL: Southern Community Laboratories

MedLab Hamilton has finished reporting smears and Report 16 was their last reporting period

**Figure 11: Satisfactory but limited smears by laboratory**



**Figure 12: Unsatisfactory smears by laboratory**



\*Unsatisfactory smears target is not less than 0.5% and not more than 2.0% so laboratories should be between the two target lines

## 6.6 Satisfactory but limited and unsatisfactory smears by smear taker

### *Definition*

Definitions and a description of the issues surrounding satisfactory but limited and unsatisfactory smears are given on Page 40.

### *Targets*

The target for satisfactory but limited smears is not more than 20% of all smears reported for each smear taker category. The target for unsatisfactory smears is not less than 0.5% and not more than 2.0% of all smears reported for each smear taker category.

### *Calculation*

Smears taken from enrolled women of all ages during the reporting quarter for which there was a result recorded on the NCSP Register were used to calculate these indicators. The total number of smears recorded by each smear taker group for the 12 months prior to the end of the reporting quarter was used to calculate the annual volume of smears taken by each smear taker group. For each group, the number of satisfactory but limited and unsatisfactory smears was expressed as a proportion of the total number of smears taken by that group.

### *Results*

The numbers and proportions of satisfactory, satisfactory but limited and unsatisfactory smears taken in this quarter by annual volume of smears taken by each smear taker group is shown in Table 9. Overall, 98,081 smears were taken during the reporting quarter, of which 7 (<1%) were taken by lay smear takers, 59,785 (61%) by medical smear takers, 29,637 (30%) by nurses, 8,338 (9%) by specialists and 314 (<1%) by midwives. These proportions and volumes are similar to those reported in the last quarter.

The proportion of satisfactory but limited smears was within the target of not more than 20% for each smear taker group as a whole. When smear taker groups were considered by annual volume, the proportion of satisfactory but limited smears was greater than 20% for medical, specialist, and midwife smear taker groups who took

fewer than 30 smears, and midwife smear takers who took 30 to 100 smears in the 12 months prior to 31 December 2004. The numbers of smears in each group, when split by annual volume, is too small for meaningful analyses for some smear taker groups.

The proportion of unsatisfactory smears was within the target range of 0.5 to 2.0% for smear taker groups, with the exception of specialist smear takers with annual volumes of under 30 smears (4.0%) and 30 to 100 smears (2.1%). None of the smears taken by lay smear takers were reported as unsatisfactory for assessment.

### ***Recommendations***

No recommendations were made, since the “satisfactory but limited” category is no longer in use. This indicator will continue to be reported on, since the proportion of unsatisfactory smears is still of interest.

**Table 9: 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	Satisfactory smears		Satisfactory but limited smears <sup>1</sup>		Unsatisfactory Smears <sup>2</sup>	
			n	%	n	%	n	%
Lay	<30	0	0	0.0	0	0.0	0	0.0
	30-100	7	7	100	0	0.0	0	0.0
	<b>Total</b>	<b>7</b>	<b>7</b>	<b>100</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>
Medical	<30	4,023	3,129	77.8	839	20.9	55	1.4
	30-100	17,005	13,643	80.2	3,173	18.7	189	1.1
	>100	38,757	31,155	80.4	7,249	18.7	353	0.9
	<b>Total</b>	<b>59,785</b>	<b>47,927</b>	<b>80.2</b>	<b>11,261</b>	<b>18.8</b>	<b>597</b>	<b>1.0</b>
Nurse	<30	2,082	1,687	81.0	382	18.4	13	0.6
	30-100	11,570	9,780	84.5	1,703	14.7	87	0.8
	>100	15,985	13,756	86.1	2,125	13.3	104	0.7
	<b>Total</b>	<b>29,637</b>	<b>25,223</b>	<b>85.1</b>	<b>4,210</b>	<b>14.2</b>	<b>204</b>	<b>0.7</b>

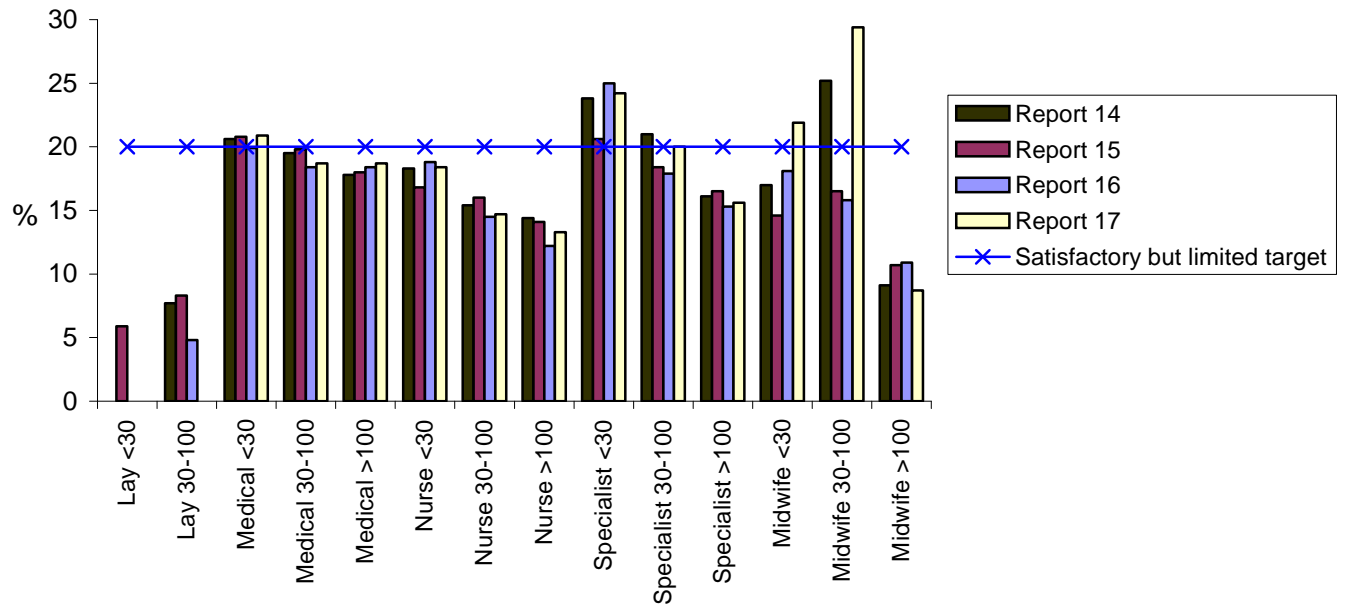
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Targets: <sup>1</sup>not more than 20%, <sup>2</sup> 0.5 to 2.0%

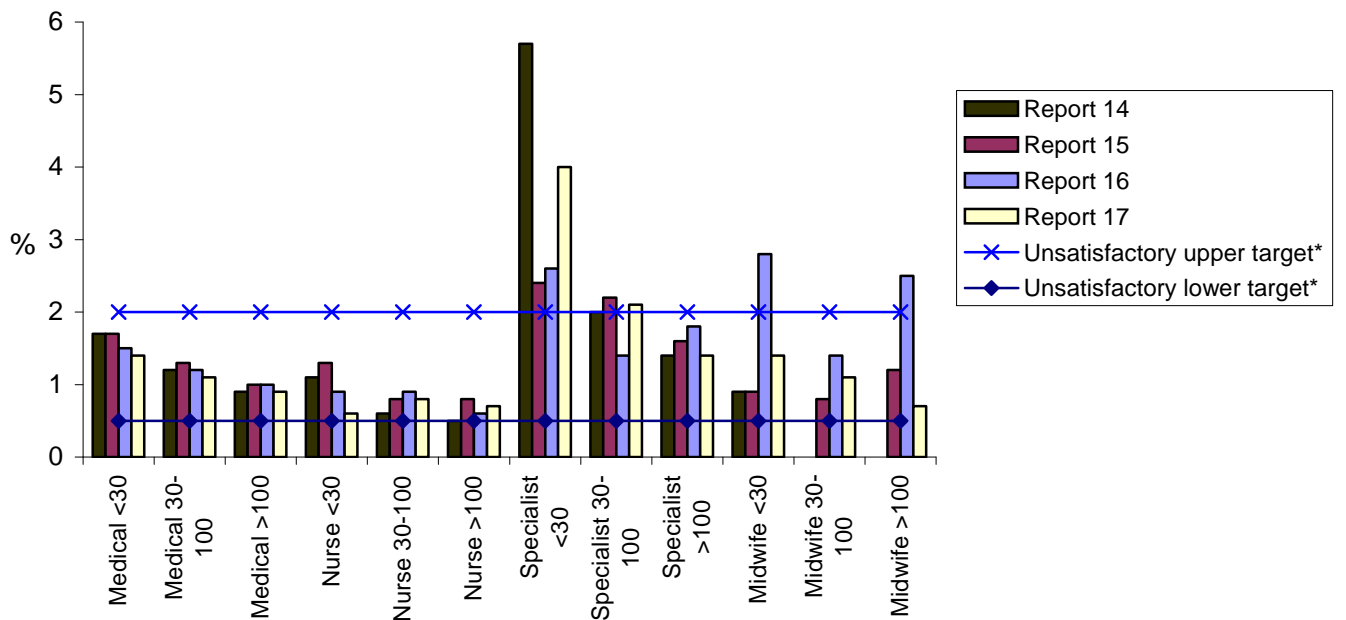
Smear taker group	Annual volume of smears	Total number of smears	Satisfactory smears		Satisfactory but limited smears <sup>1</sup>		Unsatisfactory Smears <sup>2</sup>	
			n	%	n	%	n	%
Specialist	<30	124	89	71.8	30	24.2	5	4.0
	30-100	714	556	77.9	143	20.0	15	2.1
	>100	7,500	6,225	83.0	1,169	15.6	106	1.4
	<b>Total</b>	<b>8,338</b>	<b>6,870</b>	<b>82.4</b>	<b>1,342</b>	<b>16.1</b>	<b>126</b>	<b>1.5</b>
Midwife	<30	73	56	76.7	16	21.9	1	1.4
	30-100	92	64	69.6	27	29.4	1	1.1
	>100	149	135	90.6	13	8.7	1	0.7
	<b>Total</b>	<b>314</b>	<b>255</b>	<b>81.2</b>	<b>56</b>	<b>17.8</b>	<b>3</b>	<b>1.0</b>
<b>Total</b>		<b>98,081</b>	<b>80,282</b>	<b>81.9</b>	<b>16,869</b>	<b>17.2</b>	<b>930</b>	<b>1.0</b>

Targets: <sup>1</sup>not more than 20%, <sup>2</sup> 0.5 to 2.0%

**Figure 13: Satisfactory but limited smears by smear taker**



**Figure 14: Unsatisfactory smears by smear taker**



\*Unsatisfactory smears target is not less than 0.5% and not more than 2.0% so smear takers should be between the two target lines. Lay group is not shown here because of the limited numbers of unsatisfactory smears.

## 6.7 Waiting time for colposcopic assessment for HSIL or ASCUS-HG

### *Definition*

The waiting time for colposcopic assessment for HSIL or ASCUS-HG is the time from the receipt of a referral to a DHB colposcopy service for women with a high grade cytology result to the time of the first colposcopic assessment.

### *Targets*

The target for colposcopic assessment of women with a high grade cytology result is 95% of women having assessment within four weeks of referral.

### *Calculation*

The data required for the calculation of the waiting time for assessment for HSIL or ASCUS-HG indicator are supposed to be collected by DHB colposcopy clinics and reported to the NSU. The indicator was unable to be calculated with the available data. Nevertheless, the number of women with HSIL or ASCUS-HG cytology results who were referred to DHB colposcopy clinics each month, and the number of women with HSIL or ASCUS-HG cytology results who were waiting longer than four weeks for colposcopic assessment at the end of each month, reported by DHB colposcopy services were provided by the NSU.

### *Results*

The reported number of women with a HSIL or ASCUS-HG cytology result referred each month for colposcopic assessment to each DHB colposcopy service, and the reported number of women referred for colposcopic assessment of a HSIL or ASCUS-HG cytology result waiting longer than four weeks at the end of each month is shown in Table 10. Two colposcopy units, Nelson Marlborough and Northland, did not provide any data for this reporting quarter, compared with four that did not provide data for the previous quarter.

The reported number of women referred for an assessment of a HSIL or ASCUS-HG cytology abnormality waiting longer than four weeks at the end of each month was highest for Hawke's Bay colposcopy unit (71 women at the end of October, 79 women at

the end of November, and 112 women at the end of December). The number of colposcopy units which reported that no women waited longer than four weeks in any month was eight, compared with nine in the previous quarter.

***Recommendations***

- IMG have concerns about the non-reporting of and the accuracy of the reported colposcopy data. The NSU should investigate this as a matter of urgency.

**Table 10: Waiting time for colposcopic assessment of HSIL or ASCUS possible high grade by DHB colposcopy service**

DHB Colposcopy Reporting Unit	Number of women referred for assessment of HSIL or ASCUS-HG			Number of women referred waiting longer than 4 weeks at the end of each month		
	October	November	December	October	November	December
Auckland	37	58	24	0	0	0
Bay of Plenty	30	17	29	0	0	0
Canterbury	33	32	29	0	0	0
Capital and Coast	14	16	13	2	6	5
Counties Manukau	22	42	20	2	5	21
Hawke's Bay	21	29	24	71	79	112
Hutt Valley	23	18	7	1	5	4
Lakes	4	0	4	34	0	1
MidCentral	11	0	4	0	0	0
Nelson Marlborough	NR	NR	NR	NR	NR	NR
Northland	NR	NR	NR	NR	NR	NR
Otago	24	29	29	0	0	0
South Canterbury	0	3	3	0	0	0
Southland	0	0	0	2	3	7
Tairāwhiti	6	3	6	4	2	2
Taranaki	7	16	10	3	2	0
Waitemata	0	0	0	0	0	53
Waikato	19	38	37	2	0	3
Wairarapa	1	2	6	0	2	1
Whanganui	7	4	6	0	0	0
West Coast	0	0	3	0	1	1
<b>Total</b>	<b>259</b>	<b>307</b>	<b>254</b>	<b>121</b>	<b>105</b>	<b>210</b>

NR: data not reported

## 6.8 Waiting time for colposcopic assessment for LSIL or ASCUS

### *Definition*

The waiting time for colposcopic assessment for LSIL is the time from the receipt of a referral to a DHB colposcopy service for women with a low grade (LSIL or ASCUS) cytology result to the time of the first colposcopic assessment.

### *Targets*

The target for colposcopic assessment of women with a low grade cytology result is 95% of women having assessment within 26 weeks of referral.

### *Calculation*

Data required for the calculation of the waiting time for assessment for LSIL indicator are supposed to be collected by DHB colposcopy clinics and reported to the NSU. The indicator was unable to be calculated with the available data. Nevertheless, the number of women with low grade cytology results who were referred to DHB colposcopy clinics each month, and the number of women with low grade cytology results who were waiting longer than 26 weeks for colposcopic assessment at the end of each month, reported by DHB colposcopy services were provided by the NSU.

### *Results*

The reported number of women with low grade cytology results referred each month for colposcopic assessment to each DHB colposcopy service, and the reported number of women referred for colposcopic assessment of a low grade cytology result waiting longer than 26 weeks at the end of each month is shown in Table 11. Two colposcopy units, Nelson Marlborough and Northland, did not provide any data for this reporting quarter, compared with four that did not provide data for the previous quarter.

The reported number of women referred for an assessment of a LSIL or ASCUS cytology abnormality waiting longer than 26 weeks at the end of each month was highest for Hawke's Bay colposcopy unit (84 women at the end of October, 81 women at the end of November, and 84 women at the end of December). Seven of the colposcopy units

reported that no women waited longer than 26 weeks in any month, compared with eight in the previous quarter.

***Recommendations***

- IMG have concerns about the non-reporting of and the accuracy of the reported colposcopy data. The NSU should investigate this as a matter of urgency.

**Table 11: Waiting time for colposcopic assessment of LSIL or ASCUS by DHB colposcopy service**

DHB Colposcopy Reporting Unit	Number of women referred for assessment of LSIL or ASCUS			Number of women referred waiting longer than 26 weeks at the end of each month		
	October	November	December	October	November	December
Auckland	32	37	24	0	0	0
Bay of Plenty	48	46	46	0	0	0
Canterbury	58	56	54	1	2	1
Capital and Coast	51	58	62	0	0	0
Counties Manukau	44	53	41	7	19	24
Hawke's Bay	8	9	6	84	81	84
Hutt Valley	4	5	9	0	1	2
Lakes	15	0	40	0	0	22
MidCentral	25	25	29	10	0	2
Nelson Marlborough	NR	NR	NR	NR	NR	NR
Northland	NR	NR	NR	NR	NR	NR
Otago	21	23	22	0	0	0
South Canterbury	1	1	0	0	3	3
Southland	22	15	2	4	5	6
Tairāwhiti	13	20	16	4	2	2
Taranaki	9	21	3	1	0	0
Waitemata	0	0	0	0	0	44
Waikato	41	51	48	24	29	34
Wairarapa	22	10	16	0	2	0
Whanganui	13	20	22	0	0	0
West Coast	0	6	1	0	0	0
<b>Total</b>	<b>427</b>	<b>456</b>	<b>441</b>	<b>135</b>	<b>144</b>	<b>224</b>

NR: data not reported

**Appendix 1: Summary of the Revised Bethesda Coding Standard (1998)**

The hierarchy of broad cytological categories is:

- (a) Negative for dysplasia or malignancy
- (b) Abnormal not otherwise specified
- (c) Atypical squamous cells of undetermined significance (ASCUS), excluding ASCUS possible high grade
- (d) Low grade squamous intra-epithelial lesion (LSIL)
- (e) Atypical glandular cells of undetermined significance (AGUS) favouring a reactive process
- (f) Atypical glandular cells of undetermined significance (AGUS) favouring a dysplastic or neoplastic process
- (g) ASCUS possible high grade
- (h) High grade squamous intra-epithelial lesion (HSIL)
- (i) Adenocarcinoma-in-situ (AIS)
- (j) Adenocarcinoma
- (k) Cancer not otherwise specified