

Orthodoxy is the ability to  
say two and two make five  
when faith requires it.

George Orwell

# How will the colposcopy services manage in a primary HPV screening environment?

- Referral Value NHS 2013: The number of abnormal tests referred to colposcopy to detect one case of CIN2+
- NHS 2016 (unpublished data).
- Unvaccinated screening population.
- Cytology RV 2.2. HPV 16 RV 7.1. HPV 18 RV 21.0 in cytology negative HPV positive women.
- HPV 16 RV 3.5 x Cytology.

**Figure 57 – Percentage of women with a high grade cytology (no suspicion of invasive disease) with a colposcopy visit within 20 working days, by ethnicity**

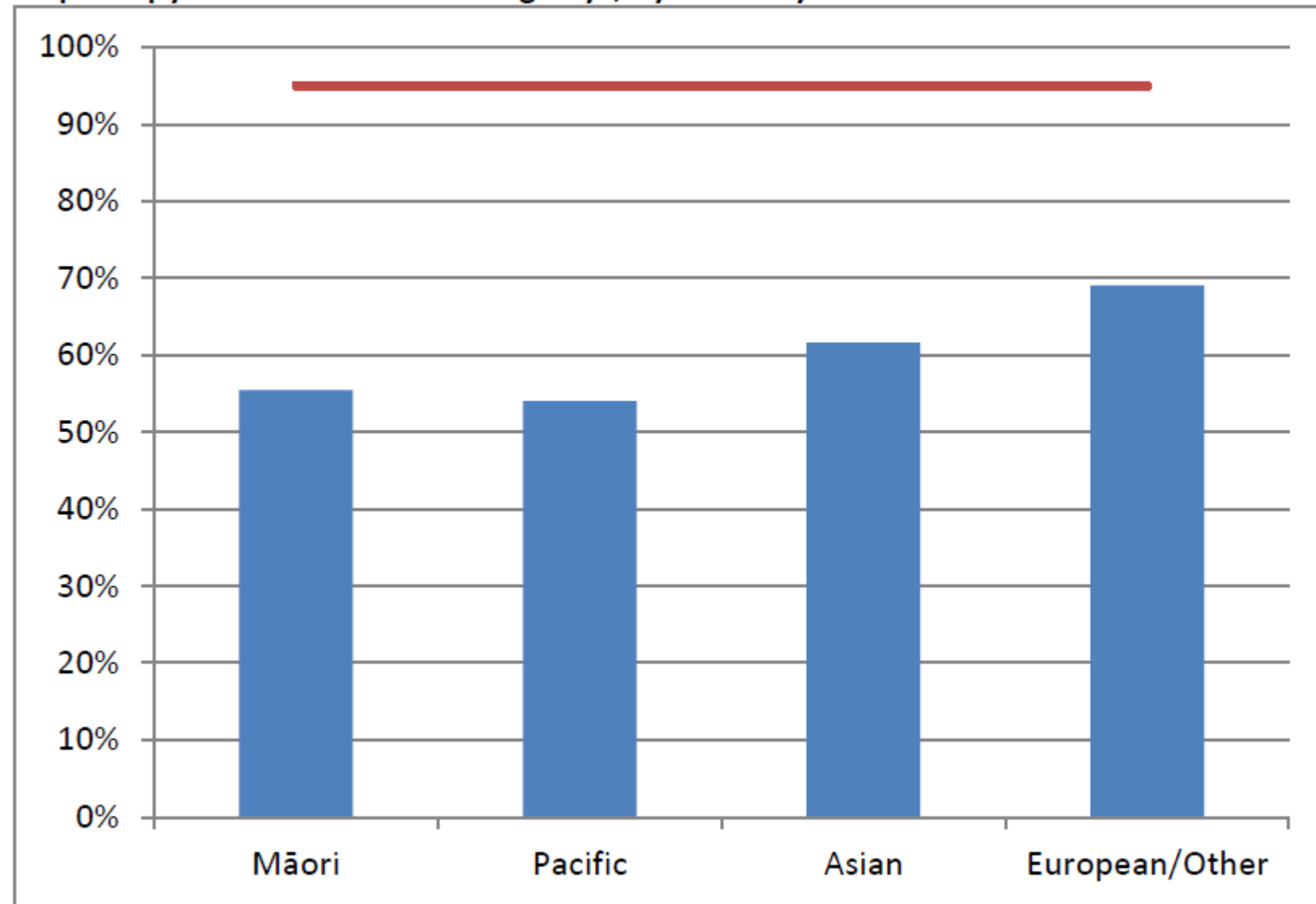
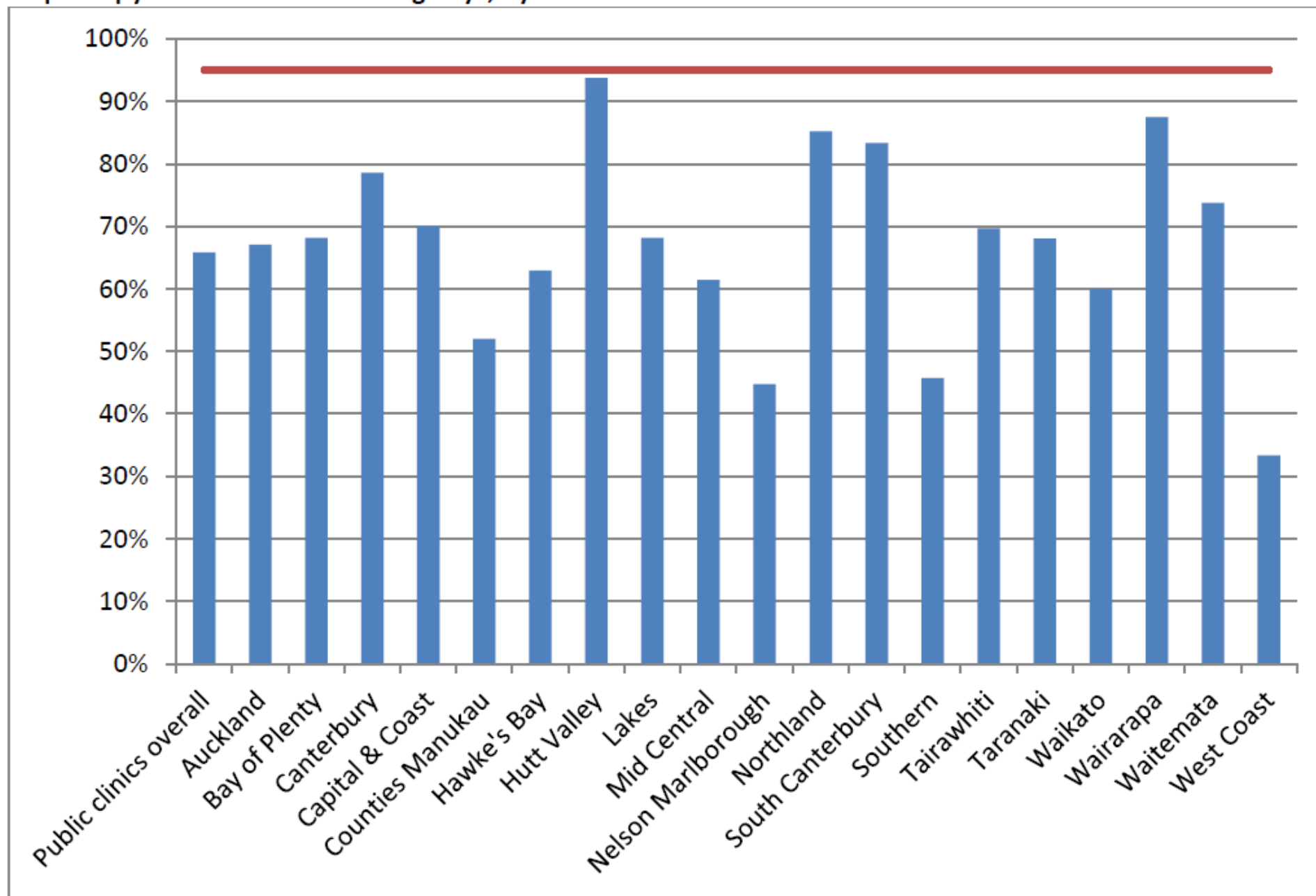


Figure 58 – Percentage of women with a high grade cytology (no suspicion of invasive disease) with a colposcopy visit within 20 working days, by DHB



# HPV detects an infection not a cancer precursor

- Most women will resolve the infection
- The majority of HRHPV women will have no cytological, histological or colposcopic abnormality
- 4/51 ( 7.8%) Cytology negative HPV16/18 positive women had CIN 2+ Austin RM 2015.
- How do we care appropriately for these HRHPV positive women?
- Co-testing would allow for safe conservative management in the community.

Is it safe to not screen NZ women under 25 ?



Table 10: Age-specific histology reporting rates per 1000 women screened (aged 20–69 years), 2012

Histology result category	Age group (years)											
	20–24		25–29		30–34		35–39		40–44		45–49	
	<i>n</i>	Rate	<i>n</i>	Rate	<i>n</i>	Rate	<i>n</i>	Rate	<i>n</i>	Rate	<i>n</i>	Rate
Negative/benign (non neoplastic)	713	14.6	782	17.9	902	20.1	1,188	25.2	1,752	33.3	1,976	40
HPV	366	7.5	360	8.2	290	6.5	252	5.3	246	4.7	190	3.8
CIN1	931	19.1	716	16.3	563	12.6	404	8.6	398	7.6	291	5.9
CIN2	369	7.6	325	7.4	204	4.6	147	3.1	130	2.5	80	1.6
CIN3	515	10.5	504	11.5	391	8.7	281	6	204	3.9	110	2.2
HSIL nos	357	7.3	353	8.1	263	5.9	148	3.1	95	1.8	70	1.4
Microinvasive	1	<0.05	1	<0.05	1	<0.05	0	<0.05	5	0.1	1	<0.05
Invasive SCC	3	0.1	3	0.1	6	0.1	13	0.3	15	0.3	13	0.3
Glandular dysplasia	0	<0.05	0	<0.05	1	<0.05	0	<0.05	0	<0.05	0	<0.05
Adenocarcinoma in situ	14	0.3	33	0.8	28	0.6	30	0.6	15	0.3	8	0.2
Invasive adenocarcinoma*	3	0.1	3	0.1	1	<0.05	3	0.1	6	0.1	4	0.1
Adenosquamous carcinoma	0	<0.05	0	<0.05	0	<0.05	0	<0.05	0	<0.05	0	<0.05
Other cancer	0	<0.05	2	<0.05	5	0.1	0	<0.05	4	0.1	9	0.2
<b>Total</b>	<b>3272</b>	<b>67.0</b>	<b>3082</b>	<b>70.4</b>	<b>2655</b>	<b>59.3</b>	<b>2466</b>	<b>52.3</b>	<b>2870</b>	<b>54.5</b>	<b>2752</b>	<b>55.7</b>

Note: CIN = cervical intraepithelial neoplasia; HSIL nos = high-grade not otherwise specified (CIN2/3, SNOMED co

# Is it safe to not screen NZ women under 25?

- International data suggest that this may be safe.
- But...
- Early age of first intercourse in NZ
- High rates of CIN3 in NZ U25.
- No evidence to support the view that the natural history of CIN3 is different in the U25
- No evidence to support the view that conservative management of early stage invasive cancer is not associated with progression.
- NZ data on invasive cancers in the 25-30 age group would be helpful.



**Table 3: Types of invasive cervical cancer detected in women aged 20–24 years, 2008–2013 (N = 23)**

Invasive cancer type	<i>n</i>	Negative only screen result prior to cancer diagnosis	Low-grade cytology prior to cancer diagnosis	No screening or high-grade cytology within 6 months of cancer diagnosis	Comment regarding negative only screening prior to cancer diagnosis
Microinvasive squamous cell carcinoma	14	1	3	10	1 x negative smear 12 months prior (start of screening)
Squamous cell carcinoma	4	0	1	3	-
Adenosquamous cell carcinoma	1	1	0	0	2 x negative smears 20 months and 13 months prior
<b>Total squamous cell carcinomas</b>	<b>19</b>	<b>2</b>	<b>4</b>	<b>13</b>	
Adenocarcinoma	4				
<b>Total all cancers</b>	<b>23</b>				

# LBC effective at detecting early invasive cancer in U25

3.16 Two of the 19 squamous carcinoma cases (both invasive) had no screening

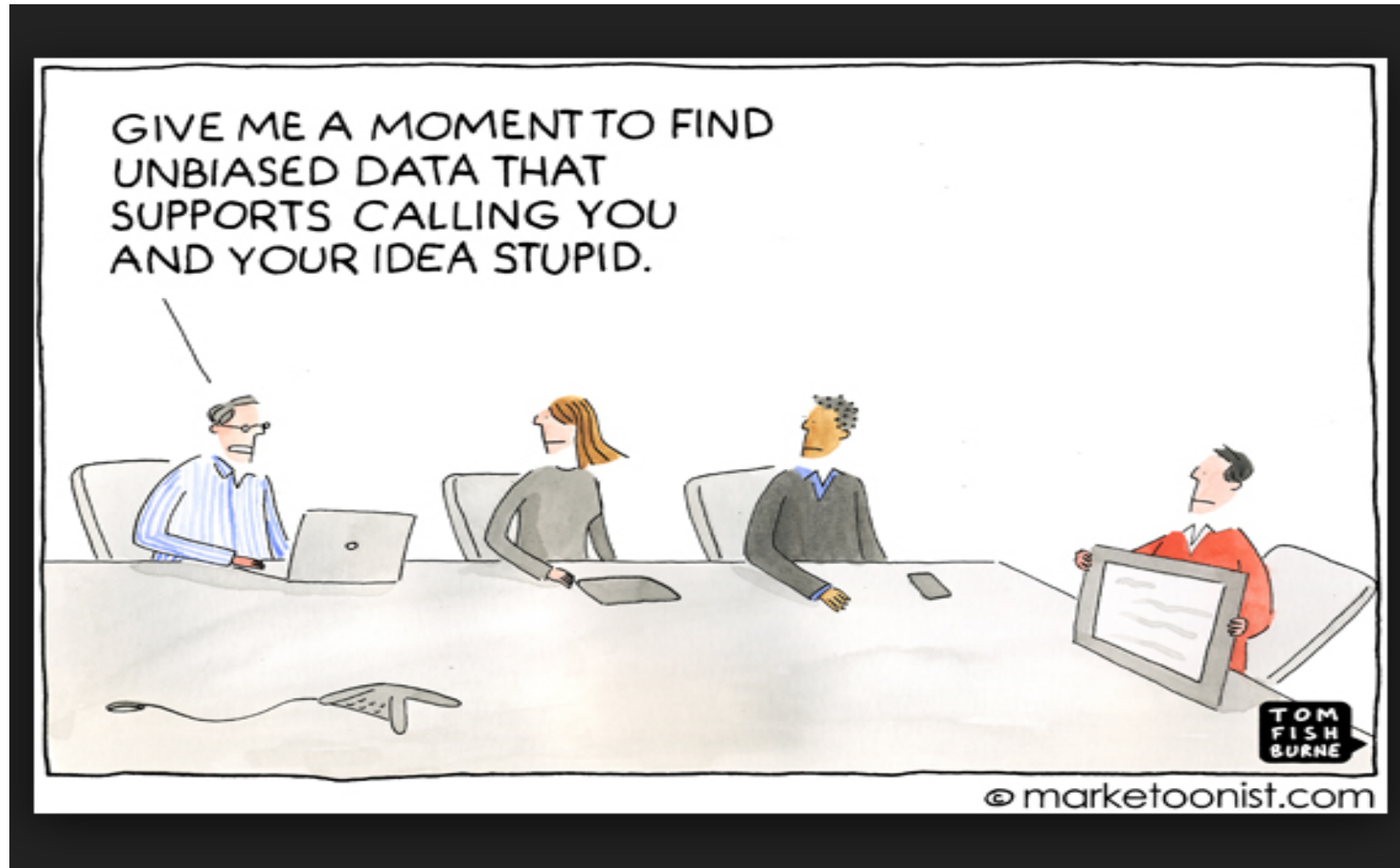
3.17 In conclusion, all of the microinvasive cases were associated with screening results recommending referral according to New Zealand guidelines (either high-grade or two low-grade abnormalities). Without the screening events, it cannot be determined if the microinvasive cases would have developed to invasive disease before the age of 25 years. However, screening this age group was beneficial as morbidity was lower.

- the remaining 13 microinvasive cases did not have abnormal symptoms and had at least one cervical smear test
- 11 of the 14 microinvasive cases had a high-grade smear prior to histological diagnosis and the remaining 3 cases had low-grade cytology prior. No cases had only a negative cytology history.

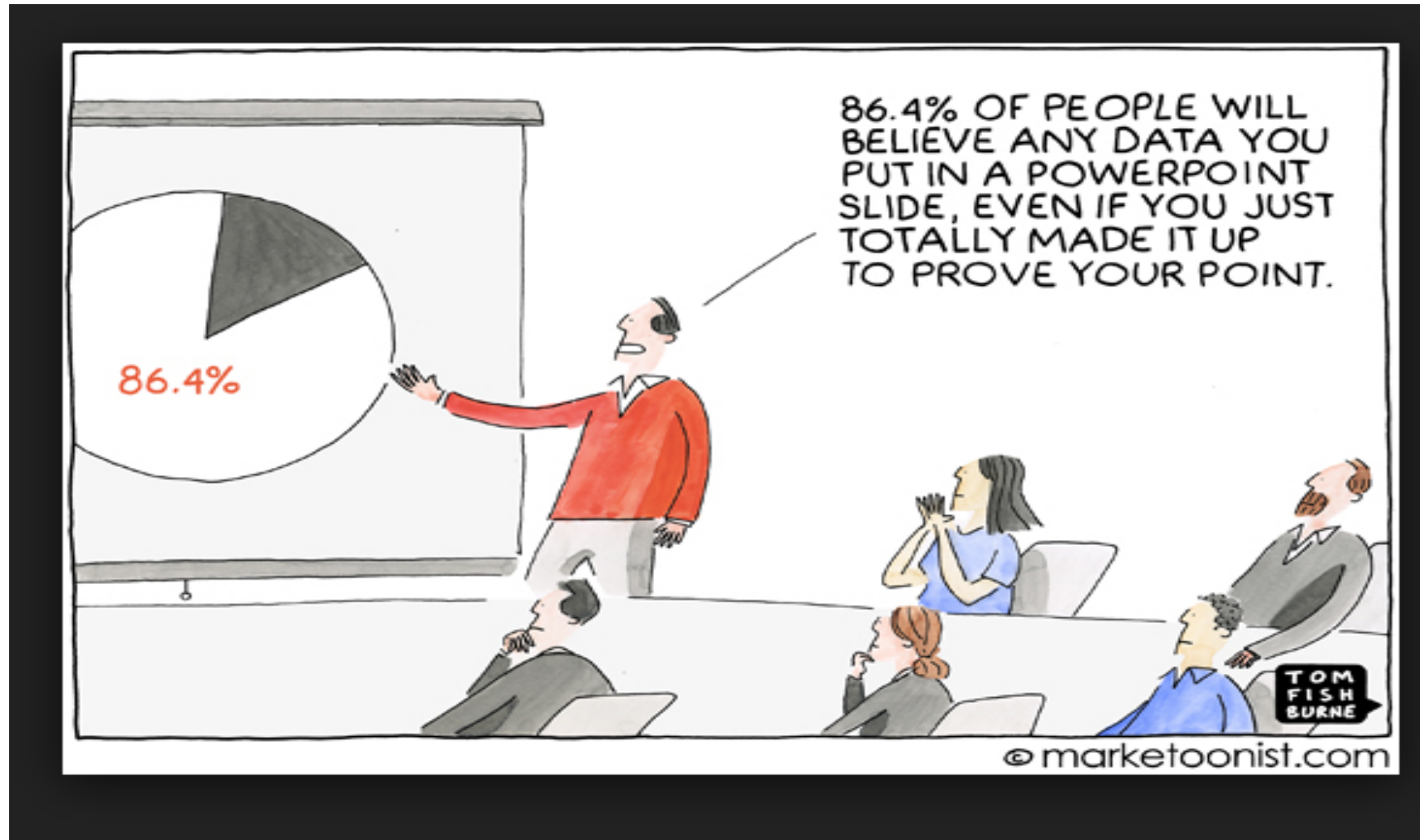
# LBC effective at detecting early invasive cancer in the U25

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- Co-testing using LBC and HRHPV is the best test for NZ women
- Co-testing mitigates concerns about reduced cancer protection at extended screening intervals
- Co-testing allows for community based conservative follow up of Cytology negative HRHPV positive women.
- Co-testing guarantees the vitality of the cytology work force
- Co-testing therefore mitigates transition risk over the next 10 years.
- 5 yearly Co-testing need not cost more than our current 3 yearly LBC.