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Introduction

CervicalCheck, The National Cervical Screening Programme in the Republic of Ireland provides treatment at colposcopy for high-grade cervical intraepithelial neoplasia (CIN) to over 4000 women annually. There is a standardised model of care across fifteen colposcopy services. Traditional follow up for these women has included annual cytology for ten years because of the increased risk of recurrence. Specifically, the traditional strategy (up to May 2012) has included treatment, smear in colposcopy clinic at 6 months, discharge for 1 further smear at 6 months followed by 9 annual surveillance smears whereby the time for whole episode: 10 years. New strategies including testing for subtypes of the human papillomavirus (HPV) allow a more accurate definition of this risk. Post treatment HPV testing was introduced as part of CervicalCheck in 2012 with combined cytology and HPV tests at six and eighteen months following treatment. From May 2012, the new strategy comprises treatment, smear & HPV test in colposcopy clinic at 6 and 18 months and discharge to routine screening whereby the time for whole episode: 18 months. Women with results categorised as low risk were eligible for a return to routine screening. We present the experience of the first two years.

Figure 1. HPV testing as part of cervical screening programmes

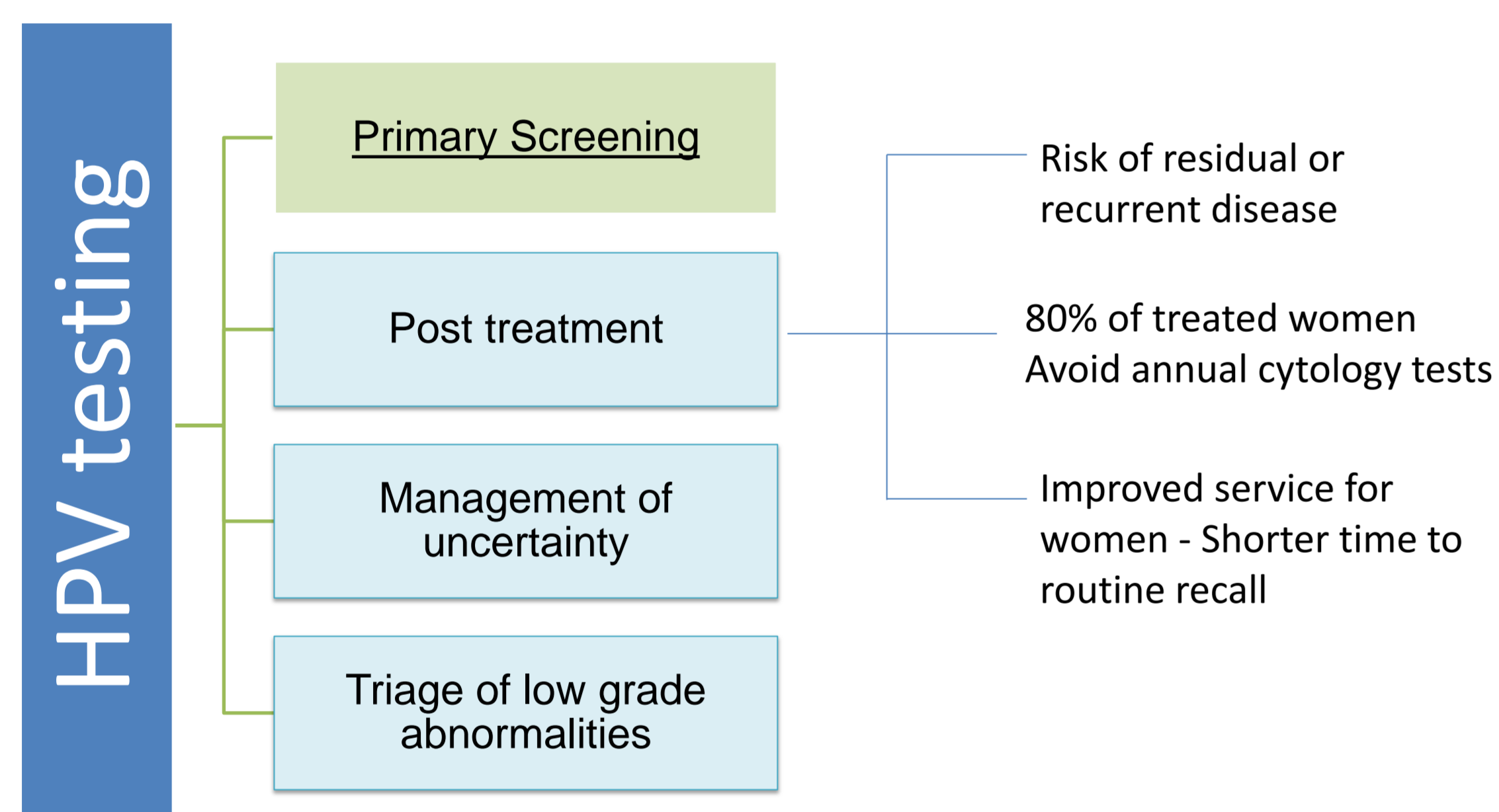
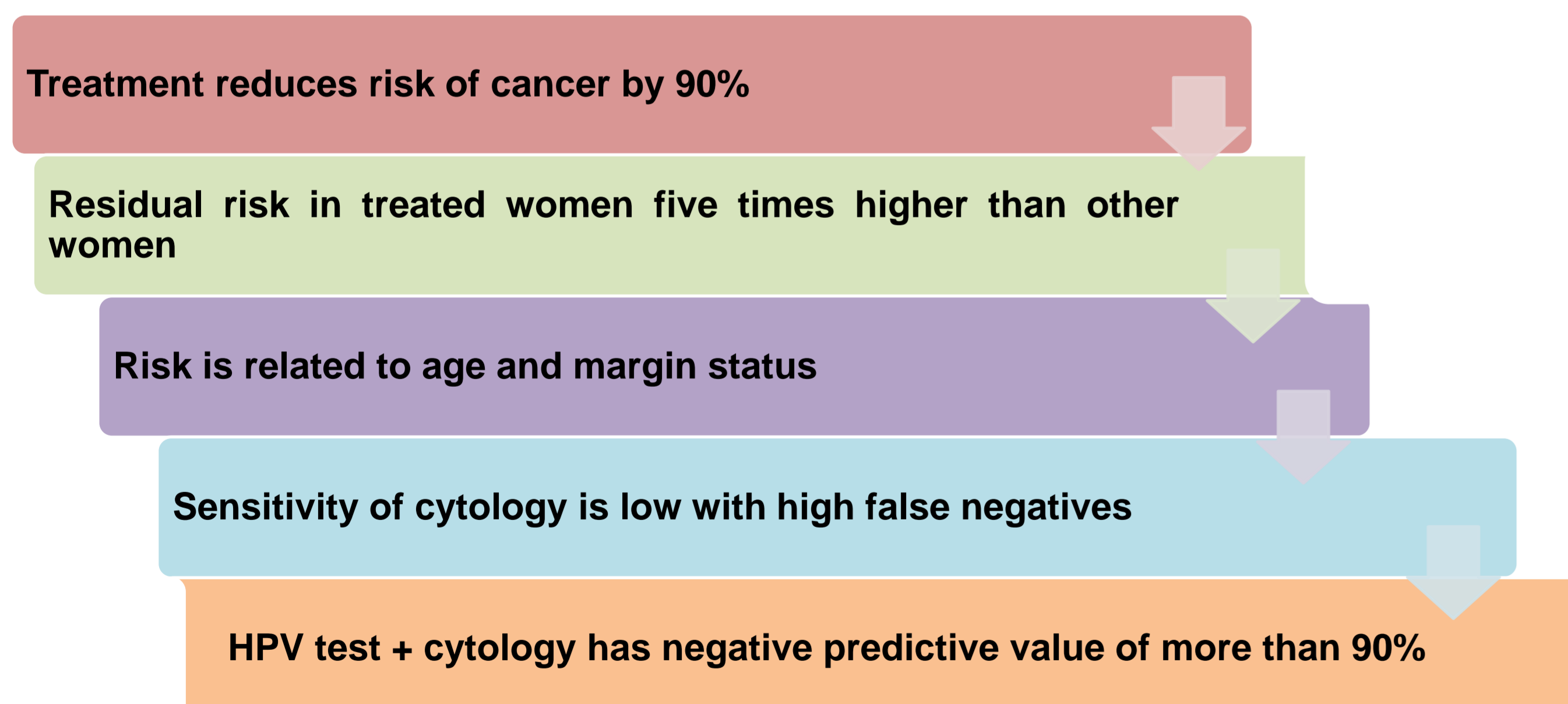
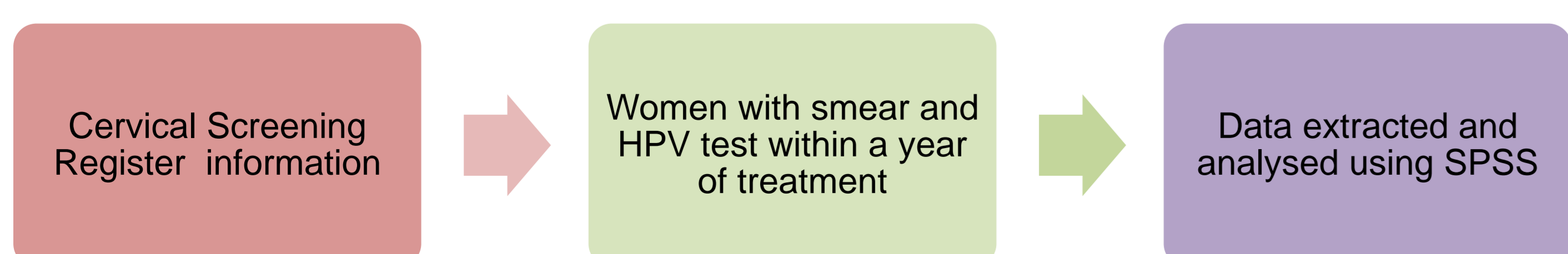


Figure 2. Post treatment follow up strategies tailored to risk of recurrence



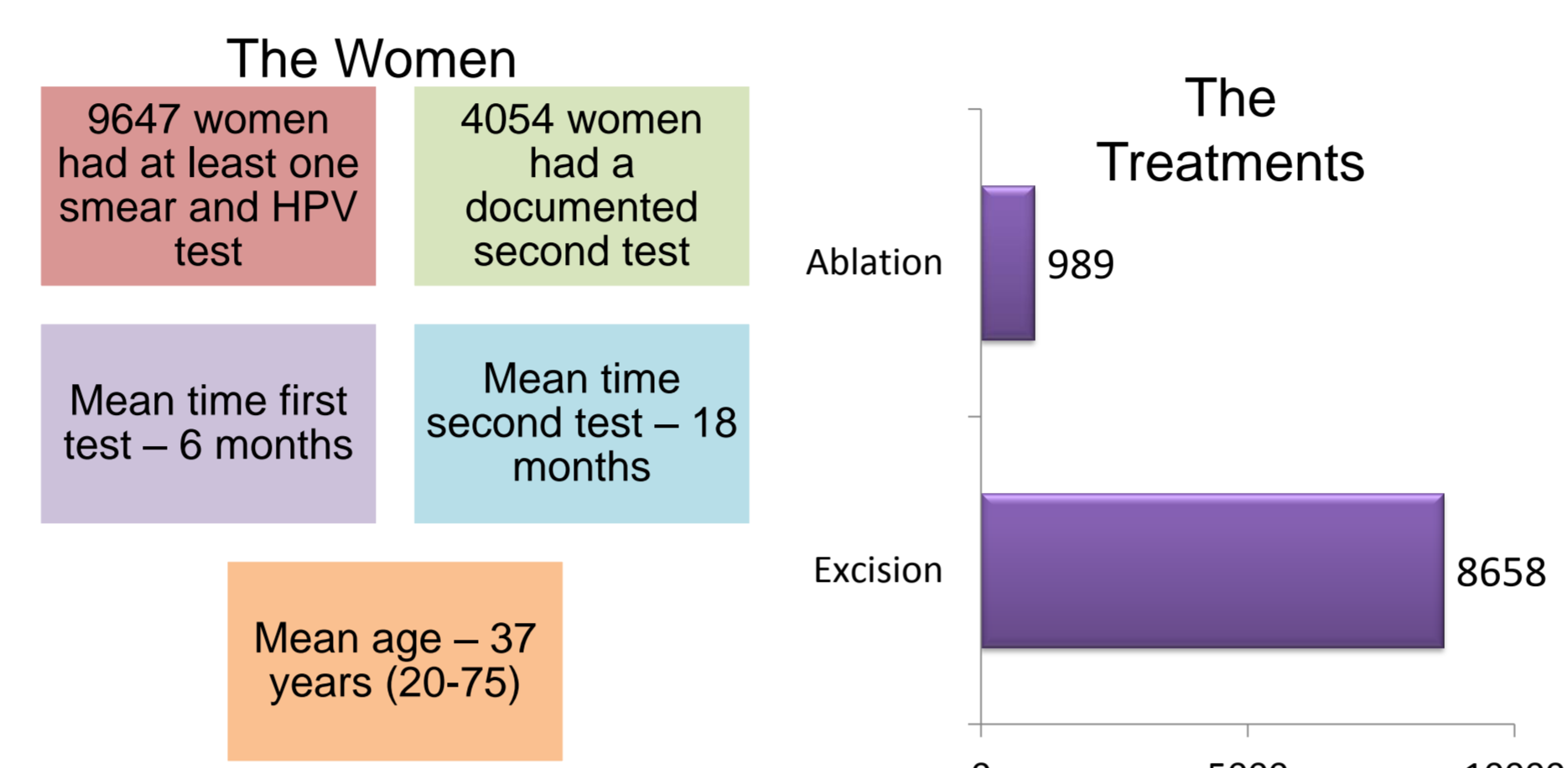
Methods



Results

CervicalCheck new strategy : women and treatments to October 2014

Figure 4. Results up to October 2014



In Figure 4, we highlight the number of CervicalCheck women who had one smear and HPV test at 6 months post treatment and those who underwent a second test at 18 months post treatment. The majority of treatments comprise excision biopsy procedures.

Figure 5. Results of first post-treatment test

	HPV Negative	HPV Positive	Total
Unsatisfactory	101 (83%)	22 (17.2%)	123
Normal	6491 (87%)	1008 (13%)	7949
ASCUS	225 (48%)	241 (52%)	466
ASC-H	30 (43%)	40 (57%)	70
LSIL	167 (29%)	414 (71%)	581
HSIL	10 (7%)	145 (93%)	155
? Invasion	0	1 (100%)	1
AGUS	28 (76%)	9 (24%)	37
Total	7502 (80%)	1880 (20%)	9382*

Figure 5 shows the results of the first post-treatment test where 74% of women had cytology less than LSIL and were negative for high-risk HPV. HPV results were not available for 265 women.

Management of women

Figure 6. Change in programme management based on first test outcomes

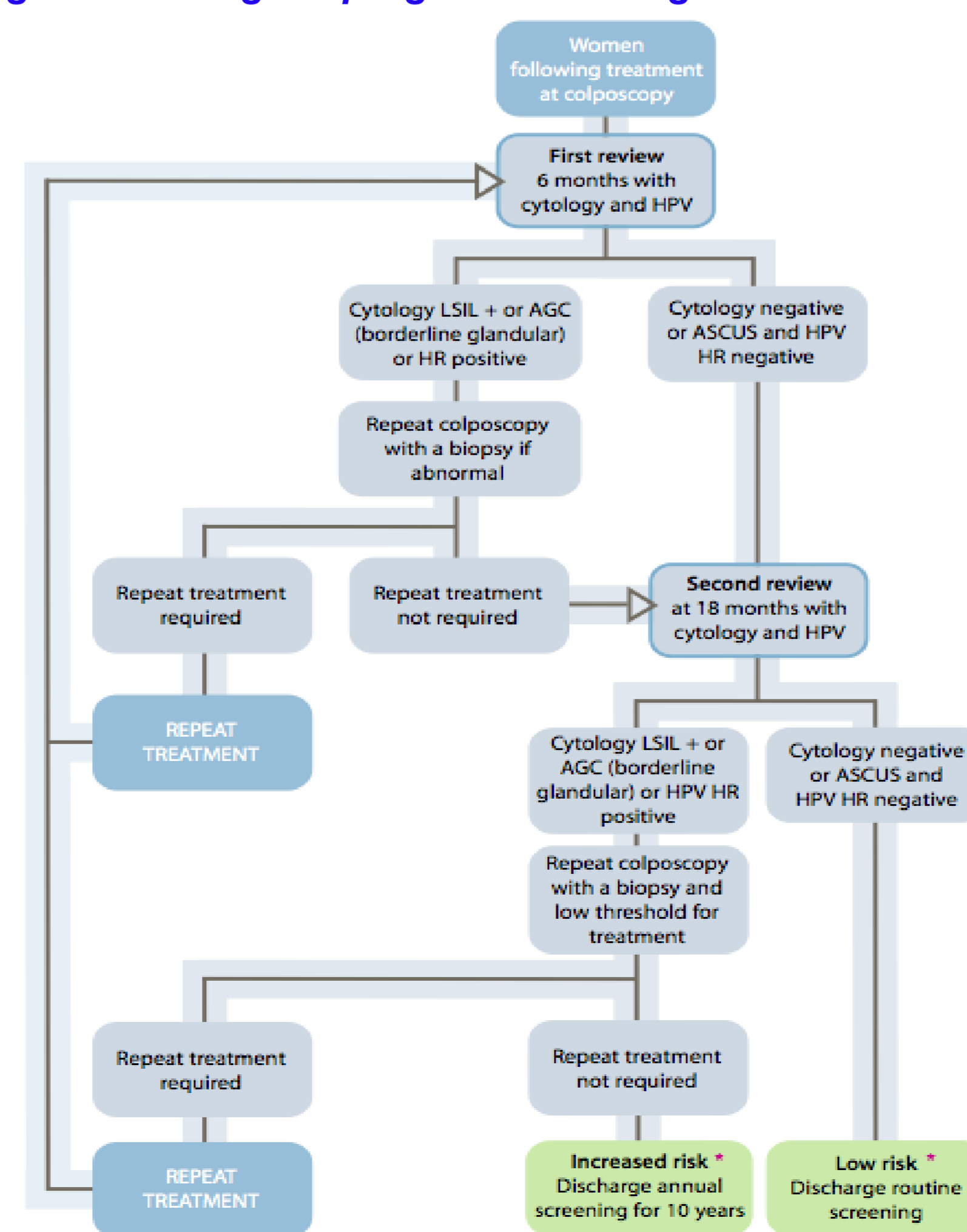


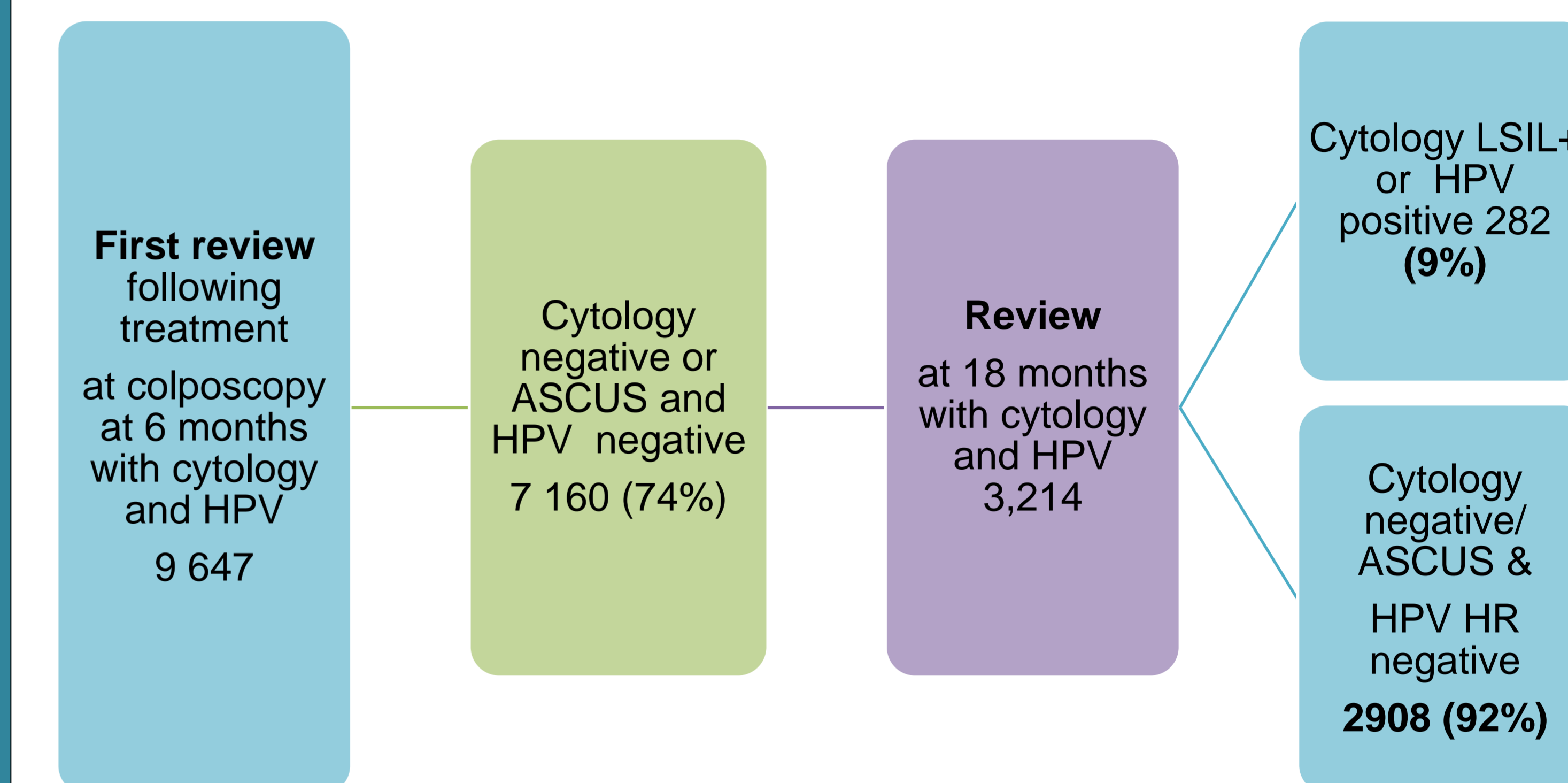
Figure 6 demonstrates the change of management of women post-treatment. In year 1, women who were either LSIL+ or HPV positive at 6 months and did not have repeat treatment were discharged to annual surveillance. In year 2, these women were not discharged but instead were offered a further smear and HPV test at 18 months post treatment.

*In certain circumstances, for example, AIS or microinvasive cancer – follow-up should be in the colposcopy service (delayed discharge).

CervicalCheck first follow-up test outcomes

Figure 7. Outcomes of the first follow-up test

(A) When first follow-up test suggested low risk



(B) When first follow-up test was positive

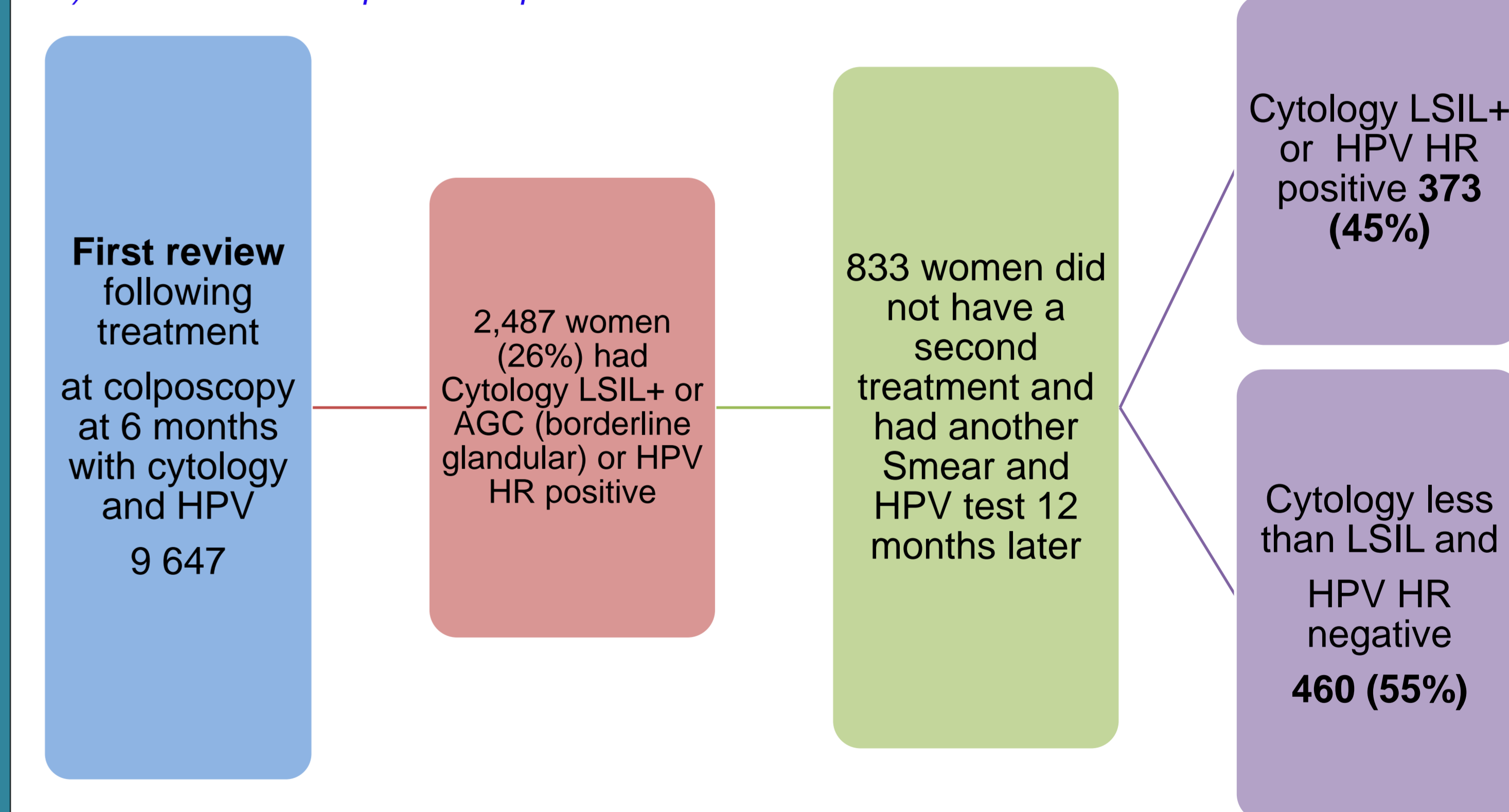


Figure 7 highlights CervicalCheck results to date based on alternative outcomes of the first follow-up test. The first test was categorised as low risk in 74% of women, of whom 3214 had a documented second follow-up test. In 92% of cases, the result was again low risk meaning that these women were suitable for discharge to the community.

Conclusions

The performance of a combined cytology and HPV test at six and eighteen months post-treatment reduces the need for annual smear tests as it allows women with normal or ASCUS cytology who do not demonstrate high risk HPV to be discharged to routine screening in three years. Women with a 'negative' first test should now be discharged and the second post treatment test done in the community.