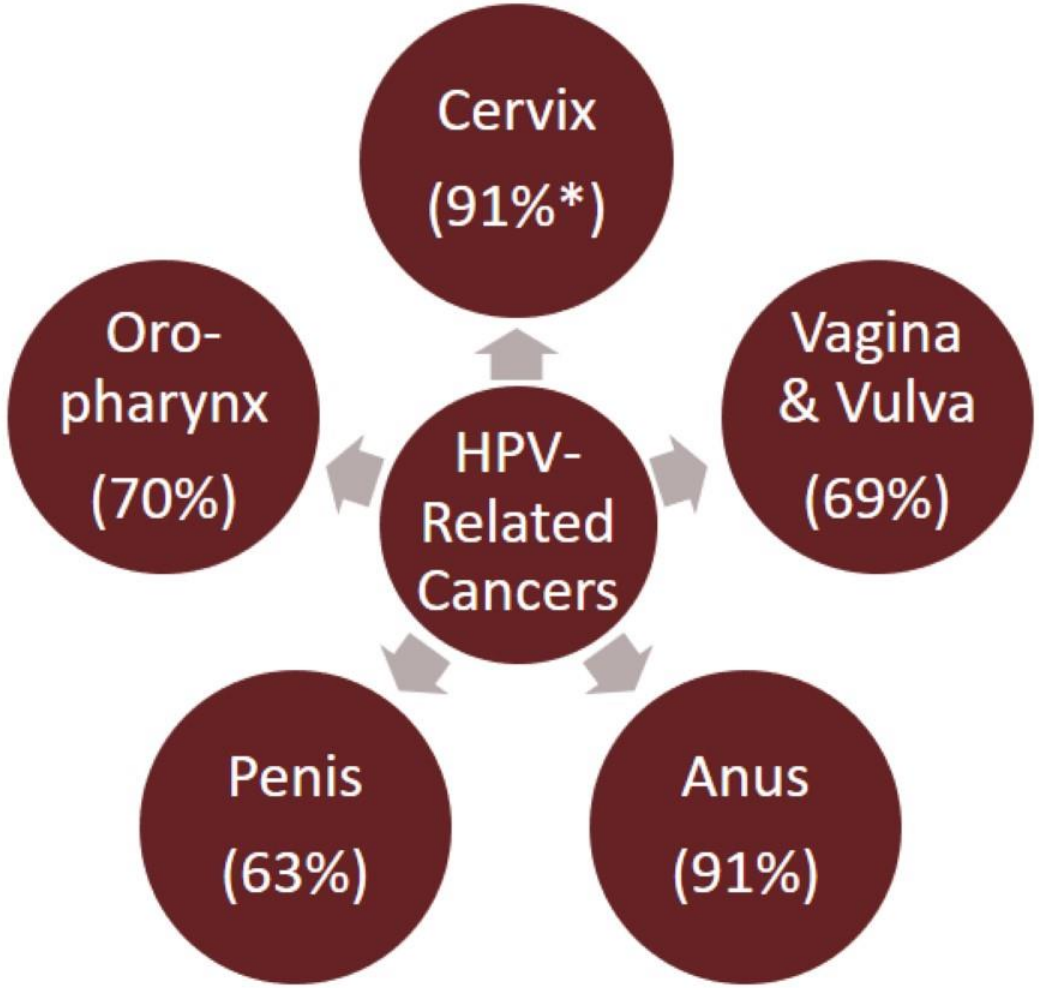
UPDATE TO NEW CLINICAL PATHWAY

- EVIDENCE AND ASSUMPTIONS
- PREDICTIONS
- QUESTIONS

Rethinking Our Thinking About HPV

- Is HPV immunization is just for younger persons?
- Do older men and women also benefit from protection against HPV-related diseases?



*It is assumed that ~100% of all cervical cancer is caused by HPV.

Markowitz L. Expanded age range for 9-valent HPV vaccine. Background for policy considerations. Advisory Committee on Immunization Practices. October 24-25, 2018.

HOW DO WE DO NOW

- BETWEEN 1996 AND 2017 CERVICAL CANCER INCIDENCE.
  - DECLINED FROM 10.5 TO 6.1 PER 100,000 FOR ALL WOMEN.
  - DECLINED FROM 25.0 TO 9.7 PER 100,000 FOR MAORI WOMEN.

MORTALITY

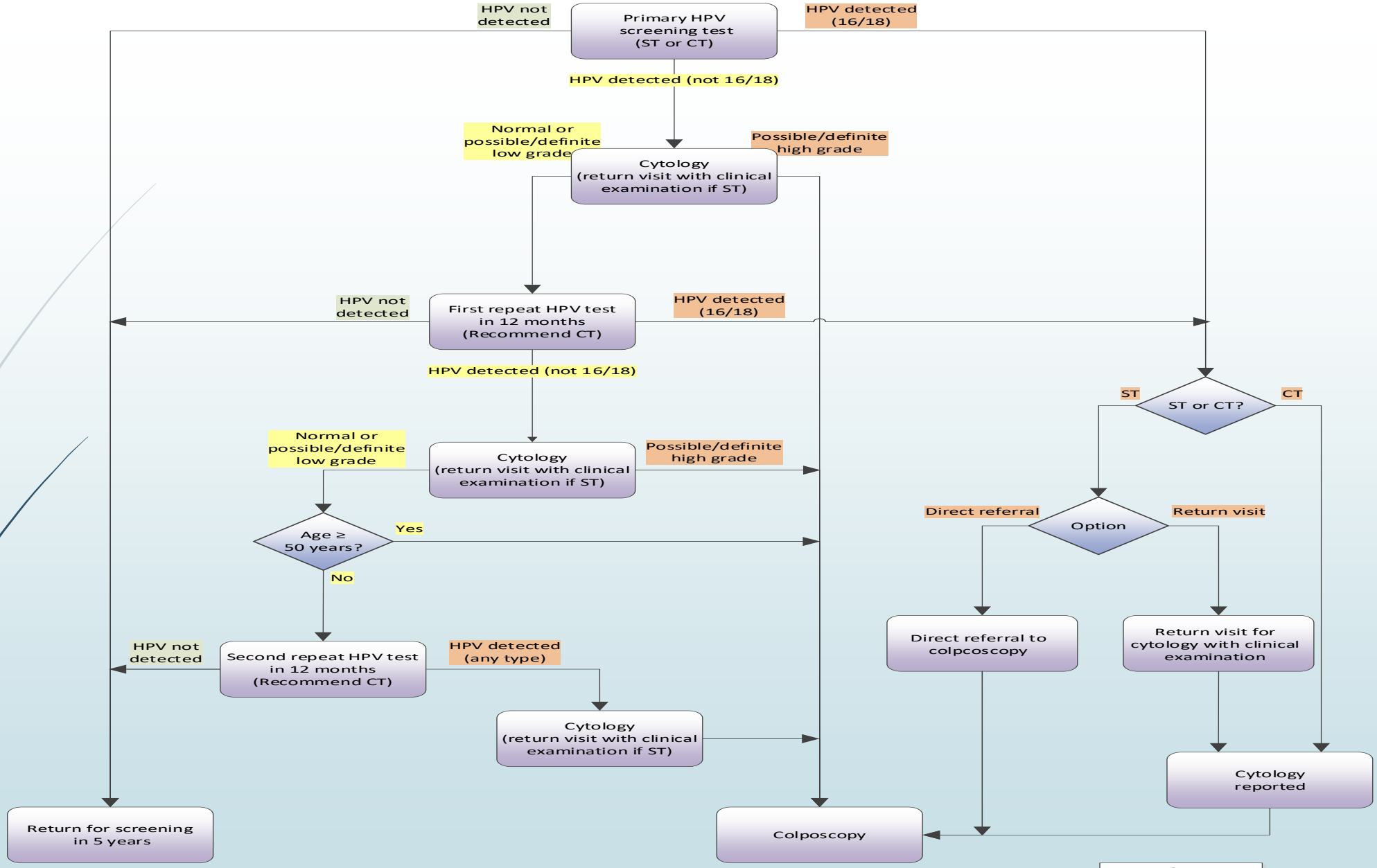
- BETWEEN 1998 AND 2016 CERVICAL MORTALITY
- DECLINED FROM 3.2 TO 1.7 PER 100,000 FOR WOMEN OF ALL ETHNICITIES.
- DECLINED FROM 10.3 TO 2.9 PER 100,000 FOR MAORI WOMEN.

SCREENING COVERAGE

JUNE 2018 PRECOVID	JUNE 2022
SCREENING RATE	SCREENING RATE
OVERALL 71%	OVERALL 67%
MAORI 63%	MAORI 54.9%
PACIFIC 66%	PACIFIC 66%
OTHER 77%	OTHER 75%

A NEW REGISTER

- THE PROBLEM. 1990 REGISTER WITH NO UPDATES
- CURRENT REGISTER IS PHO BASED
- ALMOST ALL PASIFIKA ARE ON A PHO REGISTER.
- 95% OF EUROPEANS
- 85% OF MAORIS
- THOSE NOT ON THE PHO REGISTER ARE INVISIBLE.
- THE OLD REGISTER CAN ONLY COMMUNICATE VIA FAX.
- THE NEW WILL BE ABLE TO CONTACT WOMEN BY EMAIL AND TEXT.
- PRACTITIONERS WILL BE ABLE TO ACCESS THE REGISTER ELECTRONICALLY NOW REUIRES A FAX.



ST – Self-taken sample
CT – Clinician-taken sample

NOW THE CHANGES

- ALL TESTING WILL HAVE HPV AS THE INITIAL TEST.
- WOMEN WILL HAVE THE OPTION OF A SWAB WITH A CLINICIAN RESPONSIBLE FOR THE RESULT.
- NO MAIL OUT IS PLANNED NOT LIKE BOWEL CANCER SCREENING.
- WOMEN WITH A NEGATIVE HPV TEST WILL BE RECALLED IN 5 YEARS.

HOW WILL WE GET TO THOSE NUMBERS

- CENTRAL INVITATION WILL COME FROM THE REGISTER.
- THE NOMINATED COMMUNITY CARE PROVIDER WILL BE NOTIFIED AT THE SAME TIME.
- RECALL WILL BE MANAGED CENTRALLY.
- CONTACT WILL BE BY A COMBINATION OF TEXT EMAIL PHONE AND MAIL.
- IF NOTHING HAS BEEN RECEIVED BY THE REGISTER WITHIN A DEFINED TIME FRAME SUPPORT TO SCREENING WILL BE NOTIFIED.

ASSUMPTIONS

- THOSE CURRENTLY SCREENED WILL CONTINUE.
- 25% OF THE NEVER SCREENED AND UNDERSCREENED WILL TAKE UP A SWAB TEST.
- 10% OVERALL WILL BE HPV POSITIVE.
- 2.5% WILL BE HPV 16/18 POSITIVE.
- 7.5% WILL HAVE MEDIUM RISK VIRUS.

MODELLING INFORMATION

			ANY HPV		HPV 16/18		HPV OTHER	
	ALL TESTS	VALID TESTS	NUMBER	PROPORTION	NUMBER	PROPORTION	NUMBER	PROPORTION
PRIMARY SCREENING	157700	157542 99,9%	12699	8.1%	3453	2.2%	9246	5.9%
NZ EXPECT 400000 HPV SCREENS PA			40000	10%	10000	2.5%	30000	7.5

MODELLING INFORMATION

- PRIMARY SCREENING

	ANY ONCOGENIC HPV		HPV 16/18		HPV OTHER	
NUMBER OF TESTS	12387		3397		8990	
NEGATIVE CYTOLOGY	7986	65%	2161	64%	5825	65%
ANY CYTOLOGY ABNORMALITY	4401	35%	1236	36%	3165	35%
LSIL	1086	27%	715	21%	2600	29%
HSIL		8.8%	521	15%	565	6.5%

HPV 16/18

- THE CONCERN REMAINS UNDIAGNOSED CANCER.
- THE AUSTRALIAN FIGURE IS 0.3%
- THIS IS MUCH HIGHER THAN OTHER PROGRAMMES.
- AUSTRALIA HAS VIRTUALLY ELIMINATED HPV16/18 FROM THE 25 TO 30 YEAR OLDS.
- NZ PREVALENCE IN THE YOUGER AGE GROUP WILL BE HIGHER AND I ANTICIPATE THE INVASIVE NUMBER WILL BE A SMALLER PERCENTAGE.
- THIS WILL NEED TO BE REVIEWED AFTER ONE SCREENING ROUND.

HPV 16/18

- ALL PARTICIPANTS WITH HPV 16/18 WILL GO TO COLPOSCOPY THEY WILL HAVE THE CHOICE OF ATTENDING COMMUNITY CARE FOR CYTOLOGY PRIOR TO THAT VISIT.
- COLPOSCOPY IS MORE ACCURATE WHEN THE CYTOLOGY IS AVAILABLE.
- THIS STEP HOWEVER MAY REPRESENT A BARRIER.
- IF 25% ACCEPT THE NEW TEST THERE WILL BE 2700 PARTICIPANTS FROM THE UNDERSCREENED GROUP INDENTIFIED.
- HSIL RATE WILL BE APPROXIMATELY 15%.
- ABOUT 400 WILL REQUIRE TREATMENT

HRHPV 16/18

- MOST WILL HAVE NO DISEASE OR LOW- GRADE DISEASE.
- WE ARE ENCOURAGING PRACTITIONERS NOT TO TREAT LOW GRADE DISEASE SO THESE WOMEN WILL NEED FURTHER COLPOSCOPIES.
- THE TRADE OFF BETWEEN THE EARLY DIAGNOSIS OF THE CANCERS IN THE COMMUNITY IS A LARGE NUMBER OF WOMEN WHO WILL HAVE UNNECCESSARY COLPOSCOPIES AND BIOPSIES.
- UNTIL THERE IS A METHOD OF TESTING THE SWAB TO ILLUMINATE THAT ANSWER WE WILL NEED TO GO ONE SCREENING ROUND BEFORE IT CAN BE REVIEWED

HRHPV 16/18

- AUS DATA PUTS THEIR RATE AT 2.2% WITH 86% VACCINATION
- NZ VACCINATION RATES LOWER.
- EXPECT 400000 SCREENS PER YEAR.
- NZ RATE WILL BE HIGHER PARTICULARLY IN THE YOUNGER WOMEN WHO HAVE NOT BEEN VACCINATED.
- PROBABLY 10000 WOMEN IN THIS GROUP.
- ABOUT 8000 OF THEM WOULD HAVE HAD NORMAL SMEARS AND WOULD NOT HAVE BEEN REFERRED.
- 8000 MORE REFERRALS TO COLPOSCOPY.

HR HPV 16/18

- COLPOSCOPY CLINICS WILL NEED TO PRIORITISE ACCORDING TO SCREENING AND AGE.
- OVER 30 AND LATE FOR SCREENING WILL BE SEEN AS A PRIORITY.

MODELLING INFORMATION

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NZ MULTIPLY BY 3						

	COLP	LBC AT COLP	BIOPSY			LBC MITIGATION
HPV16/18	NEGATIVE	NEGATIVE	NONE	LBC PLUS HPV COMMUNITY CARE 12 MONTHS		+
HPV16/18	NEGATIVE	LSIL	POSSIBLE	LBC PLUS HPV COMMUNITY CARE 12 MONTHS		+
HPV16/18	NEGATIVE	HSIL	POSSIBLE	MDM REVIEW RECOLPOSCOPY		+++
HPV16/18	NEGATIVE	GLANDULAR ABNORMALITY	POSSIBLE	IMMEDIATE RECOLPOSCOPY		+++
HPV16/18	LSIL	LSIL/NEGATIVE	LSIL	LBC PLUS HPV COMMUNITY CARE 12 MONTHS		+
HPV16/18	LSIL	HSIL	LSIL	MDM REVIEW		+++
HPV16/18	LSIL	GLANDULAR ABNORMALITY	ANY	IMMEDIATE RECOLPOSCOPY		+++
HPV16/18	HSIL	NEGATIVE	LSIL	MDM		+++
HPV16/18	TUMOR	DIRECT REFERRAL TO GYNE ONCOLOGY				EXAM CRITICAL

HPV16/18

- THE TABLE DOES RAISE BARRIERS WHEN DISCHARGED FROM COLPOSCOPY.
- THERE REMAINS UNFINISHED WORK TO ADDRESS THOSE BARRIERS.

HPV OTHER

- THE MOST IMPORTANT MESSAGE IS GIVE IT TIME TO GO AWAY.
- THESE GROUPS WERE NOT INCLUDED IN THE VACCINE UNTIL 2017.
- THERE WILL BE A CONSIDERABLE LAG BEFORE THE NUMBERS DECREASE.

HPV OTHER

- ALL WILL BE REQUESTED TO HAVE CYTOLOGY.
- THE ESTIMATE IS APPROXIMATELY 30000 IN THIS GROUP.
- THOSE WITH HSIL WILL BE REFERRED AS USUAL ABOUT 2000.
- THOSE WITH NORMAL 65% (20000)
- AND THOSE WITH LOW LSIL 30% (9000) WILL BE MOVED TO ANNUAL SURVEILLANCE.
- UNDER 50 WILL REQUIRE 3 TESTS A YEAR APART BEFORE REFERRAL TO COLPOSCOPY.
- OVER 50 WILL BE REFFERED AFTER 2 LSIL TESTS

HPV OTHER

- THE RISK OF MALIGNANCY IN THE LSIL GROUP IS 0.015.
- ALLOWING TIME FOR THE VIRUS TO GO AWAY DECREASES THE COLPOSCOPY LOAD WITH MINIMAL POPULATION RISK.

HRHPV OTHER

- THIS IS A MAJOR CHANGE.
- AUSTRALIAN DATA PUTS THE RISK OF CANCER AT 0.0003%.
- ALLOWING EXTRA TIME FOR VIRAL CLEARANCE WILL SAVE A LARGE NUMBER OF WOMEN FROM UNNECESSARY COLPOSCOPY AND BIOPSY.
- HPV 16/18 ARE UNDERLYING 70% OF CERVICAL CANCERS AND OVER 90% IN THE UNDER 50S.
- OVER 50S HAVE A MUCH MORE VARIED HPV GENOTYPE

COLPOSCOPY VOLUMES

INCREASE IN COLPOSCOPY			
EQUITY 75%		3884	573
25% OF DEFICIT ACCEPTS NEW TEST		4648	686
CURRENT COLPOSCOPY VOLUMES		23608	
		4648 EXTRA COLPOSCOPIES OVER 24 MONTHS	
25% ACCEPT NEW TEST		10% PA	

OTHER CHANGES

FOLLOW UP

- THE CHANGES TO THE FOLLOW UP HAVE ALREADY BEEN MADE.
- FORMERLY A COLPOSCOPY AND SMEAR AT 6 MONTHS BUT NO HPV TESTING THEN SMEARS WITH CYTOLOGY AND HPV AT 12 AND 24 MONTHS.
- TREATED HIGH GRADE DISEASE THAT THE PATHOLOGIST INDICATES HAS BEEN COMPLETELY EXCISED WILL RETURN TO PRIMARY CARE FOR A TEST OF CURE AT 6 MONTHS AND 18 MONTHS.
- OMITS A COLPOSCOPY WHICH HAD VERY LITTLE VALUE

ADENOCARCINOMA IN SITU

- ABOUT 10%
- FORMERLY FOLLOWED UP WITH BOTH CYTOLOGY AND HPV TESTING ANNUALLY FOR LIFE.
- IF TREATED BY HYSTERECTOMY THERE IS NO GLANDULAR TISSUE LEFT.
- FOR THIS GROUP FOLLOW UP WILL BE A TEST OF CURE WITH THE FIRST ONE BEING DONE IN THE COLPOSCOPY CLINIC.

ADENOCARCINOMA IN SITU

- WHERE THE TREATMENT HAS BEEN FERTILITY SPARING AND BY EXCISION.
- THERE IS ALREDY A REQUEST TO COLPOSCOPY CLINICS TO TEST THE HPV GENOTYPE BEFORE TREATMENT WHICH WILL BE REDUNDANT ONCE HPV TESTING IS THE PRIMARY TEST.
- WHERE THE EXCISION HAS BEEN COMPLETE THE WOMEN WILL HAVE A TEST OF CURE WITH THE FIRST ONE BEING DONE IN THE COLPOSCOPY CLINIC BEFORE RETURN TO PRIMARY CARE.
- WHERE THE EXCISION HAS BEEN INCOMPLETE THESE WOMEN WILL REMAIN UNDER THE CARE OF COLPOSCOPY.
- DIFFERENT FROM AUSTRALIA WHICH CONTINUES ANNUAL COTEST AND UK WHICH DISCHARGES IMMEDIATELY AFTER TREATMENT