

IV Seminario Internacional: “Prevención del cáncer cervicouterino en Argentina en la era del VPH: lo nuevo, lo recorrido, lo que vendrá”

Programa Nacional de Prevención de Cáncer Cervicouterino, Instituto Nacional del Cáncer
Complejo Costa Salguero, Buenos Aires, 29 y 30 de octubre de 2012

Principales aspectos organizativos de la prevención del cáncer cervicouterino en Canadá

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Puntos a tratar:

- Historia de la tamizaje del cáncer cervicouterino en Canadá y sus principales actores
- Aunque el gobierno federal y las provincias han trabajado en la armonización de las prácticas de cribado del cáncer cervicouterino aún existe una considerable heterogeneidad entre las jurisdicciones
- ¿Cuáles son las características de los programas de tamizaje?
- ¿Cuáles son los indicadores de resultados y las cuestiones que se están considerando?

Historia de la tamizaje del cáncer cervicouterino en Canadá

- La prueba de Papanicolaou usada por primera vez en Canadá en 1949
- Columbia Británica fue la primera provincia en implementar un programa
- 1976 Walton report: apoyo para la tamizaje organizada con sistemas de información, call-recall, y control de calidad
- 1989 National Workshop: edad de inicio, los intervalos, la gestión de las anomalías, sistemas de información y control de calidad
- Health Canada Interchange 1995 Workshop: Creación de la Red de Prevención del Cáncer Cervicouterino (CCPN)
- 2003 Pan-Canadian Forum on Cervical Cancer Prevention and Control: evaluación de la prueba del VPH y la citología de base líquida
- CCPN ampliado para incluir la vacunación: Red para la Prevención y Control del Cáncer Cervicouterino (CCPCN)

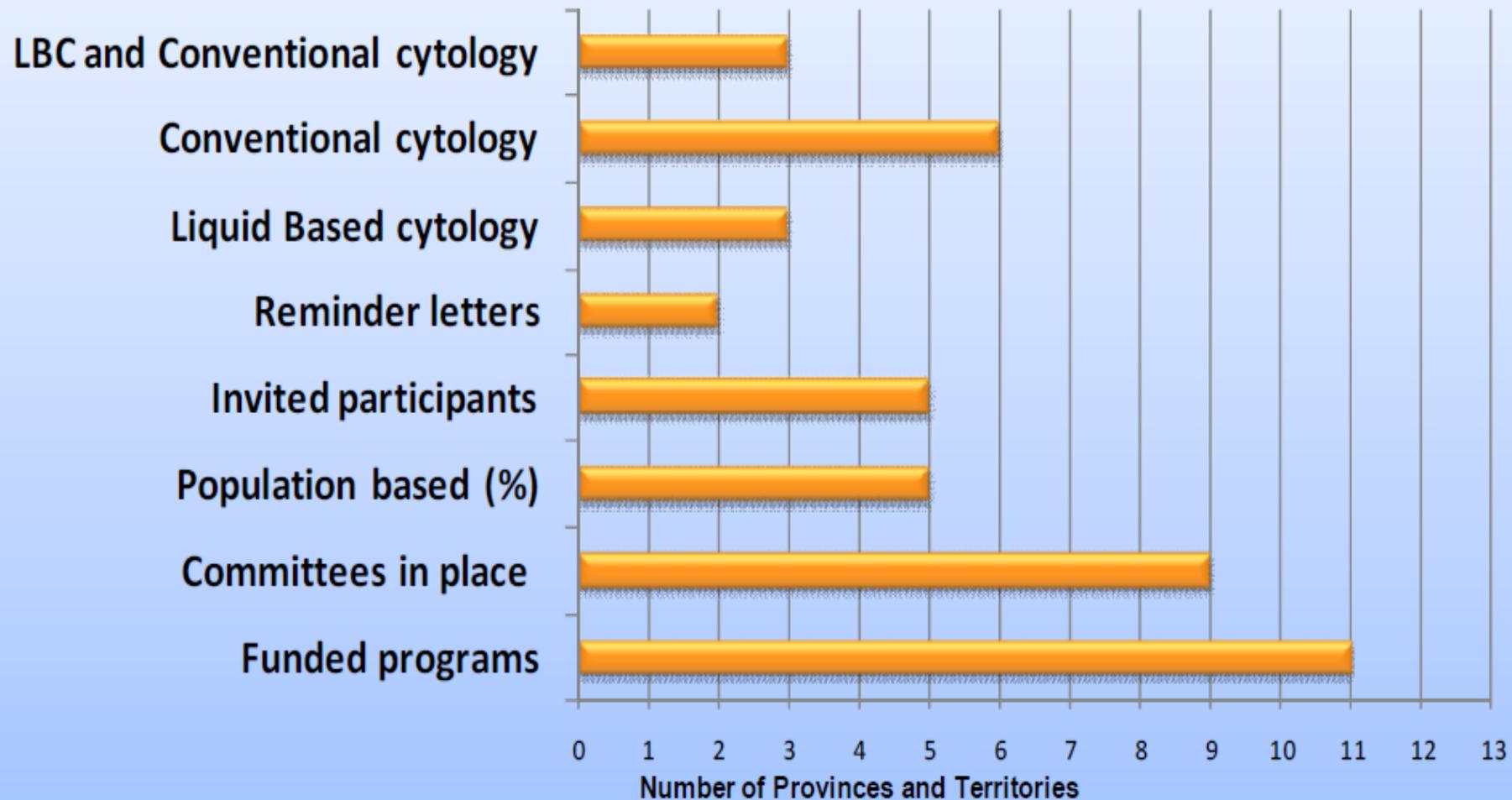
Las partes interesadas canadienses sobre tamizaje del cáncer de cuello uterino

- Canadian Cancer Society
- Canadian Network on HPV Prevention
- Canadian Society of Cytopathology
- Canadian Task Force on Preventive Health Care
- College of Family Physicians of Canada
- Public Health Agency of Canada
- Screening Action Group
- Society of Canadian Colposcopists
- Society of Gynaecologic Oncology of Canada
- Society of Obstetricians and Gynaecologists of Canada
- Canadian Partnership Against Cancer (via the Pan-Canadian Cervical Screening Initiative)

Pan-Canadian Cervical Screening Initiative

- Un foro nacional para discutir y tomar acción en asuntos relacionados con los programas de tamizaje y su integración con la prueba del VPH y las iniciativas de vacunación
- Las provincias y territorios ofrecen información acerca de los componentes del programa de tamizaje de cáncer de cuello uterino o estrategias dos veces al año
- Última actualización: diciembre 2011

La variación en las prácticas canadienses de tamizaje de cáncer de cuello uterino



Snap Shot of Program Elements (As of June 2011)	YT	NT	NU	BC	AB	SK	MB	ON	QC	NB	NS	PI	NL
Type of Program S – Spontaneous PO – Partially Organized O – Organized	S	S	S	PO	PO	O (2009)	O (2010)	PO	S	S	PO	PO	PO
Program Launched/ Announced				1960	2000	2003	1999	2000			1991		2003
Start Screening	BCCA guidelines	3 years post sexual debut or age 21		Shortly following sexual activity	21 or 3 years after becoming sexually active, whichever occurs later	18	3 years following sexual activity	Within 3 years of sexual activity	Guidelines to be released in September 2011	21 or 3 years after first intimate sexual activity, whichever occurs later	Within 3 years of first vaginal sexual activity or at age 21, whichever occurs first	18 or within 3 years of onset of sexual activity	Following sexual activity
Stop Screening	BCCA guidelines	Age 69		69 with 3 consecutive neg. tests	69 with 3 consecutive neg. tests	69	70 with 3 consecutive neg. tests in previous 10 years with no change in partner	70 with adequate screening in last 10 years	Guidelines to be released in September 2011	69 with 3 consecutive annual neg. tests in previous 10 years	75 with 3 or more neg. tests in previous 10 years	75, after 2 neg. tests in previous 10 years	No recommendation
Screening Interval		Triennial, then biennial if normal		Biennial after 3 normal	Triennial after 3 annual neg. tests	Triennial after 2 normal	Biennial	Biennial or triennial after 3 neg. tests	Guidelines to be released in September 2011	Biennial after 3 consecutive annual neg. tests and every 3 years when recall system is in place	Biennial after 3 normal	Biennial	Annual/changes pending 2011
Population-based Recruitment	No	No	No	No	Yes – for part of the province	Yes	Yes	Planning underway	No	No	No	No	No
Result Letters to Women	No	No	No	No – Results to provider	Yes	Yes	By request from women only	No	No	No	Pap screen history by request	No	No
Reminders for Follow up after Abnormal Pap	NA	Yes – Care providers	NA	Yes – Care providers	Yes – Care providers and woman	Yes – Care providers	Yes – Care providers and woman	No	No	Not at this time	Yes – Care providers	No	Yes – Care providers

Snap Shot of Program Elements (As of June 2011)	YT	NT	NU	BC	AB	SK	MB	ON	QC	NB	NS	PI	NL
Conventional (C) Liquid-based Cytology (LBC) Both (B)	C	LBC	LBC	C	B	C	C	B	C	B	C	C	LBC
HPV Testing for ASC-US Triage or for Primary Screening	Neither	ASC-US triage	Neither	ASC-US triage and primary screening	Neither	Neither	Neither	ASC-US triage	Neither	ASC-US triage	Neither	Neither	ASC-US triage
Administration													
Tracking of Positive Screens and Appropriate Follow-up				✓	✓	✓	✓	Underway			✓	✓	
Recall System to Health Care Providers for Overdue Pap Tests				✓	✓	✓	✓				✓	✓	✓
Information Systems													
Population-based					✓	✓	✓						
Cytology				✓	✓	✓	✓	✓					✓
Histology				✓		✓							✓
Colposcopy				✓	✓	✓	✓						✓
Quality Assurance													
Screening Guidelines		Revised March 2010		✓	✓	Revising ✓	Revising ✓	Updating 2011 ✓	Proposed plan to implement 2011	Approved (adapted from AB and ON)	✓	Revised 2010	Updating ✓
Program Report with Indicators				✓			✓			✓	✓		
Training Manuals				✓			✓	✓	Developing nursing screening tools		✓		✓

Consenso en los Indicadores de Desempeño

Indicadores de desempeño para el tamizaje de cáncer cervicouterino en Canadá

En 2007, el Grupo de Trabajo de Rendimiento del Tamizaje (bajo la dirección del Comité de Dirección para la CCPCN de la Agencia de Salud Pública de Canadá) propuso 12 indicadores de desempeño en cinco áreas para ayudar a medir el progreso de los programas de tamizaje del cáncer cervicouterino :

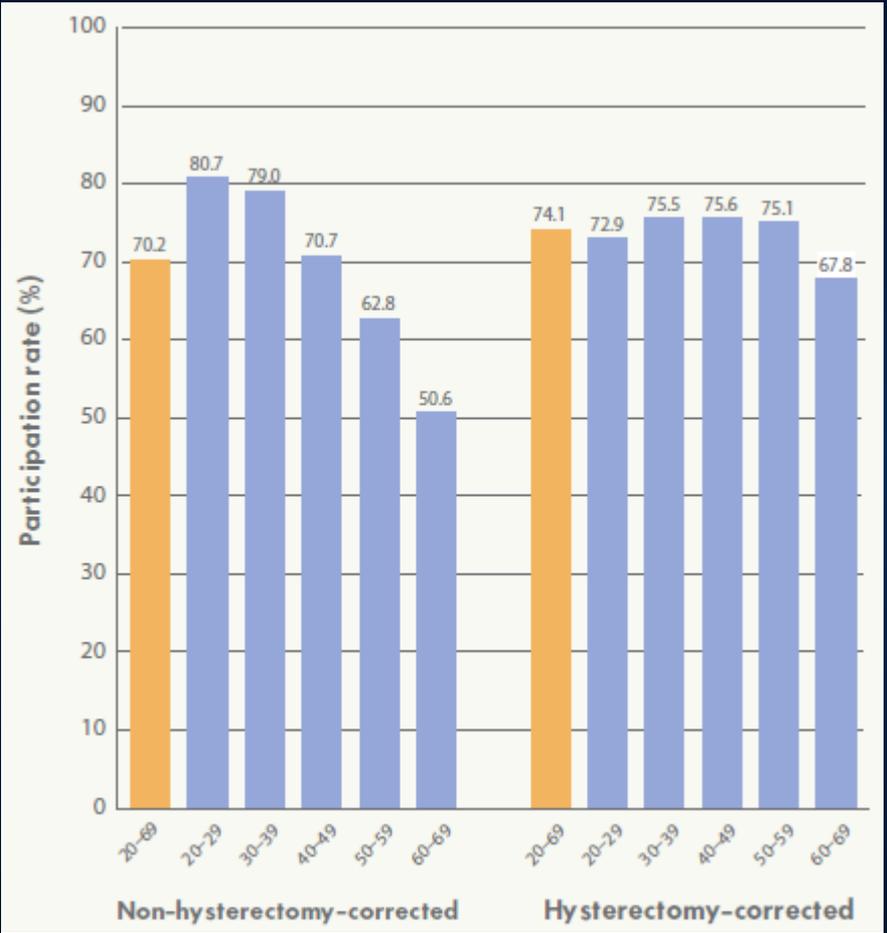
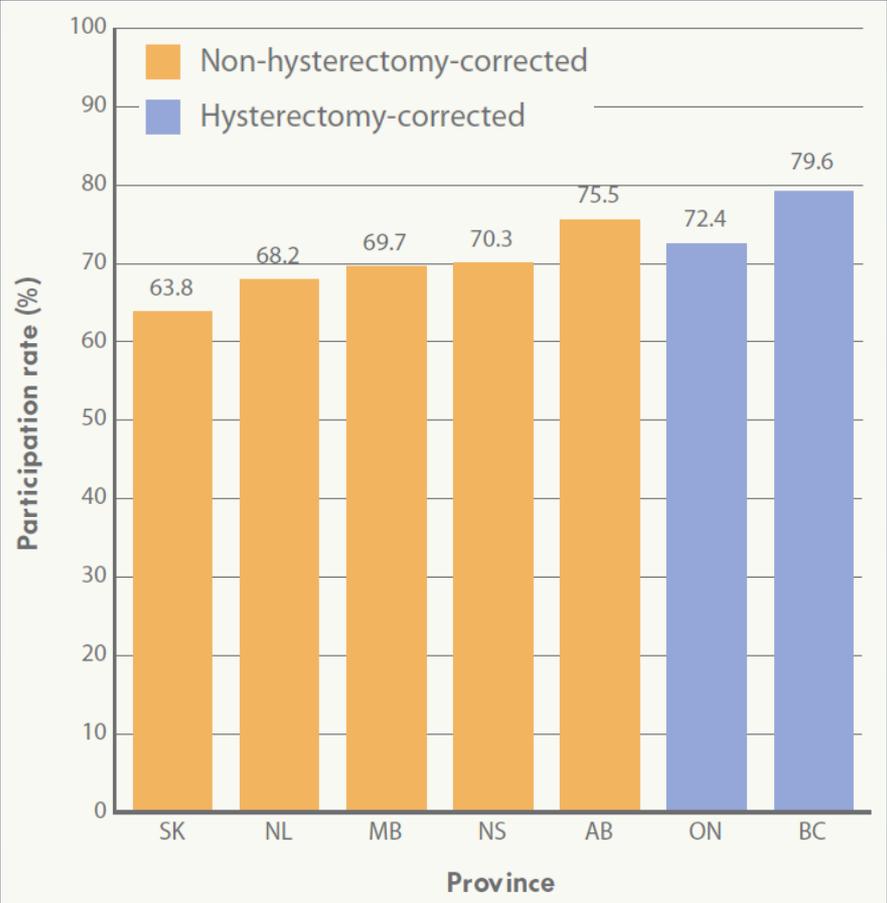
obertura: 1) la tasa de participación, y 2) la tasa de retención

desempeño de la citología: 3) calidad de la muestra y 4) resultados de las pruebas de detección

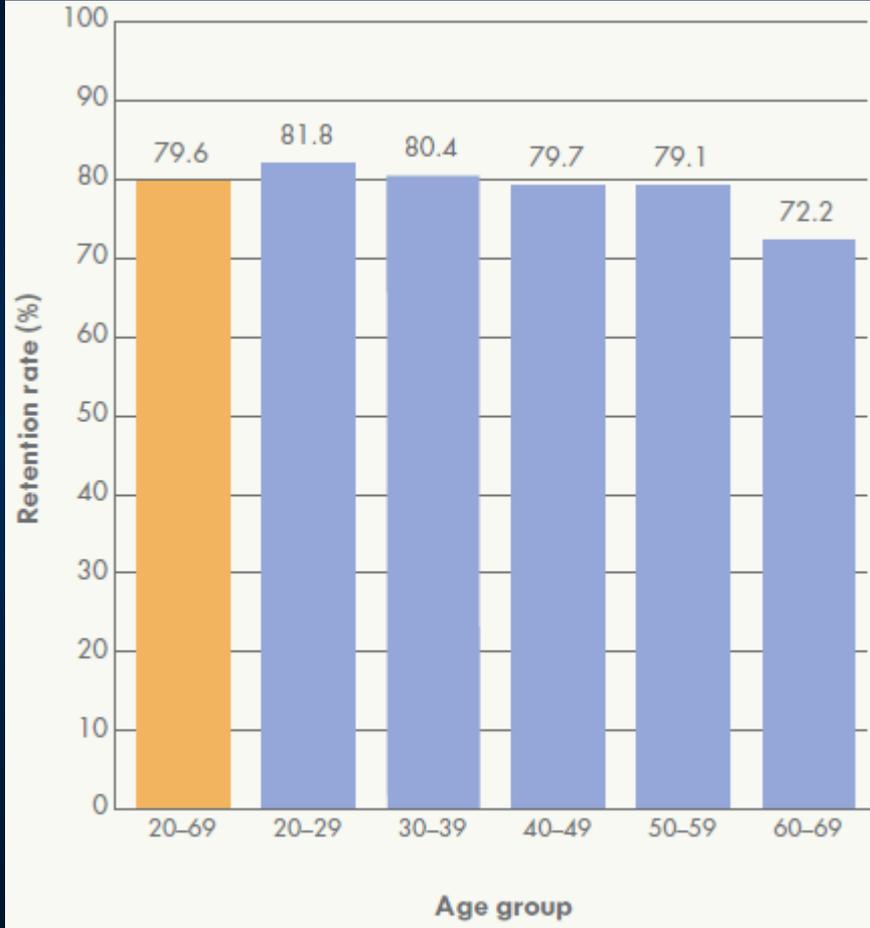
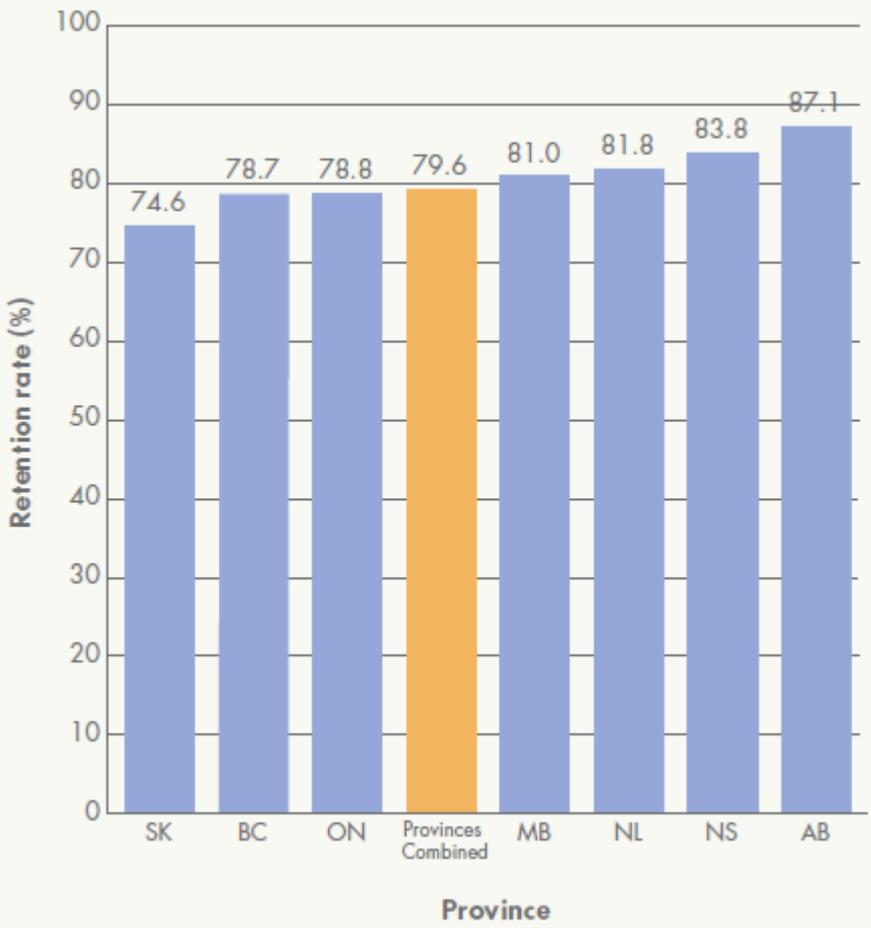
eficiencia del sistema: 5) tiempo de respuesta citología y 6) tasa de seguimiento colposcópico

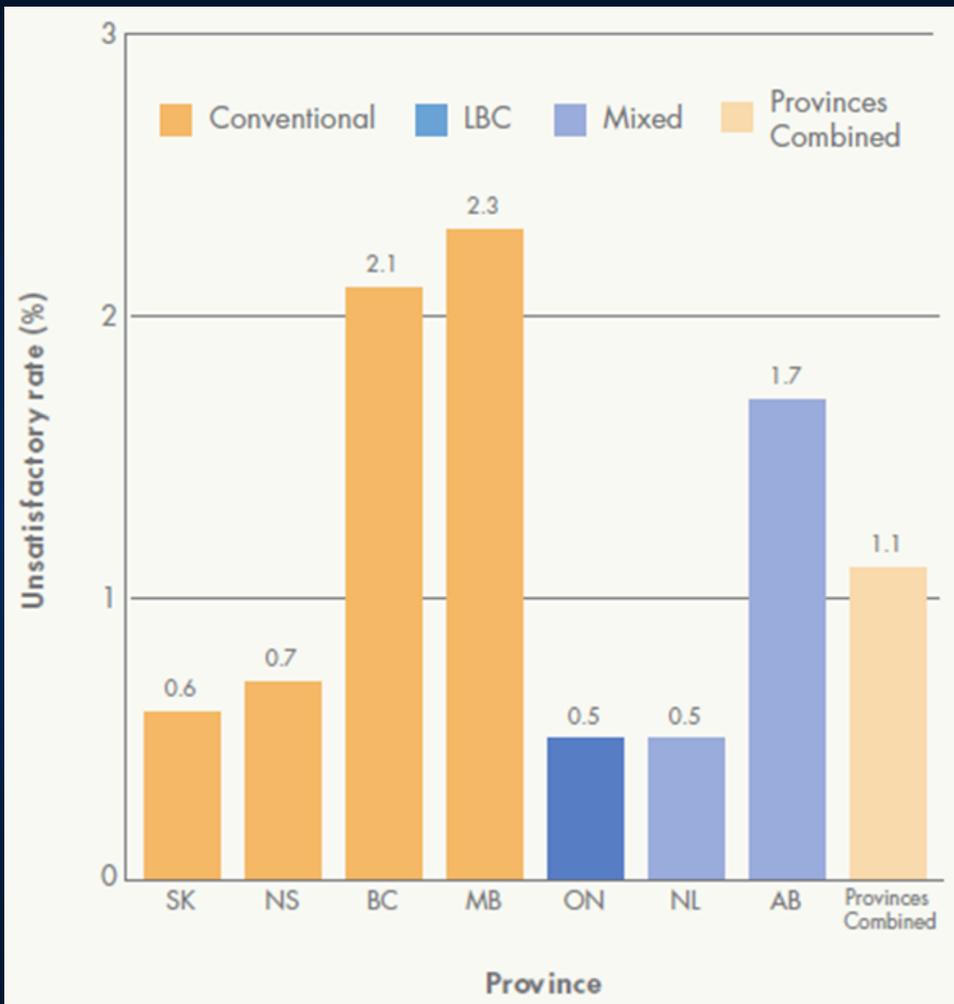
seguimiento: 7) tasa de biopsias y 8) concordancia citología-histología

Porcentaje de mujeres elegibles que tuvieron al menos una prueba Pap en un período de 3 años



% de mujeres elegibles que regresan dentro de 3 años después de una prueba Pap negativa

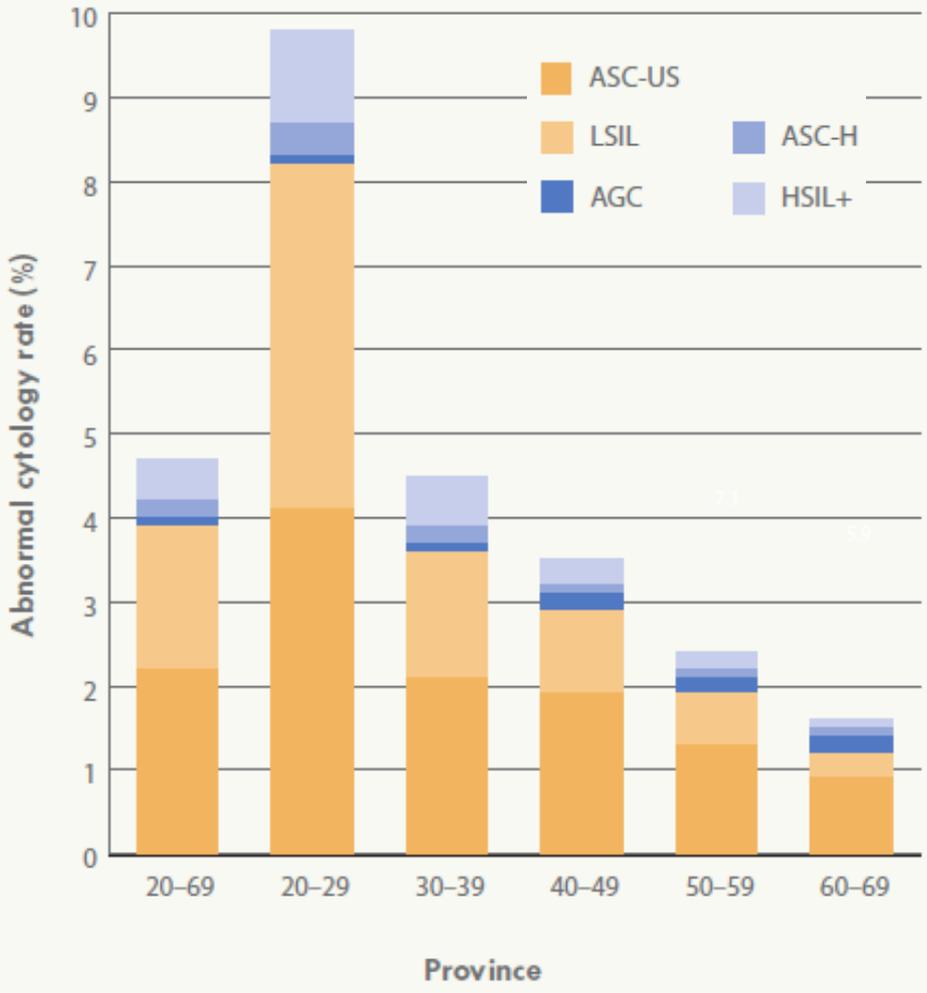




Porcentaje de los resultados insatisfactorios de la prueba de Papanicolaou para mujeres de 20-69 años de edad por provincia, 2007 y 2008

Porcentaje de mujeres de 20-69 años de edad por el resultado más grave de la prueba Papanicolaou por provincia, 2007 y 2008

Pap Test Result	Percentage							
	Provinces Combined	BC	SK	ON	NL	NS	AB	MB
Negative	95.3	96.4	96.0	95.2	94.7	94.6	94.4	93.6
ASC-US	2.2	2.0	NA	2.3	2.0	2.9	1.9	3.0
LSIL	1.7	0.8	NA	1.9	2.5	1.3	2.7	2.0
AGC	0.1	0.1	NA	0.1	0.2	0.3	0.1	0.1
ASC-H	0.2	0.2	NA	0.1	0.2	0.4	0.2	0.3
HSIL+	0.5	0.5	NA	0.3	0.4	0.5	0.7	0.9
Abnormal Low	–	–	3.2	–	–	–	–	–
Abnormal High	–	–	0.8	–	–	–	–	–
Total Abnormal	4.7	3.6	4.0	4.7	5.3	5.4	5.6	6.3

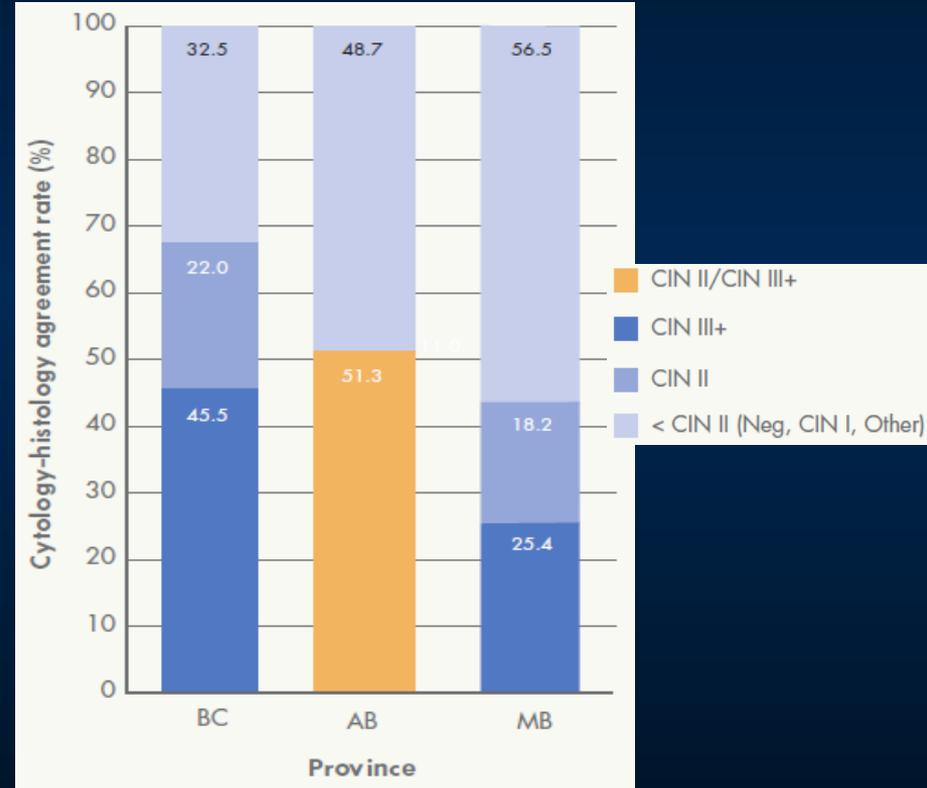


Porcentaje de mujeres de 20-69 años de edad por resultado más grave de la prueba Papanicolaou, todas provincias, 2007 y 2008

Porcentaje de mujeres de 20-69 años de edad con un resultado de citología de alto grado (ASC-H o H-SIL) que tuvieran una colposcopia de seguimiento dentro de 12 meses (2007 y 2008)

Month	Percentage		
	MB	BC	AB
0-3	35.8	60.0	31.1
3-6	24.2	16.1	54.9
6-9	12.5	3.6	7.2
9-12	4.3	1.7	3.6
Total within 12 months	76.8	81.4	96.8

% de mujeres de 20-69 años con pruebas de Papanicolaou de alto grado (ASC-H y H-SIL+) que tuvieran resultados de la biopsia dentro de 12 meses (2007-08)

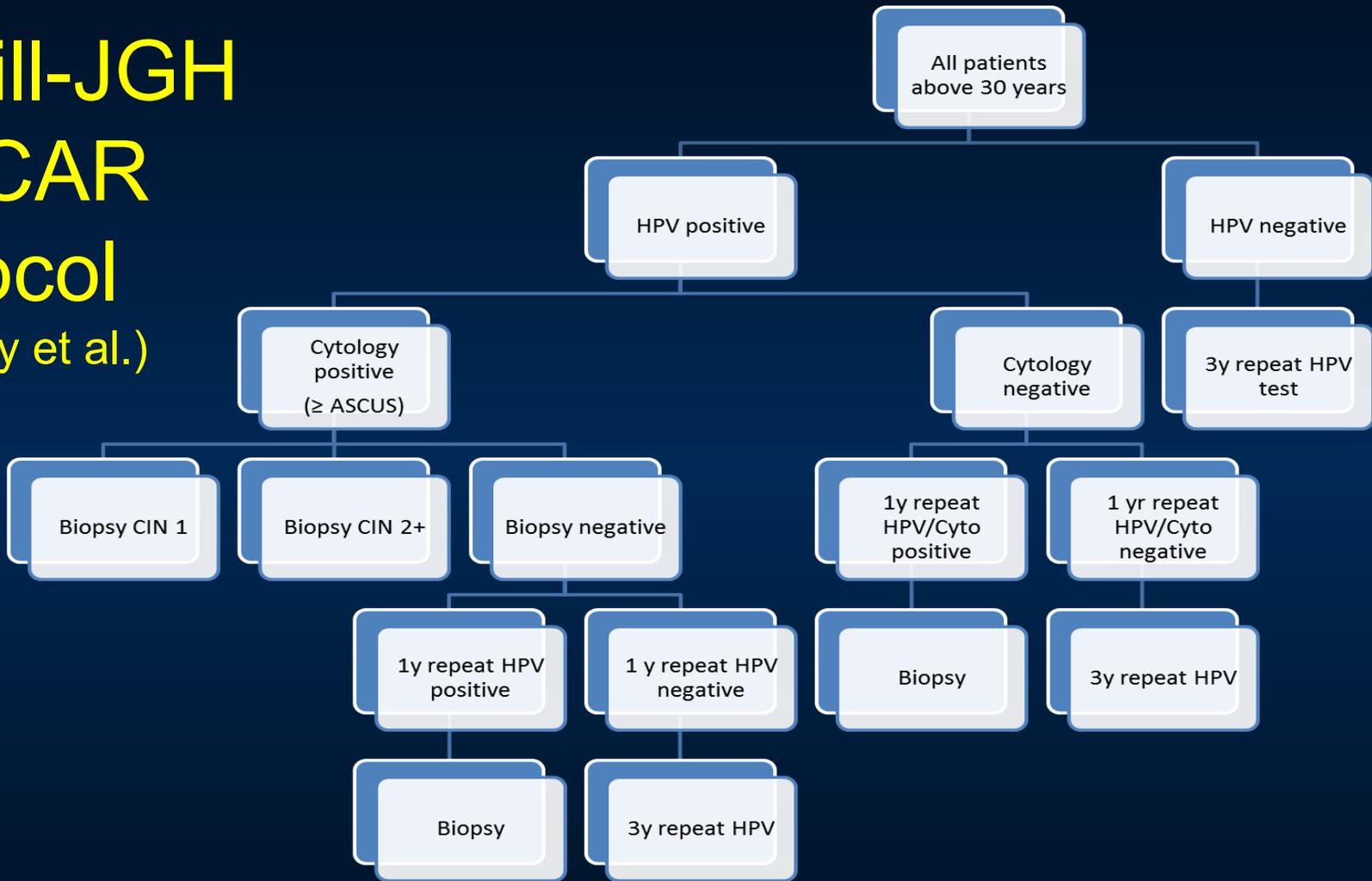


Adopting HPV testing...

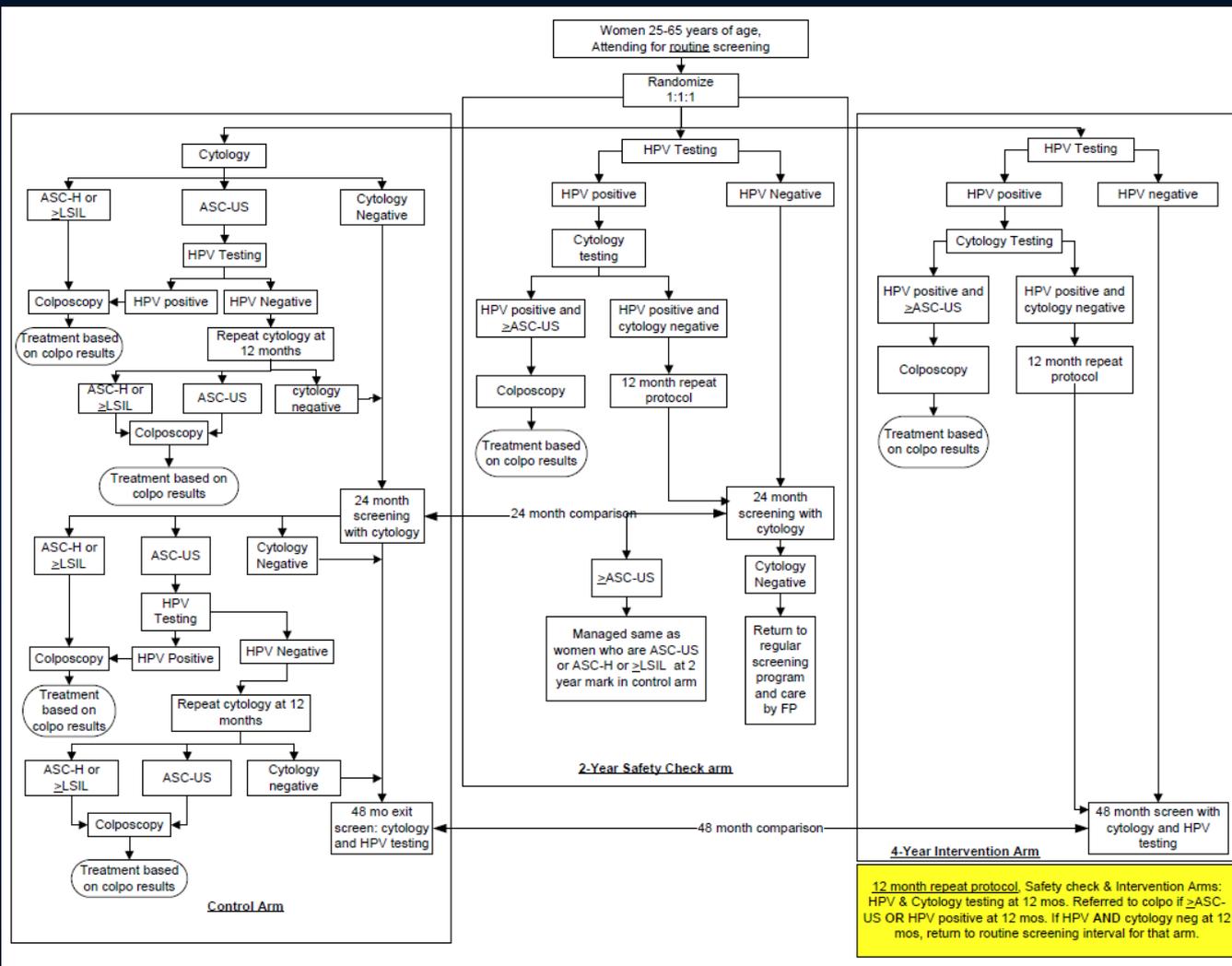
- The first randomized controlled trial of HPV testing versus Pap cytology in North America was conducted in Canada (Montreal and St. John's) (Mayrand et al., NEJM 2007)
- Ongoing RCT in British Columbia (second North American RCT) (Ogilvie et al., BMC Cancer 2010)
- First implementation of HPV testing in routine practice (VASCAR pilot study at McGill's Jewish General Hospital in Montreal)
- Ontario approves HPV testing in primary screening (2013)

McGill-JGH VASCAR Protocol

(Ferenczy et al.)



British Columbia HPV-Focal Study (Ogilvie et al.)



Cancer Care Ontario's Guideline Recommendations

Year (Section)	Evidence base	Implementation timeframe	Primary screening test	Age of screening initiation	Screening interval	Age of screening cessation*
2011 (Part 1)	Evidence- and consensus-based (up to 2011)	2013 (anticipated implementation of HPV testing in the Province of Ontario)	Women 30+: HPV testing; women <30: to be determined	To be determined at the time that HPV is implemented	Every 5 years with a negative HPV test result	65
2011 (Interim) (Part 2)	Evidence and Consensus-based	2011-2012	Cytology testing	21 years of age	Every three years	70
2005 (1)	Evidence-based (up to 2005)	2005-2010	Cytology testing	Within 3 years of initiation of sexual activity	Annually until three negative tests, then every 2-3 years	70
Abbreviation: HPV = human papillomavirus. *Provided that an adequate negative screening history has been established.						

¿Qué más hay en el horizonte?

Nuevas directrices para Norte America

- Saslow et al., American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology Screening Guidelines for the Prevention and Early Detection of Cervical Cancer. CA Cancer J Clin 2012;62:147-172 (**published online March 14, 2012**) (also published in Amer J Clin Pathol and J Low Genit Tract Dis)
- Moyer et al., Screening for Cervical Cancer: U.S. Preventive Services Task Force Recommendation Statement. Ann Intern Med 2012 ;156:880-991 (**published online March 14, 2012**)

USPSTF-AHRQ

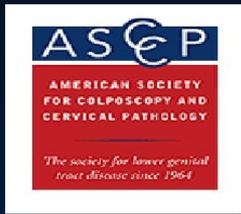
- “Purpose: To systematically review the evidence on liquid-based cytology (LBC) and high-risk human papillomavirus (HPV) screening for U.S. Preventive Services Task Force use in updating its 2003 recommendation”
- “Conclusion: Evidence supports the use of LBC or conventional cytology for cervical cancer screening, but **more complete evidence is needed before HPV-enhanced primary screening is widely adopted for women aged 30 years or older.**”

Whitlock et al., Ann Intern Med. 2011;155:687-697

USPSTF-AHRQ

“... [P]rimary HPV screening seems very promising, particularly when coupled with reflex cytology to triage positive results before colposcopy. **Screening with HPV testing** enhances the detection of CIN3 compared with cytology alone but also **increases CIN2 detection and immediate colposcopy referrals**. All CIN lesions, even CIN3, have some potential for overdiagnosis and therefore potential harms [...]. **Thus, the net effect of primary HPV screening needs to be determined through the completion of ongoing trials and more detailed reporting of potential harms and benefits from completed trials.** An ongoing trial in Canada will also provide new evidence that directly compares primary HPV screening and cytology triage with cytology screening and HPV triage in a protocol more similar to U.S. practice [...] [**reference to BC’s HPV-Focal trial**]”

Whitlock et al., Ann Intern Med. 2011;155:687-697



Las nuevas directrices (6 grupos de trabajo)

1. Intervalos óptimos de tamizaje
2. Estrategias de tamizaje para mujeres de 30 años o más
3. Gestión de las combinaciones discordantes de la citología y VPH (VPH positivo / citología negativa y VPH negativo / ASCUS)
4. A qué edad suspender cribado de rutina?
5. Impacto de la vacunación contra el VPH en las prácticas de tamizaje futuras
6. Utilidad potencial de la detección molecular (la prueba del VPH en el cribado primario se evaluó como una estrategia potencial en el futuro)

The logo for the American Society for Colposcopy and Cervical Pathology (ASCP). It features the letters 'ASCP' in a stylized, overlapping font within a blue rectangular box.

AMERICAN SOCIETY
FOR COLPOSCOPY AND
CERVICAL PATHOLOGY

*The society for lower genital
tract disease since 1964*

The new guidelines



American Society for
Clinical Pathology

- **24 Participating Organizations:** Agency for Healthcare Research & Quality, American Academy of Family Physicians, American Board of Obstetrics & Gynecology, American College Health Association, American College of Obstetricians & Gynecologists, American Social Health Association, American Society for Cytopathology, American Society for Cytotechnology, CDC (3 divisions), Centers for Medicare & Medicaid, College of American Pathologists, Food & Drug Administration, National Cancer Institute, National Comprehensive Cancer Network, Nurse Practitioners in Women's Health, Planned Parenthood Federation of America, Society of Canadian Colposcopists, Society of Gynecologic Oncologists, Society of Gynecologic Oncologists of Canada, Society of Obstetricians & Gynaecologists of Canada, **United States Preventive Services Task Force**, Veterans Health Administration
- **2 Observer Organizations:** British Society of Clinical Cytology, Office of the Canadian Task Force on Preventive Health Care, Centre for Chronic Disease Prevention and Control, Public Health Agency of Canada

Guideline Recommendations ACS / ASCCP / ASCP

Women <21	No screening
Women ages 21-29	Cytology alone every 3 years (liquid or conventional) Recommend AGAINST annual cytology
Women ages 30-65	HPV + cytology “cotesting” every 5 years (preferred) or Every 3 years with cytology alone (acceptable) Recommend AGAINST more frequent screening
Women ages >65	Discontinue after age 65 if 3 negative cytology tests or 2 negative HPV tests in last 10 years with most recent test in last 5 years
Post-Hysterectomy	Discontinue if for benign reason
Screening after HPV vaccination	Follow age-appropriate recommendations (same as unvaccinated women)

Guideline Recommendations ACS / ASCCP / ASCP

Management of Discordant Results

HPV-negative ASC-US	Rescreen with cotesting in 5 years (preferred) or Rescreen with cytology in 3 years (acceptable)
HPV positive, cytology negative	<u>Option 1</u> -- 12-month follow-up with cotesting <u>Option 2</u> -- Test for HPV16 or HPV16/18 Genotyping If HPV16 or HPV16/18 positive: refer to colposcopy If HPV16 or HPV16/18 negative: 12-month follow-up with cotesting

La primavera de la prueba del VPH...

USPSTF Guideline Revision

(Moyer et al., Ann Int Med March 2012)

“Many comments urged the USPSTF to reconsider its draft recommendation on HPV co-testing and review new evidence that had been published since its deliberation. In response to these comments, the USPSTF [...] considered new evidence that was published since its initial deliberation—specifically the update of the POBASCAM results and the study by Katki and colleagues (30, 31). With this new evidence, in addition to the previously considered evidence, the **USPSTF decided to recommend HPV testing combined with cytology (co-testing) as a reasonable alternative for women age 30 to 65 years** who wish to extend the screening interval beyond 3 years.”

Integración de Sistemas de Información de tamizaje y vacunación

Registry Database	NU	NT	YK	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
Population		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cancer		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cervical Screening (CS)		✓		✓	✓	✓	✓	✓			✓	✓	✓
CS Follow up				✓	✓	✓	✓				✓	✓	✓
Immunization				✓	✓	✓	✓	✓	✓	✓	✓		✓
HPV Immunization				✓	✓		✓	✓	✓	✓	✓	✓	

La variación en las prácticas canadienses de tamizaje de cáncer de cuello uterino (slides suplementarios)

Start, Stop and Interval recommendations

	Nunavut	Northwest Territories	Yukon	British Columbia	Alberta
Start	information currently not available	3 years post sexual debut or age 21	BCCA guidelines	Age 21 or 3 years post first sexual contact, whichever occurs first	Within 3 years of sexual activity or 21 whichever comes later
Stop	information currently not available	Age 69 if...	BCCA guidelines	69 with 3 neg. tests in 10 years	69 (with 3 negative tests)
Interval	information currently not available	Annually X 3, then biennially if normal		Every 12 months until 3 neg. tests, then every 2 years.	3 years after 3 annual negative tests
	Saskatchewan	Manitoba	Ontario	Quebec	New Brunswick
Start	18 years	3 years following sexual activity	Within 3 years of sexual activity	Guidelines released in October 2011	age 21 or three years after first intimate sexual activity, whichever occurs later
Stop	69 years	70 (with 3 negative tests in previous 10 years with no change in partners)	70 with adequate screening in previous 10 years	Guidelines released in October 2011	69 years old with 3 consecutive annual neg. tests in previous 10 years
Interval		Every 2 years	Every 2-3 years after 3 negative tests	Guidelines released in October 2011	Every 2 years after 3 consecutive annual neg. tests and every 3 years when recall system is in place.
	Nova Scotia	Prince Edward Island	Newfoundland/Labrador	December 2011 – Version 4	
Start	Within 3 years of sexual activity; 21	Begin at age 18 or within 3 years of onset of sexual activity	Age 20		
Stop	75 if adequate negative screening history in the previous 10 yrs	75 after 2 negative tests in previous 10 years	Age 70 after 3 negative results in the past 10 years and no abnormal history.		
Interval	After 3 annual negative tests, screening should continue every 2 years	Every 2 years	After 3 annual negative tests, screening should continue every 3 years.		

□ How are eligible individuals identified?

Nunavut	Northwest Territories	Yukon	British Columbia	Alberta
Information currently not available	Variable by health centre rosters in small communities Program Invitations	Information currently not available	Self and health care provider	Population data (Alberta Health & Wellness), cytology data, cancer registry Letters sent to women in areas of the province where the program has operated for at least 3 years Program Invitations
Saskatchewan	Manitoba	Ontario	Quebec	New Brunswick
Population based screening registry with imports from Ministry of Health for demographic information Program Invitations	Population based Screening registry Program Invitations	Primary health care providers.	Opportunistic (especially in practices and local health and community centres – Centres locaux de santé et de services sociaux)	iEHR Client registry & Cervical Cancer Prevention and Screening Repository (CCPSR)
Nova Scotia	Prince Edward Island	Newfoundland/Labrador		
Population based registry	Population based registry from Medical Affairs division of Health PEI Program Invitations	Cervical Cytology Registry		

□ Does the screening program send pap test results to women?

Nunavut	Northwest Territories	Yukon	British Columbia	Alberta
Information currently not available	No	Information currently not available	No	Yes
			Results sent to Health Care Provider	
Saskatchewan	Manitoba	Ontario	Quebec	New Brunswick
Yes		No	No	No
	Upon request from women only. Do not send results out routinely.	Correspondence to participants will begin in 2011/2012.		Will be determined in future release
Nova Scotia	Prince Edward Island	Newfoundland/Labrador		
	Not to all women	No		
We send women their previous Pap screening history by request only				

□ Does the screening program send reminders for follow up after abnormal Pap test results?

Nunavut	Northwest Territories	Yukon	British Columbia	Alberta
Information currently not available	1. Yes, to care providers only	Information currently not available	1. Yes to care providers only	1. Yes to care providers only
Saskatchewan	Manitoba	Ontario	Quebec	New Brunswick
1. Yes to care providers only	3. Yes, to women and care providers	4. No	4.No	4.No
	Letters sent to providers and women where recommended follow up has not been performed	Correspondence to participants will begin in 2011/2012		Will be determined in future release
Nova Scotia	Prince Edward Island	Newfoundland/Labrador	Options 1. Yes, to care providers only 2. Yes, to women only 3. Yes, to women and care providers 4. No	
1. Yes, to care providers only	3.Yes, to women and care providers	1. Yes to care providers only		
Reminder letters are sent to the health care provider who performed the pap test		In test phase 2011		

□ **Aspects of program under review**

Nunavut	Northwest Territories	Yukon	British Columbia	Alberta
Information currently not available	Reviewing follow-up data	Information currently not available	Policy revisions being discussed for cervical and HPV immunization and testing	Software application is being modified to accommodate data for the entire province. Planning underway for reflex HPV testing.
Saskatchewan	Manitoba	Ontario	Quebec	New Brunswick
Updating clinical practice guidelines; Proposal re: liquid based pap testing	Implementing reminder letters; adding HPV status to screening registry; registry to include girls 10-17	Integrated cancer screening program; to include IM/IS, invitations, reminders, recall and follow up; Patient correspondence starting with results letters to start 2011/12; updating guidelines and developing population based registry	Works in progress: clinical guidelines for screening; system requirements to invite women, developing nursing screening tools	Works in progress: Ongoing planning & development towards a province-wide screening program to be fully implemented by 2013/14
Nova Scotia	Prince Edward Island	Newfoundland/Labrador		
Collecting HPV vaccination data; Reviewing health provider reports and adding Hysterectomy data/clearance	Social marketing; Education programs	Recall within physician EMR protocol; population based registry in development		

- Is the use of HPV DNA testing a standard of practice in your province or territory?
- If yes, when is it used?

Nunavut	Northwest Territories	Yukon	British Columbia	Alberta
Information currently not available	2. Triage of abnormal pap tests 4. Pilot trials/ Research 5. Follow up for treatment	Information currently not available	4. Pilot trials/Research 5. Follow up for treatment	2. Triage of abnormal pap tests being introduced province wide 5. Follow up treatment
Saskatchewan	Manitoba	Ontario	Quebec	New Brunswick
3. Personal request (only) 4. Pilot trials/Research	4. Pilot trials/Research	2. Triage of abnormal pap tests 5. Follow up treatment	2. Triage of abnormal pap tests 4. Pilot trials/ Research	2. Triage of abnormal pap tests
				No
Nova Scotia	Prince Edward Island	Newfoundland/Labrador	Options 1. Routine primary screening 2. Triage of abnormal pap tests 3. Personal request (only) 4. Pilot trials/Research 5. Follow up for treatment 6. Other (specify)	
4. Pilot trials/Research	Not used but currently being considered	2. Triage of abnormal pap tests		
		Yes		