Cervical cancer screening in Colombia

Overview

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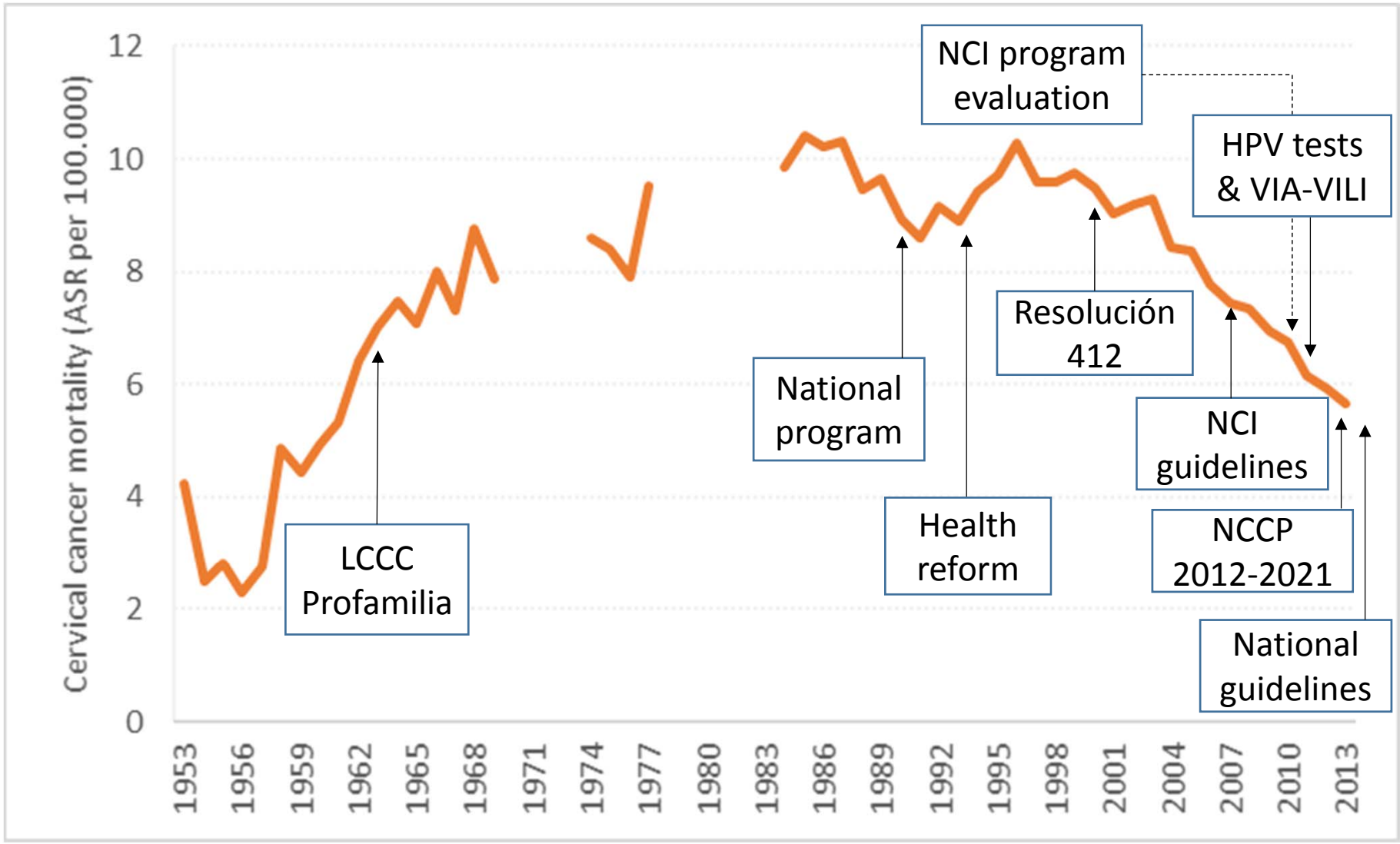
No conflicts of interest to declare

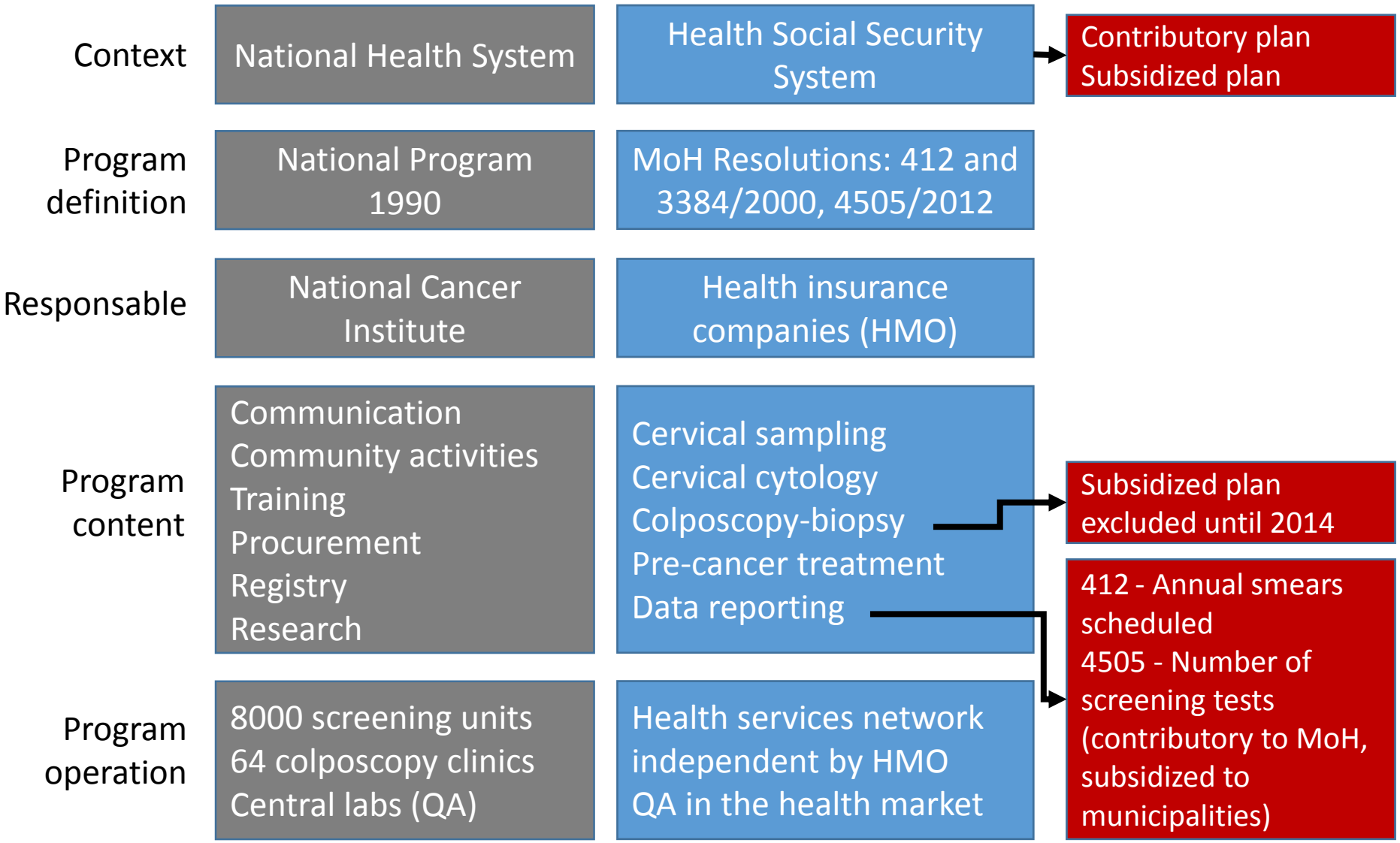
Content

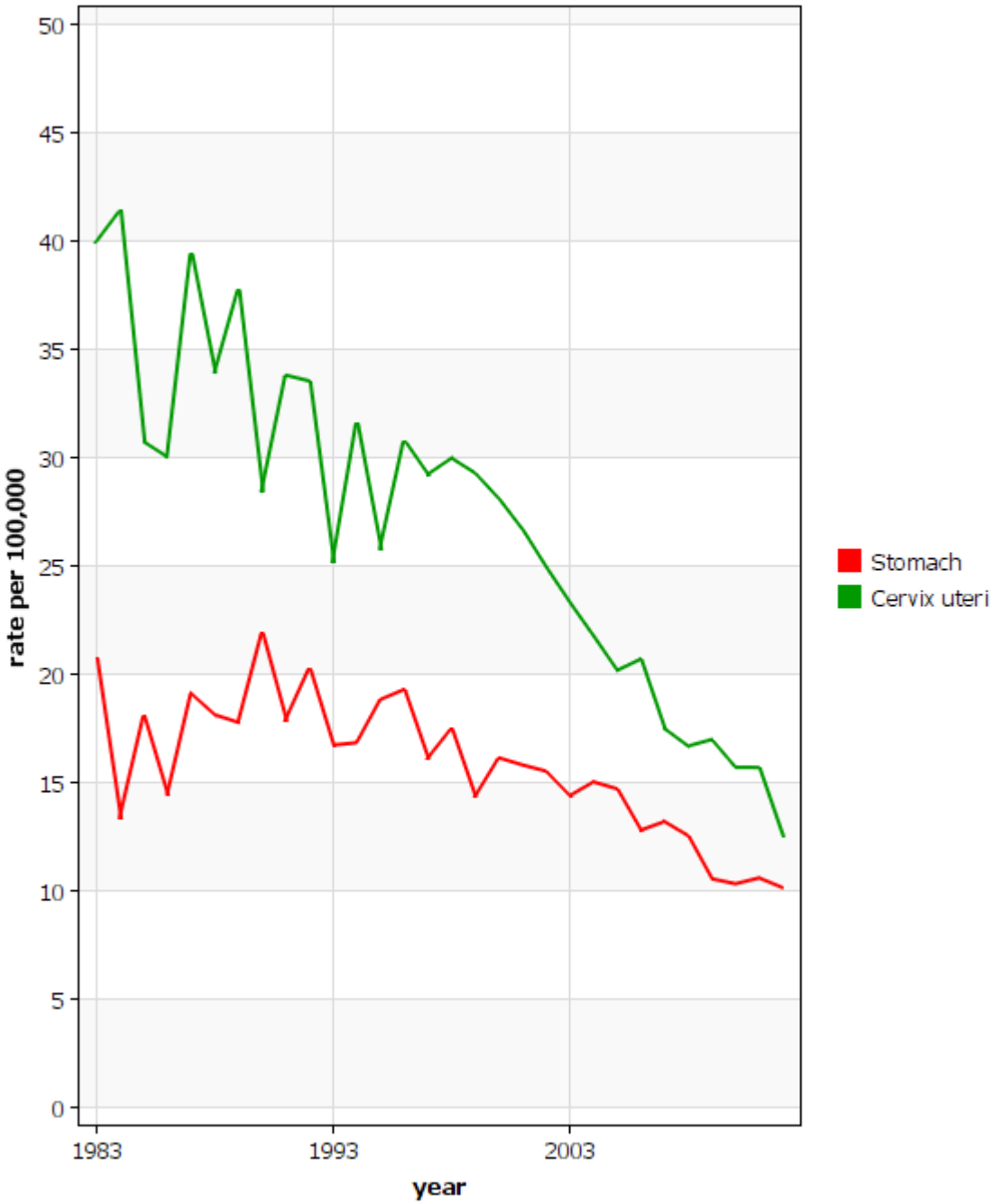
- An historical perspective
- The program evaluation
- The future

Achievements and challenges of cervical cancer screening in Colombia



Characteristics in program evolution

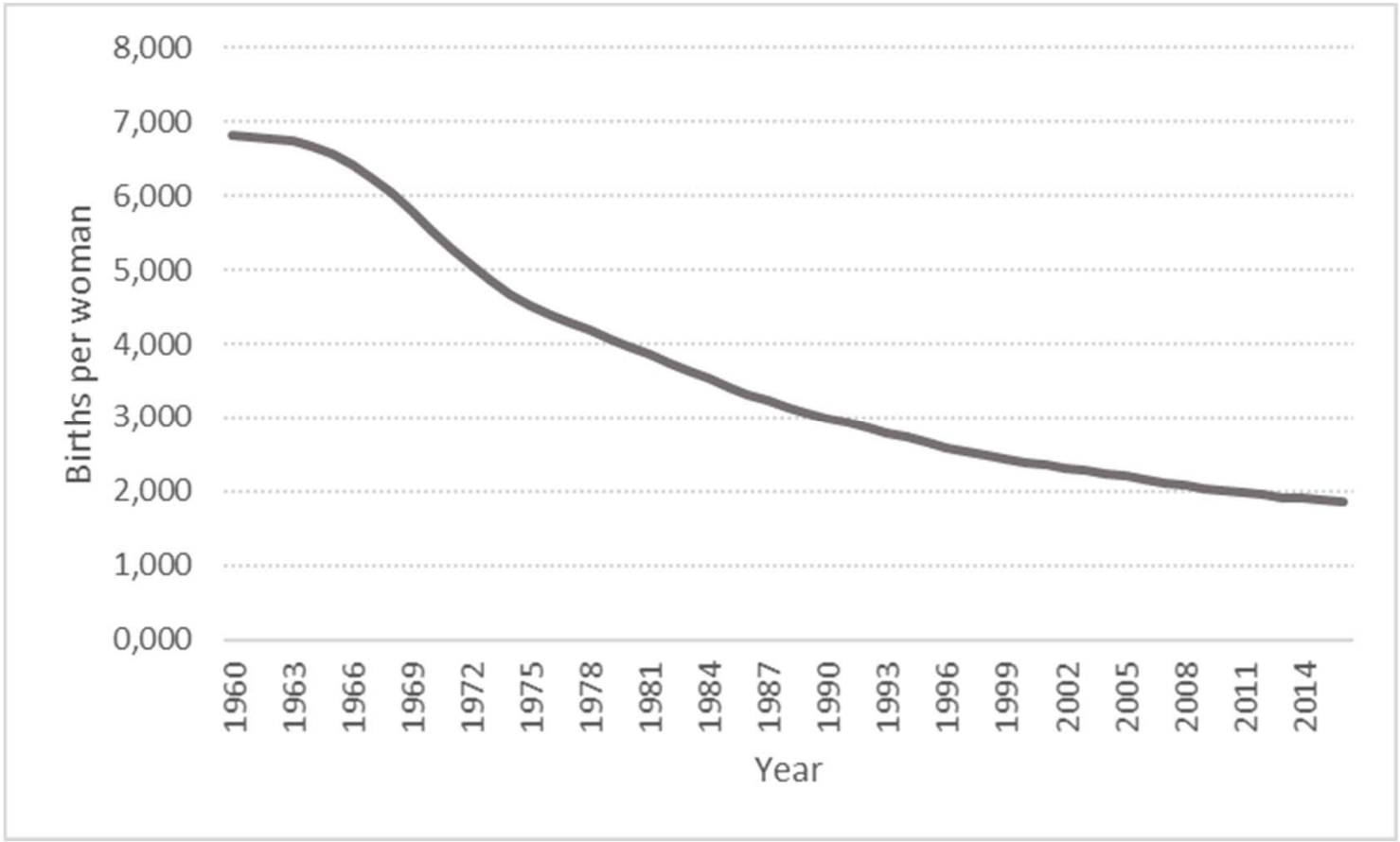




Cervical and stomach cancer mortality trends in Colombia

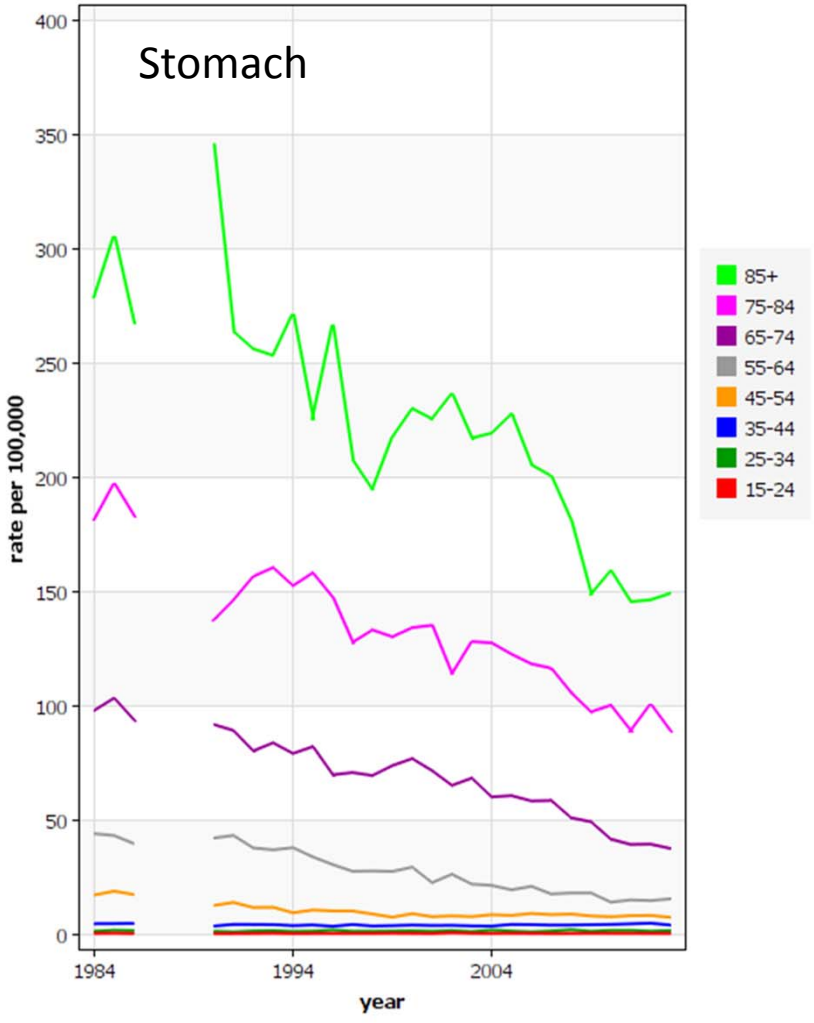
WHO-IARC
Cancer Mortality Database

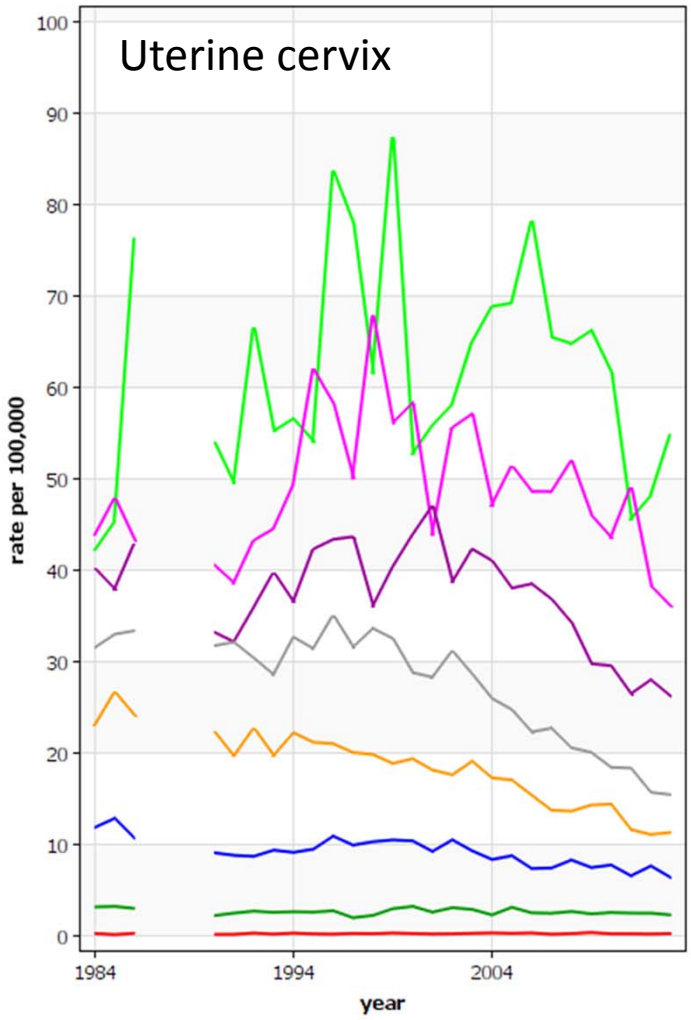
Fertility rates in Colombia



Source: World Bank

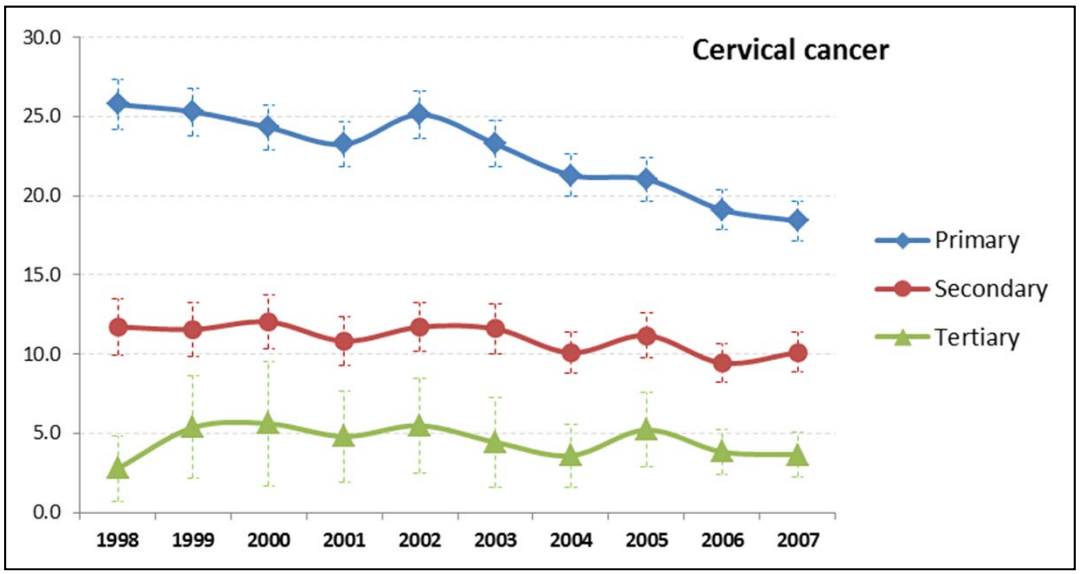
Cervical and stomach cancer mortality trends by age in Colombia

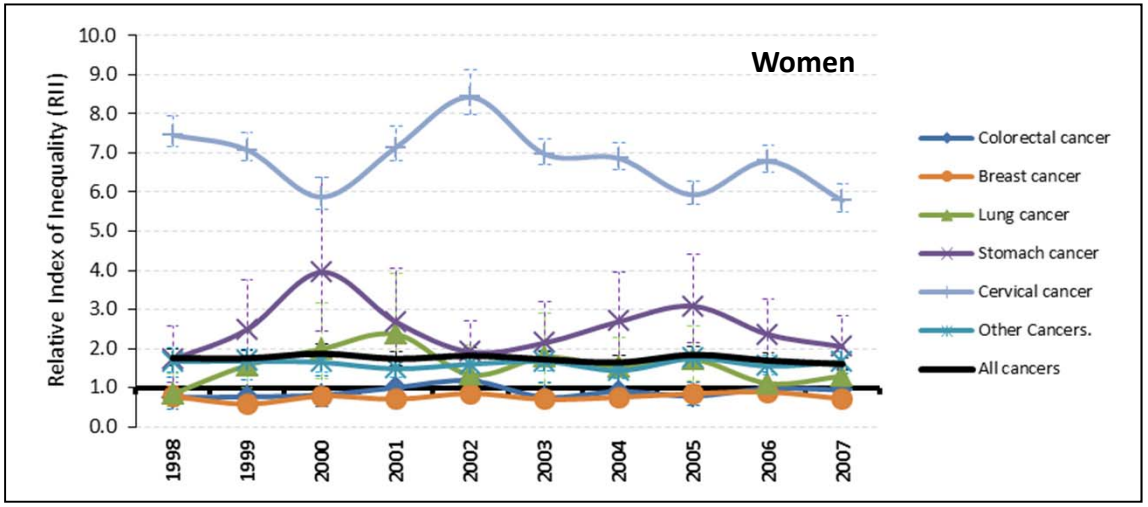




WHO-IARC. Cancer Mortality Database

Inequalities in cervical cancer mortality in Colombia





De Vries E et al
Int J Community Health 2016

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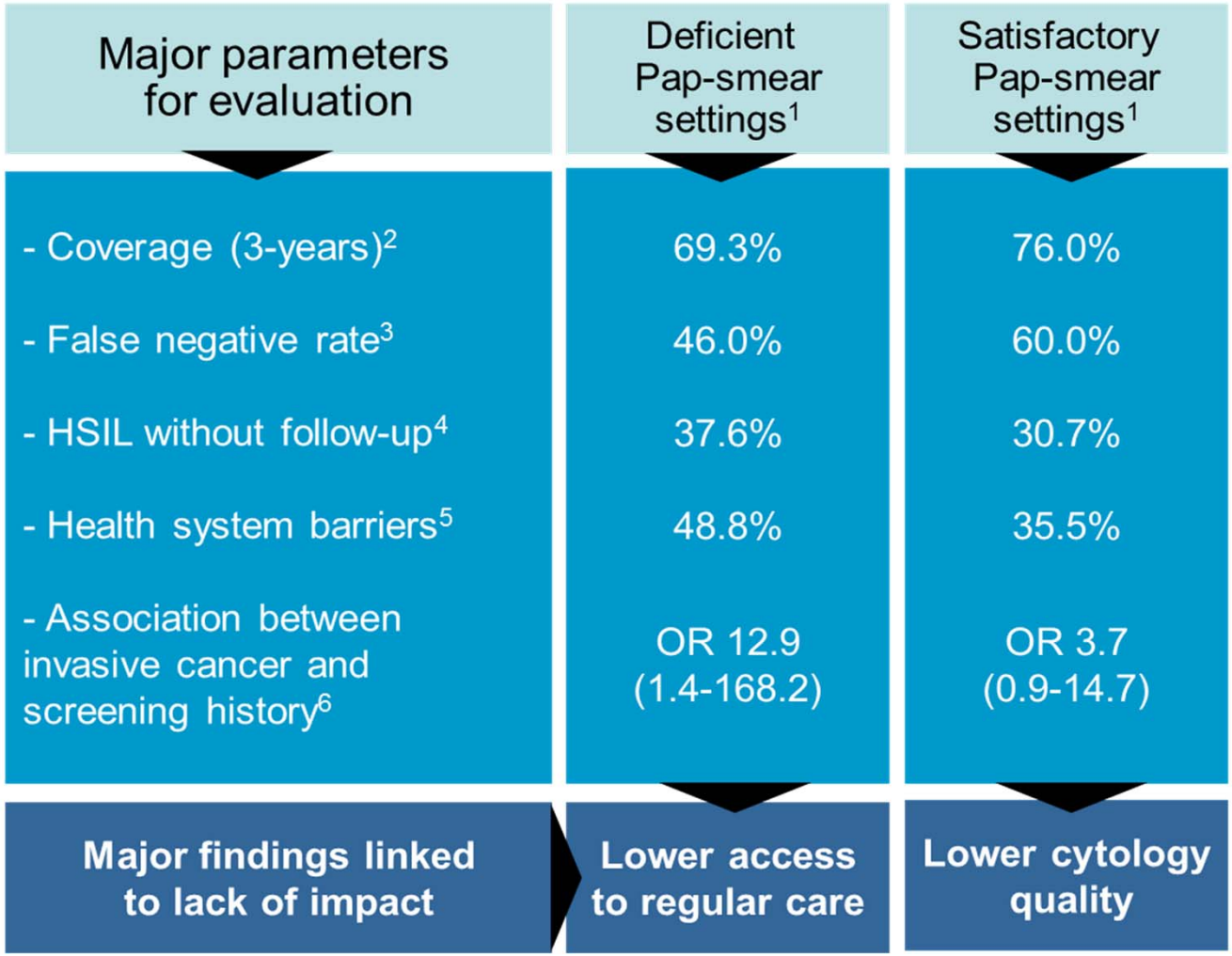
Comprehensive evaluation of cervical cancer screening in Colombia



Murillo R et al. HPV Today No. 7, Nov 2012

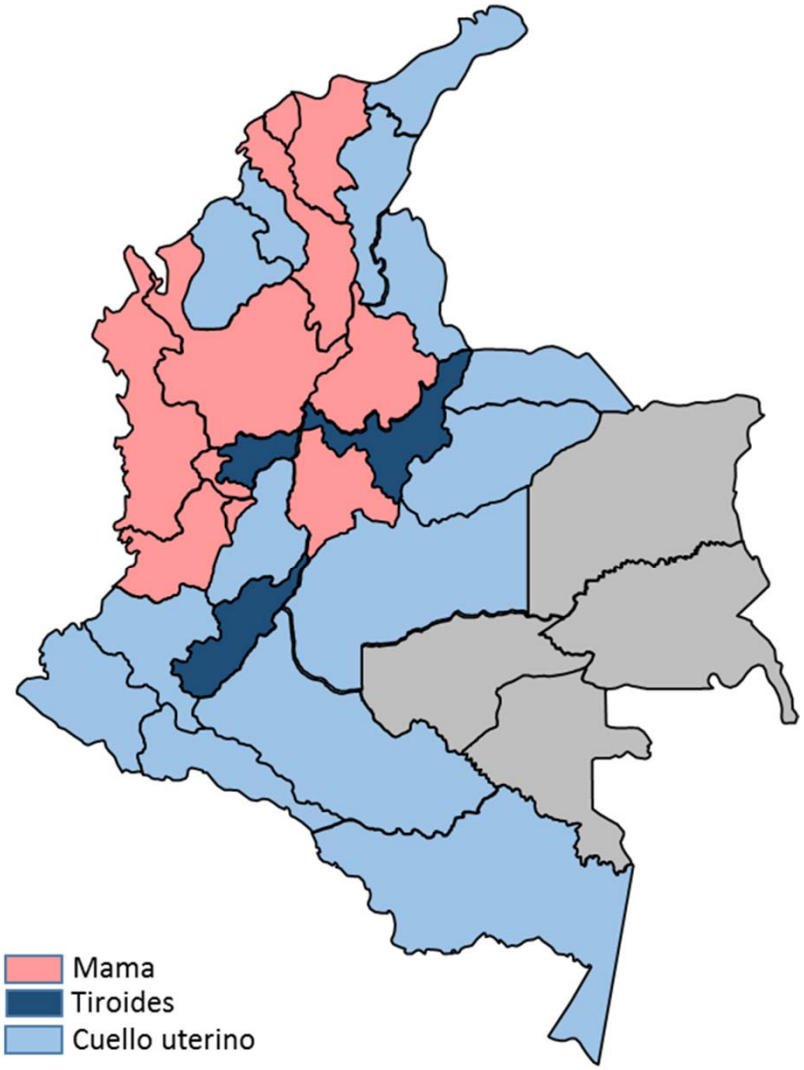
1. According to MOH parameters

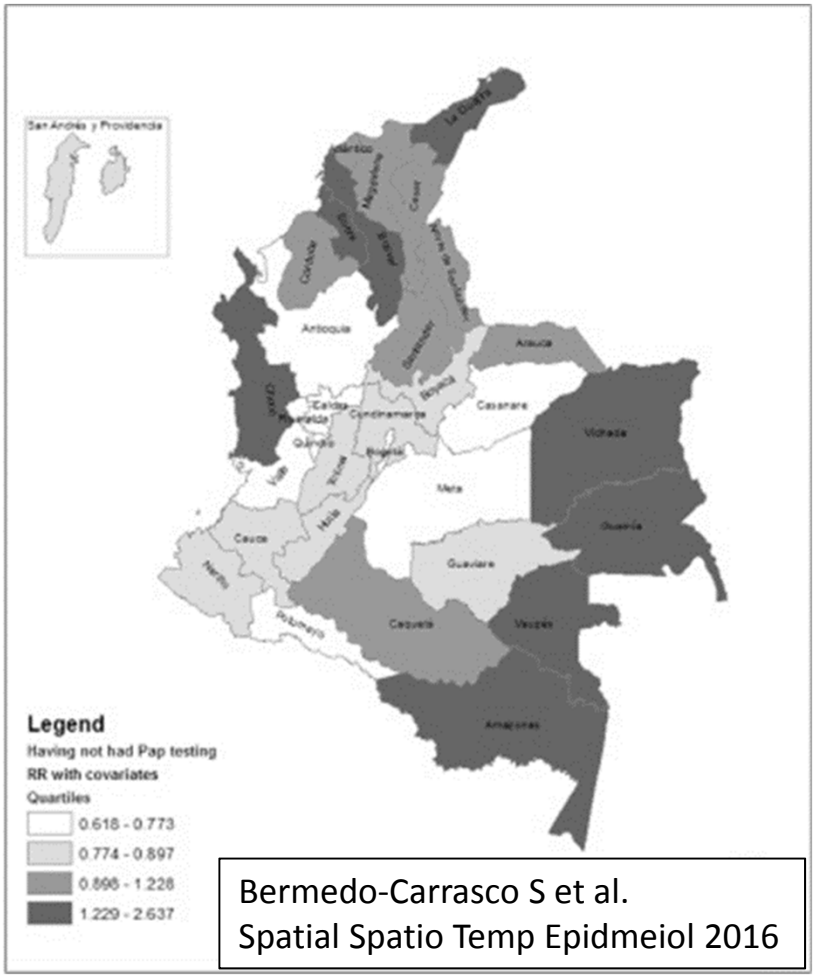
Associated factors with cervical cancer mortality reduction

Range	Mortality Rate by cervical cancer	IRR (CI 95%)	Adjusted IRR (CI 95%) *
1. Proportion of women who have never had a cervical cytology			
8.9 - 10.4	22.5	-	
10.9 - 15.5	19.9	1.05 (0.95 - 1.15)	0.86 (0.78 - 0.96)
15.8 - 18.2	25.5	0.82 (0.72 - 0.93)	0.68(0.57 - 0.80)
18.3 - 22.4	24.3	0.93 (0.84 - 1.02)	0.71(0.61 - 0.82)
2. Proportion of women who had an abnormal cervical cytology and contacted their health care provider to receive treatment			
64.6 - 81.0	23.9	-	-
81.3 - 83.8	24.3	1.01 (0.92 - 1.11)	0.88(0.79 - 0.98)
84.1 - 87.7	25.8	1.08 (0.98 - 1.18)	0.88 (0.77 - 1.01)
88.1 - 100	19.9	0.83 (0.74 - 0.93)	0.65 (0.56 - 0.76)
3. Proportion of uninsured women			
9.6 - 22.2	20.0	-	-
23.7 - 31.0	21.2	1.23 (1.11 - 1.35)	1.47 (1.27 - 1.69)
31.6 - 38.0	22.3	1.44 (1.29 - 1.61)	1.77 (1.54 - 2.03)
38.6 - 48.7	23.4	1.14 (1.02 - 1.27)	1.66 (1.42 - 1.95)

Chocontá-Piraquive LA et al. BMC Health Services Research 2010

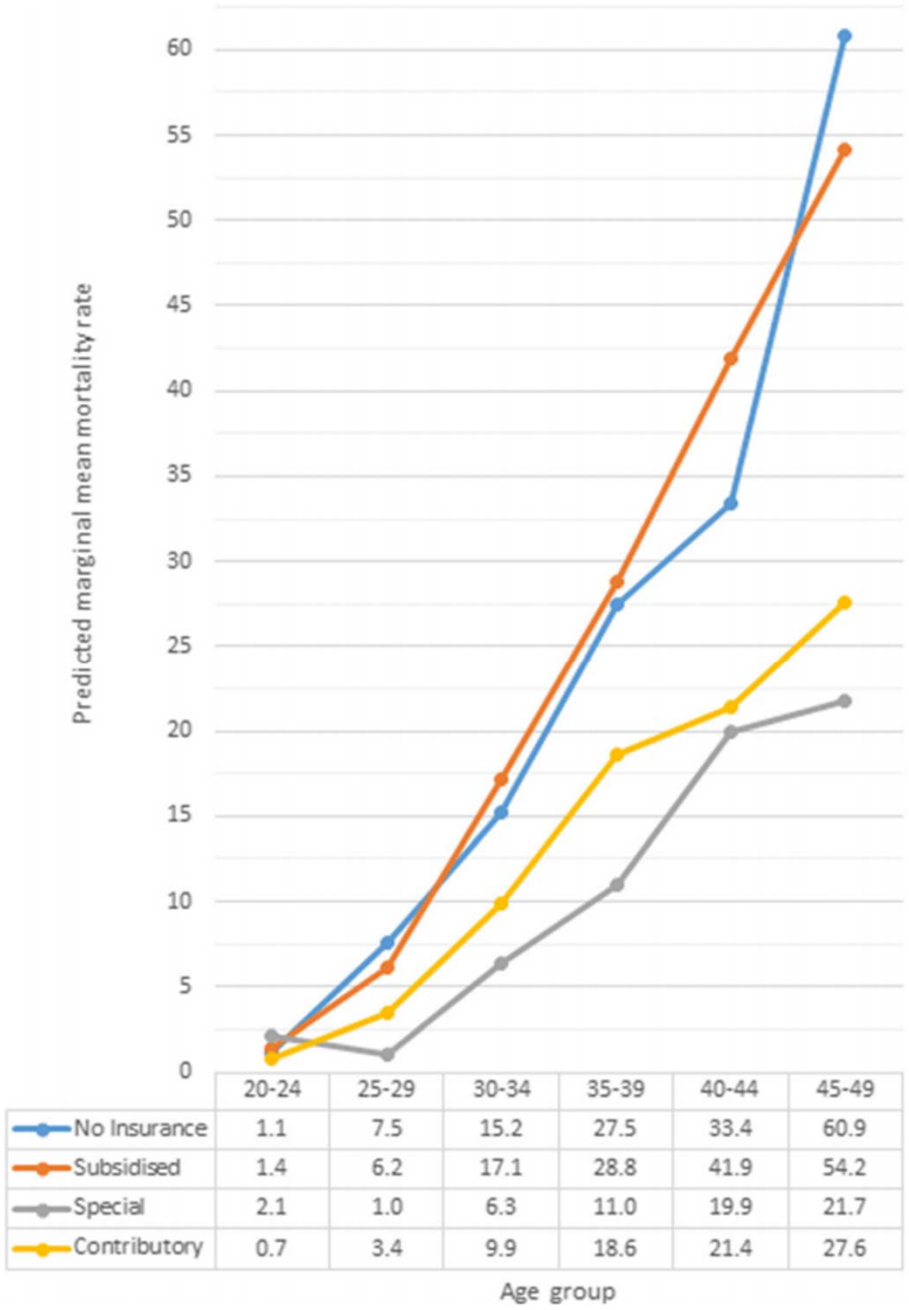
Frist cause of cancer incidence by state - Colombia (Women)





Bermedo-Carrasco S et al.
Spatial Spatio Temp Epidmeiol 2016

Source:
Pardo C et al. Incidencia, mortalidad y prevalencia de cáncer en Colombia 2007-2011. INC; 2014

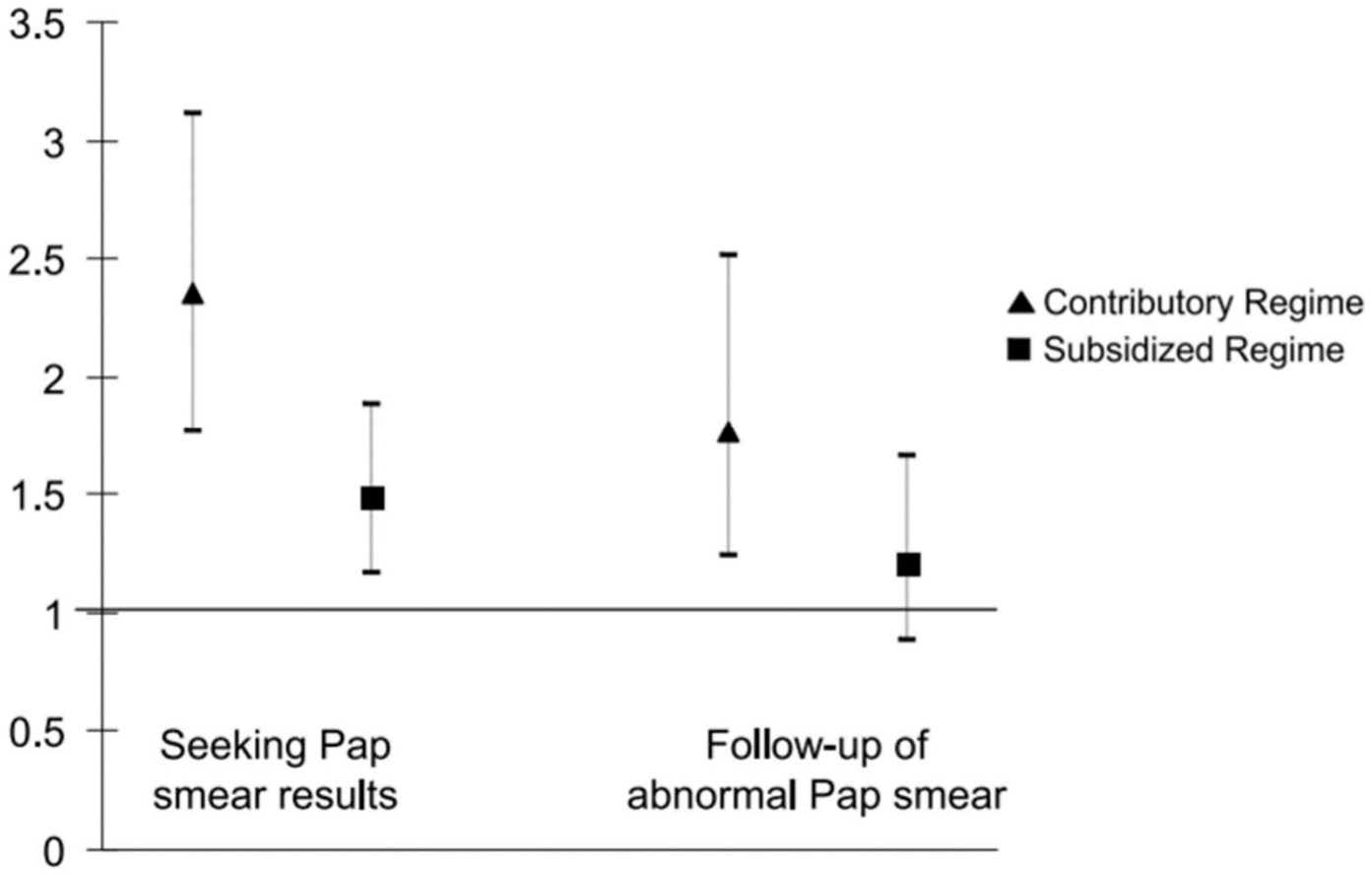


	20-24	25-29	30-34	35-39	40-44	45-49
No Insurance	1.1	7.5	15.2	27.5	33.4	60.9
Subsidised	1.4	6.2	17.1	28.8	41.9	54.2
Special	2.1	1.0	6.3	11.0	19.9	21.7
Contributory	0.7	3.4	9.9	18.6	21.4	27.6

Premature cervical cancer mortality by health insurance

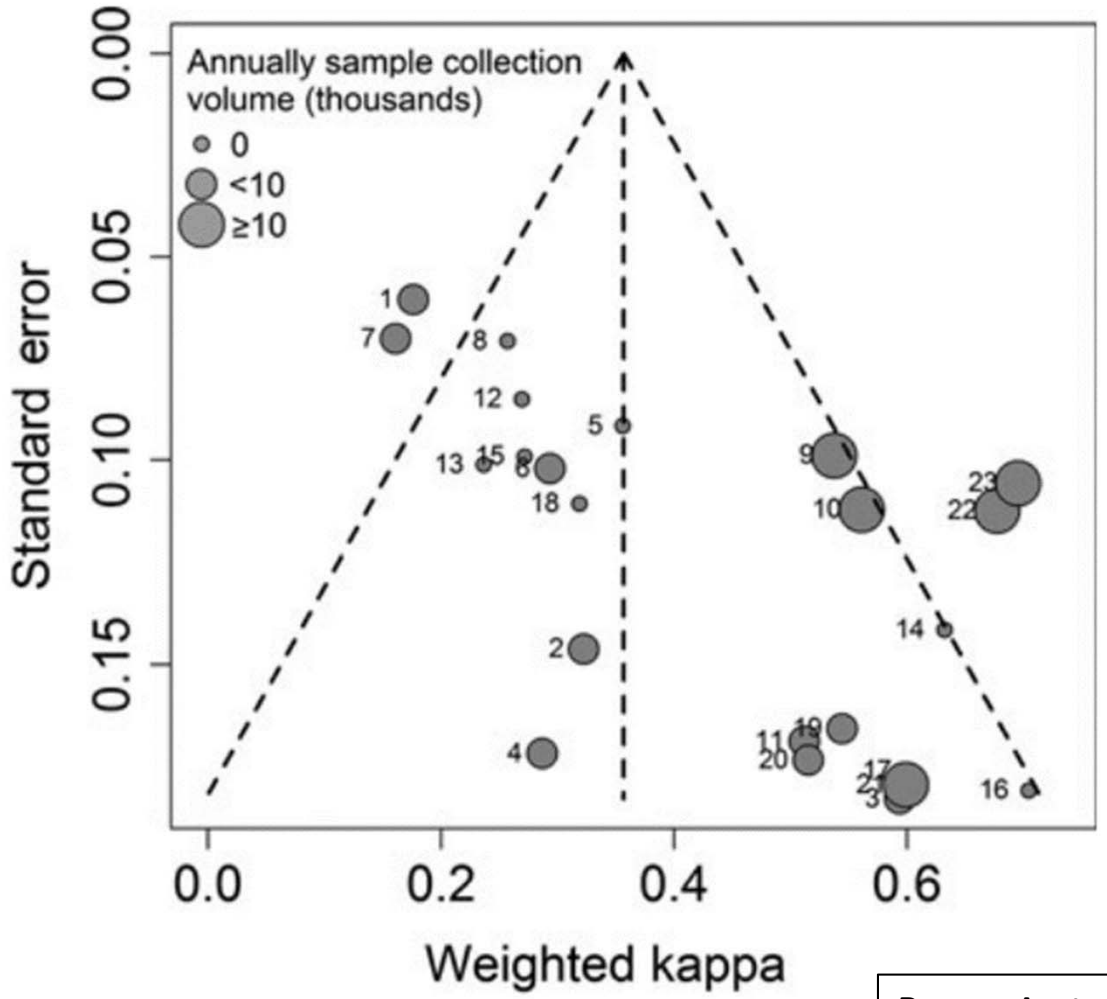
Bermedo-Carrasco S et al.
BMC Public health 2016

Association between type of health insurance coverage and positive-screening follow-up



Garcés-Palacio IC et al. Int J Gynecol Cancer 2010

Inter-observer agreement according to volume of sample collection in Antioquia



Baena A et al. Cytopathology 2016

Asociated factor	Positivity rates	
	Hybrid Capture 2	Aptima
Specific medium (independent samples cyto and HPV)		
Age		
<40		ref
≥40		0.64 (0.46-0.82)
Sampler experience		
Higher exprience	ref	
Lower exprience	2.33 (1.27-3.38)	
Initial cytology		
No	ref	ref
Yes	0.62 (0.28-0.95)	0.59 (0.22-0.97)
Preservecyt (common sample)		
Time to processing		
<30 days	ref	
≥30 days	1.52 (1.06-1.97)	
Lab technician		
Higher experienced	ref	
Lower exprienced	1.46 (1.16-1.77)	

Impact of operational factors on HPV positivity rates in an HPV-based screening study in Colombia

Source:
Robles C et al.
Int J Gynecol Obstet 2018

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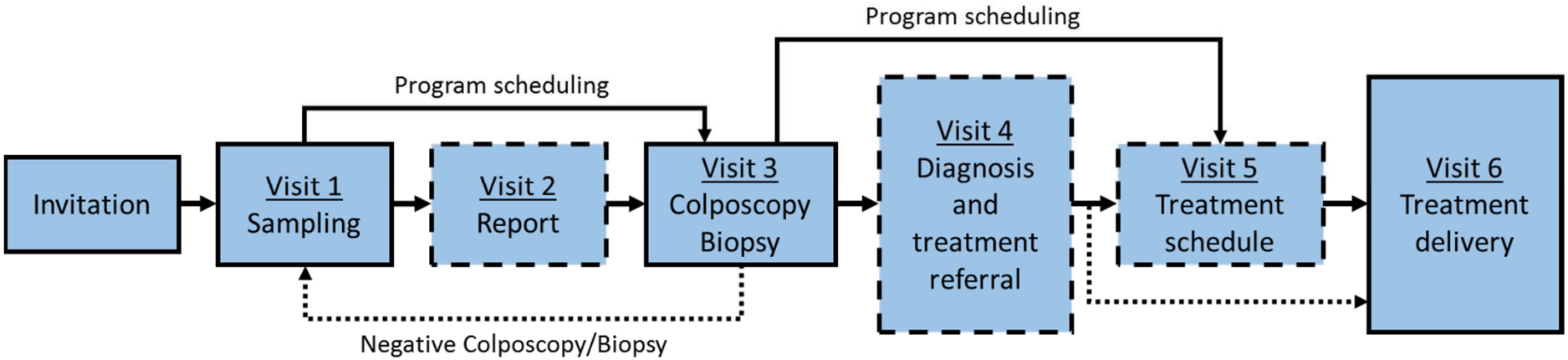
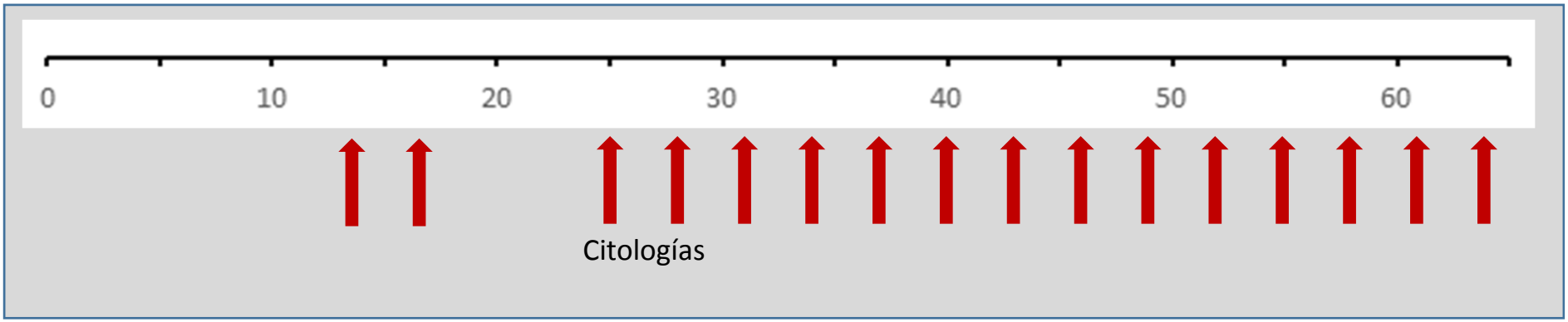
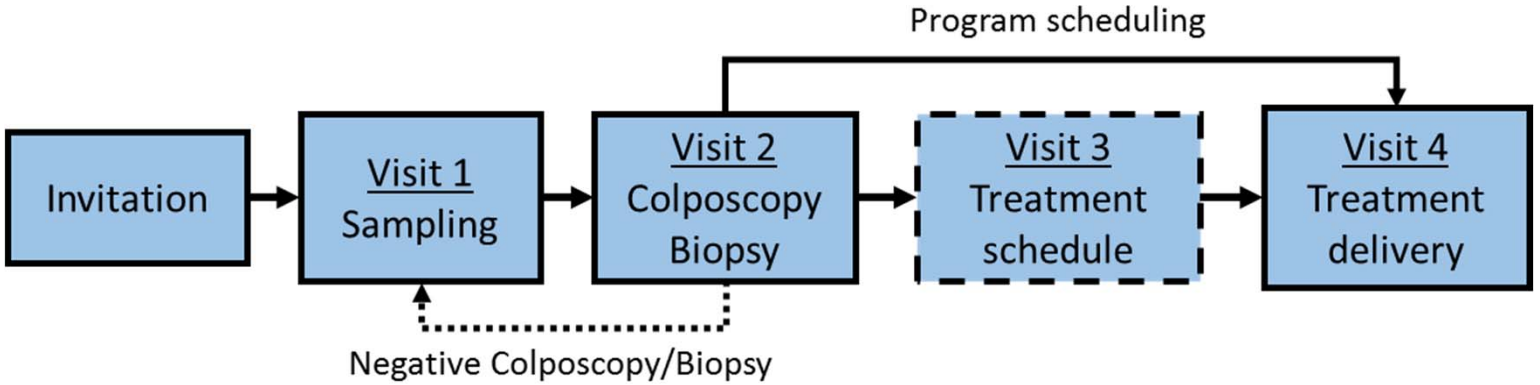
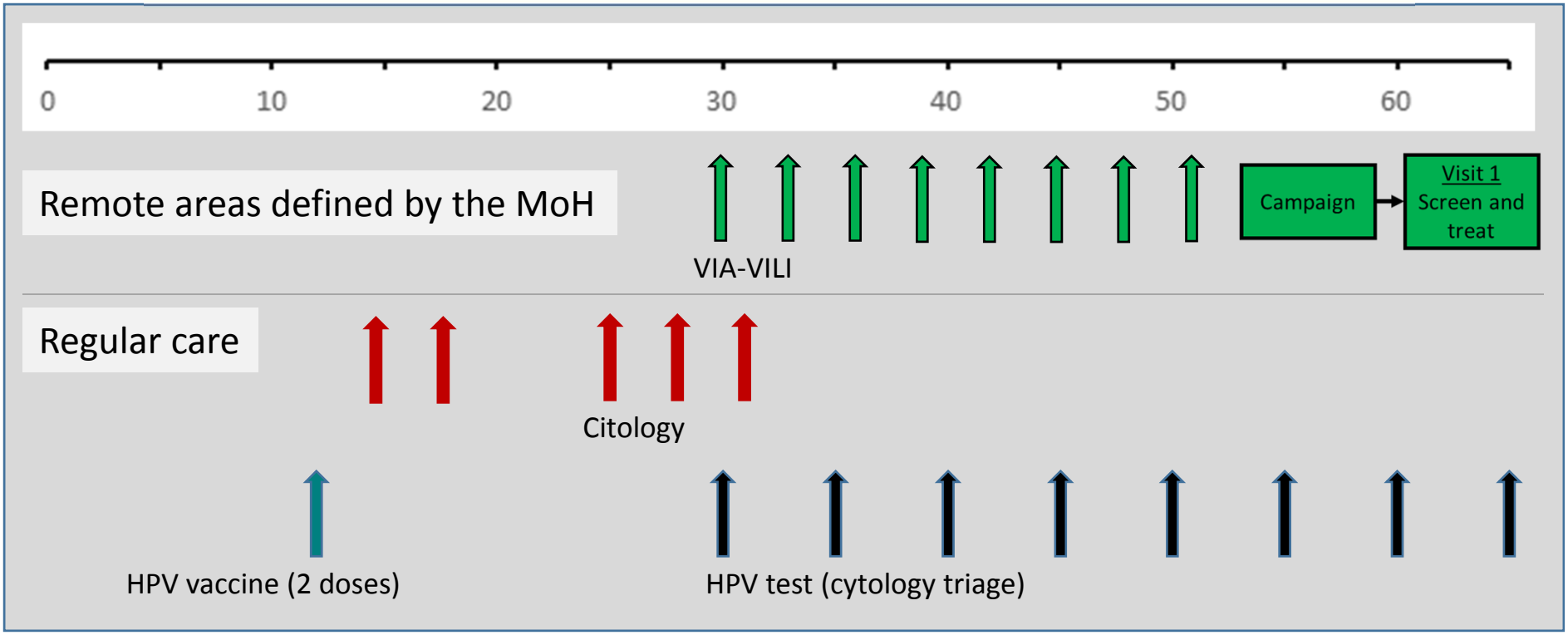
Clinical pathway and screening interval for cervical cancer screening in Colombia – Former situation





Clinical pathway (30 days) and screening interval for cervical cancer screening in Colombia – Resolución 3280 de 2018



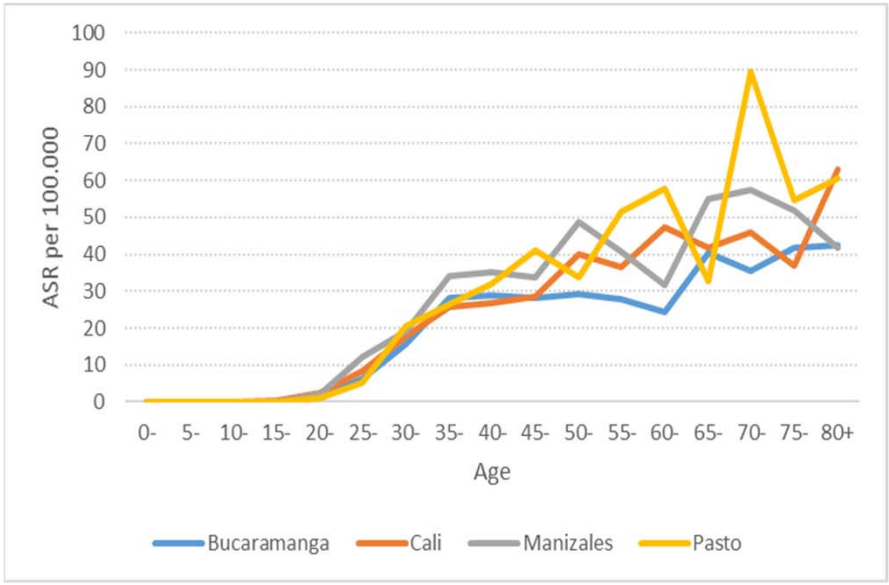


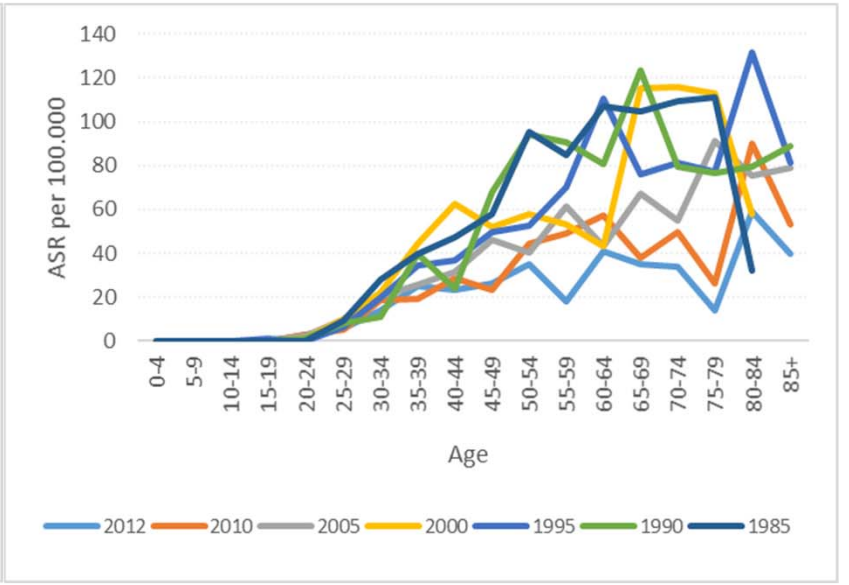
Program monitoring
(Resolución 3280 de 2018)

- Outcome
  - Proportion of women with cervical pre-cancer (**HSIL or CINII/CINIII** or adenocarcinoma in situ)
- Process
  - Proportion of women 25-69 screened (any screening method)
  - Proportion of women with HPV screening (**according to the screening protocol**)
  - Proportion of women 30-50 living in remote regions with VIA-VILI screening **in the last 3 years**
  - Proportion of positive HPV-screened women 30-65 with cytological triage
  - Proportion of positive VIA-VILI-screened women who undergo colposcopy-biopsy
  - Proportion of positive VIA-VILI screened women 30-50 years old who undergo immediate treatment
  - Proportion of women with positive cytology who undergo colposcopy-biopsy
  - Proportion of women with positive VIA-VILI or cytology who undergo colposcopy-biopsy within 30 days after the positive results
  - Timeliness of pre-cancer or cancer diagnosis
  - Proportion of unsatisfactory sampling in cervical cytology

Program (resolution) shortcomings

- No clear stewardship (collaborative plan between territories and HMOs)
- No clear quality assurance
- Screening of adolescents





Cervical cancer incidence – Cancer Incidence in Five Continents

Gracias