

# ICSN 2023

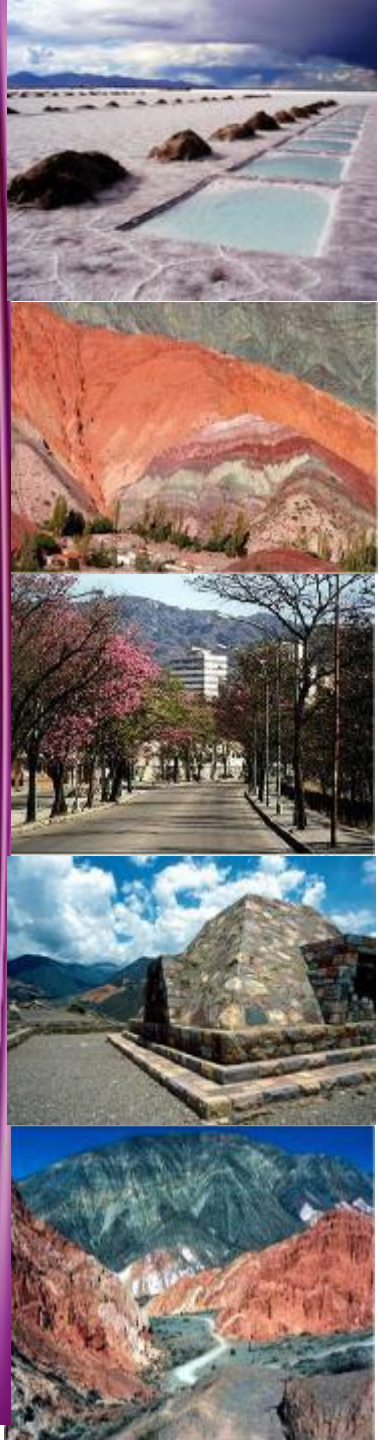
## TORINO JUNE 2023

Challenges faced in the national scaling-up of  
HPV-testing in Argentina

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CEDES/CONICET

What are the challenges faced in the national scaling-up of HPV-testing?

Important question to ensure that program performance is maintained when **HPV-testing is applied at scale, outside a demonstration project**



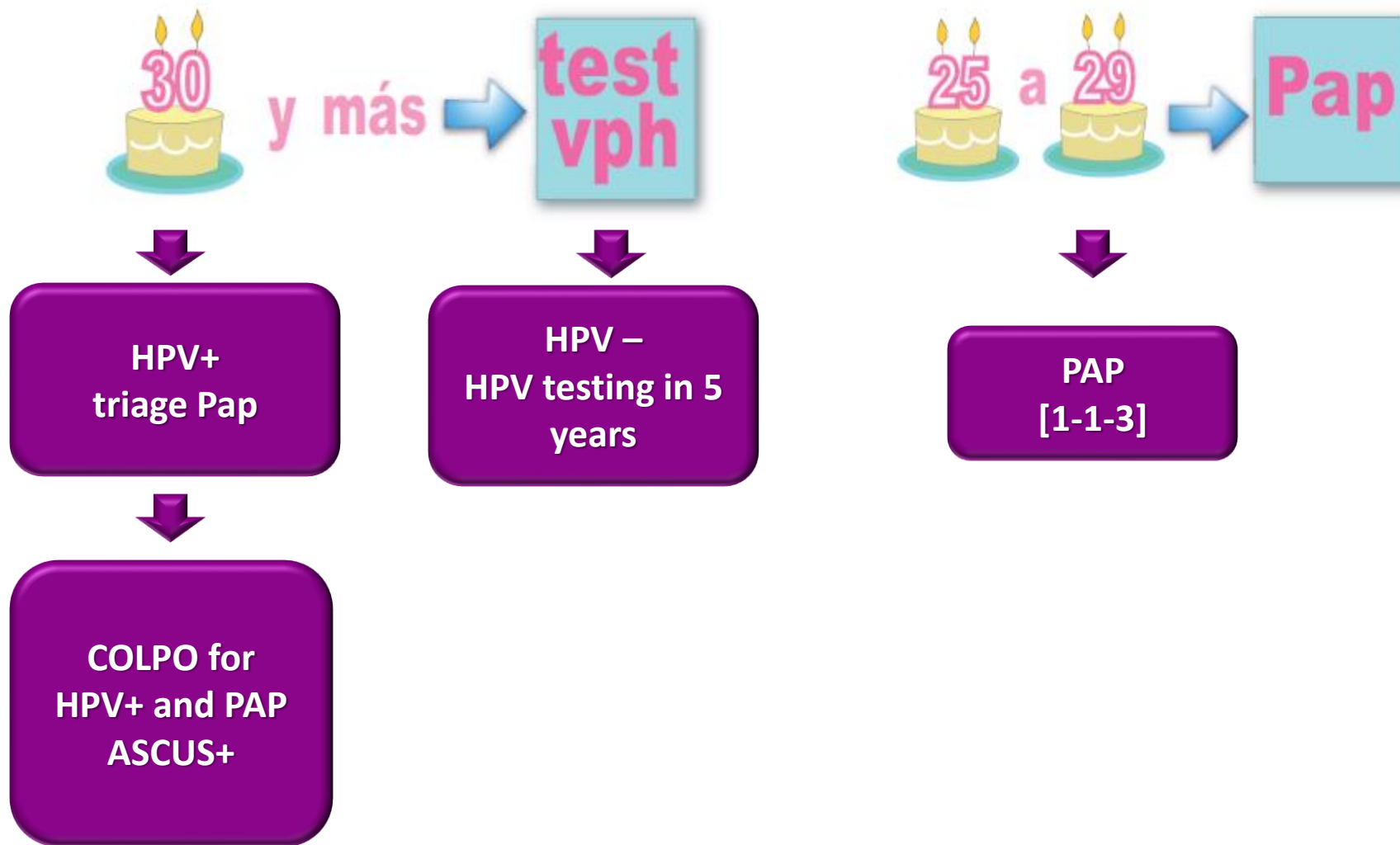
# JUJUY DEMONSTRATION PROJECT (JDP)

*Led by the National Program on Cervical Cancer prevention and Jujuy Ministry of Health*

## 2012-2014

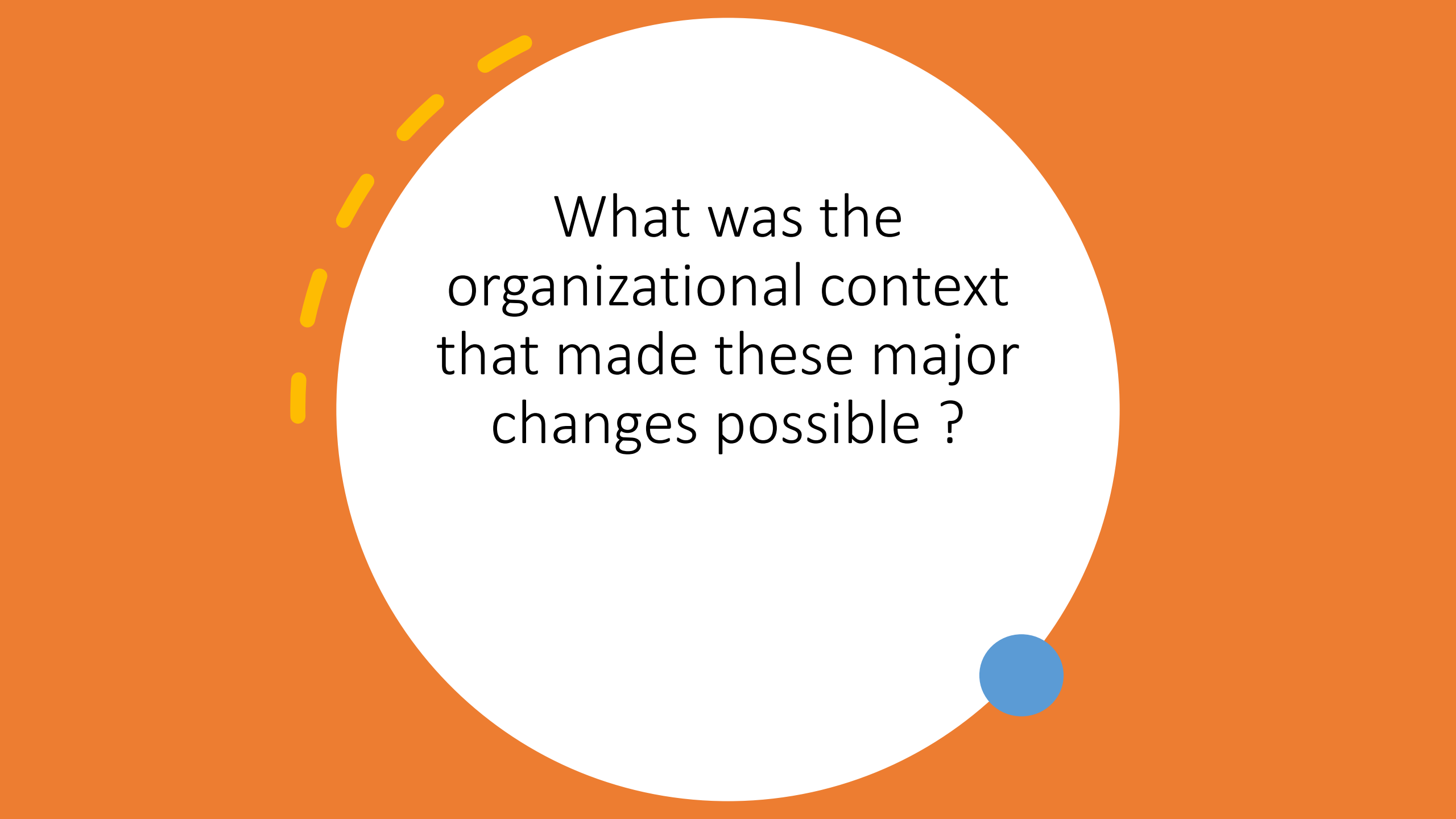
**Cervical cancer mortality rate:  
17 per 100,000 women (2008)**

# SCREENING STRATEGY



# HPV-testing vs. Cytology-based screening, comparison of selected programmatic indicators

	<b>Cytology-based period (2010-2011)</b> N=29, 631	<b>HPV-testing period (2012-2014)</b> N=44,700
Health centers offering HPV-testing as the primary screening method (%)	--	100
Effectiveness to detect CIN2+ Odds Ratio	8.0 1 (ref)	12.4 2.3 (2.01-2.73)
Screening in the recommended age (%)	79	99
Number of laboratories	6	1



What was the  
organizational context  
that made these major  
changes possible ?

## **ARGENTINA**

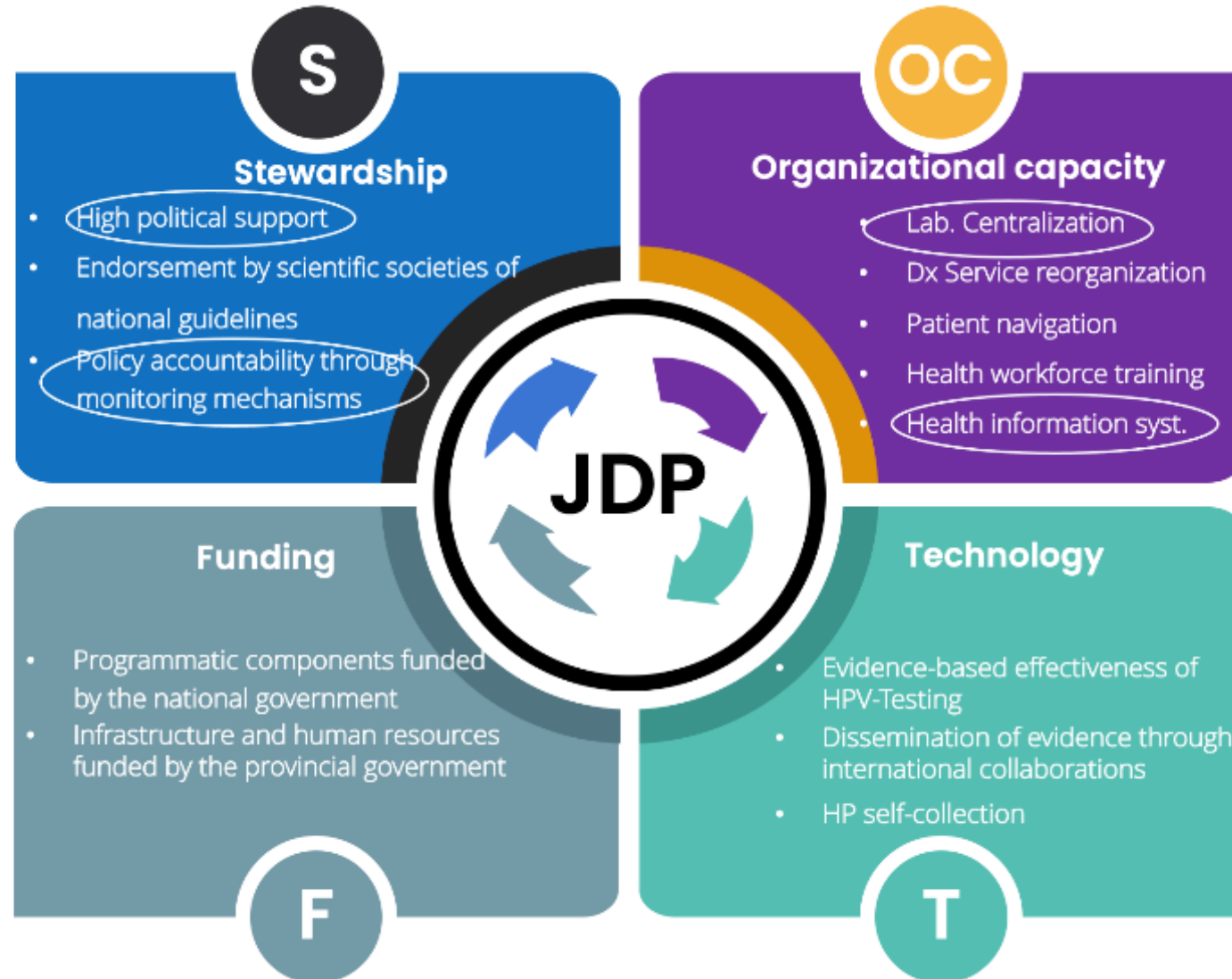
Provinces are autonomous entities responsible for the organization, management and financing of the provincial health system.

Provincial adherence to proposed national health programs depends on political and technical agreements in which responsibilities and funding are negotiated.

Provincial programs: small coordination units



# The organizational model of the JDP included activities carried out in four dimensions





## ○ STEWARDSHIP:

-Political support from the highest health authorities.

-Driving idea: Introducing a novel technology would allow showing actions on women Health

-Agreement establishing project goals for annual screening/Dx/Tx; and changes at the health system level

-NPCC committed funding of HPV testing and training

-National Resolution enacted



## STEWARDSHIP:

-Policy accountability: regular meetings with provincial health authorities and heads of health services to monitor program performance

-Data were analyzed to identify obstacles to achieve goals and agree on solutions.



# LABORATORY CENTRALIZATION

HPV LABORATORY



CYTOLOGY  
LABORATORY



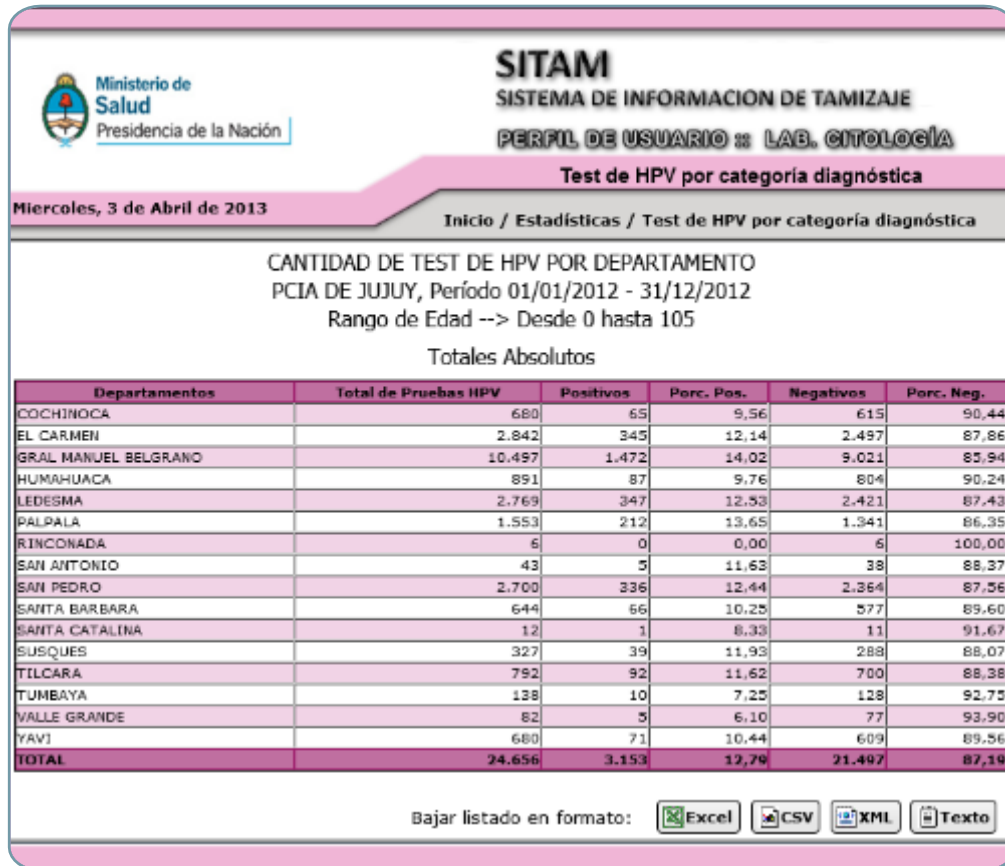
PATHOLOGY  
LABORATORY



HPV LABORATORY AS PART OF  
THE CITO-PATHOLOGY LAB



# INCORPORATION OF HPV TESTING IN SITAM



The screenshot displays the SITAM (Sistema de Información de Tamizaje) interface. At the top, it identifies the user as 'LAB. CITOLOGÍA' and the test as 'Test de HPV por categoría diagnóstica'. The date is 'Miércoles, 3 de Abril de 2013'. The main heading is 'CANTIDAD DE TEST DE HPV POR DEPARTAMENTO PCIA DE JUJUY, Período 01/01/2012 - 31/12/2012 Rango de Edad --> Desde 0 hasta 105'. Below this, a table titled 'Totales Absolutos' provides a breakdown of HPV test results by department. The table includes columns for 'Departamentos', 'Total de Pruebas HPV', 'Positivos', 'Porc. Pos.', 'Negativos', and 'Porc. Neg.'. The total number of tests is 24,656, with 3,153 positive results (12.79%) and 21,497 negative results (87.19%).

Departamentos	Total de Pruebas HPV	Positivos	Porc. Pos.	Negativos	Porc. Neg.
COCHINOCA	680	65	9,56	615	90,44
EL CARMEN	2.842	345	12,14	2.497	87,86
GRAL MANUEL BELGRANO	10.497	1.472	14,02	9.021	85,94
HUMAHUACA	891	87	9,76	804	90,24
LEDESMA	2.769	347	12,53	2.421	87,43
PALPALA	1.553	212	13,65	1.341	86,35
RINCONADA	6	0	0,00	6	100,00
SAN ANTONIO	43	5	11,63	38	88,37
SAN PEDRO	2.700	336	12,44	2.364	87,56
SANTA BARBARA	644	66	10,25	577	89,60
SANTA CATALINA	12	1	8,33	11	91,67
SUSQUES	327	39	11,93	288	88,07
TILCARA	792	92	11,62	700	88,38
TUMBAYA	138	10	7,25	128	92,75
VALLE GRANDE	82	5	6,10	77	93,90
YAVI	680	71	10,44	609	89,56
<b>TOTAL</b>	<b>24.656</b>	<b>3.153</b>	<b>12,79</b>	<b>21.497</b>	<b>87,19</b>

Bajar listado en formato: [Excel](#) [CSV](#) [XML](#) [Texto](#)

- Data entry centralized at laboratory level, then gradually incorporated into PHC centers and colposcopy/treatment units.
- Centralized data entry in SITAM at laboratory : registration of all screening/triage tests and biopsies
- Data from SITAM used to:
  - monitor and evaluate program performance
  - identify women with abnormal lesions without diagnosis/treatment
  - control of screening frequency and age: the laboratory as gate keeper

# National scaling-up of HPV-testing

2012-2014



THE LANCET  
Global Health

ARTICLE IN PRESS

Programmatic human papillomavirus prevention in the Jujuy Demonstration Base, before and after retrospective

Quintana-Rodriguez, P. G. et al. (2014) PLoS ONE 9(12): e111111. doi:10.1371/journal.pone.0111111

Cervical cancer (Malignant Anal, 2014 - 2015) (Global Burden of Disease Study 2014)

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## Summary

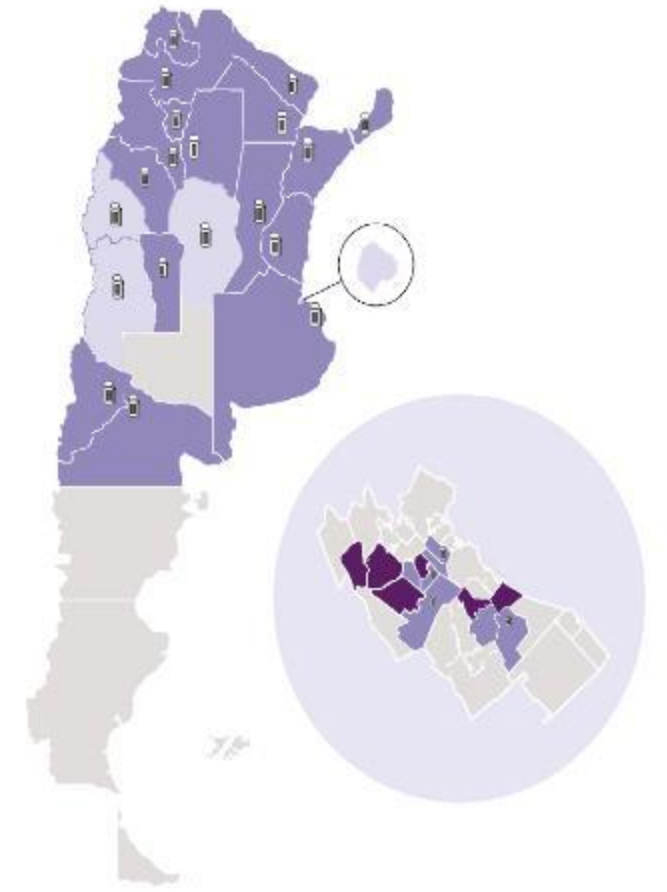
### Background

Human papillomavirus (HPV) is the primary cause of cervical cancer. The programmatic HPV testing (HPV) trial in the Jujuy Demonstration Base (JDB) is a community-based HPV testing program.

### Methods



2023



Map courtesy of NPCC



## Main challenges refer to:

### STEWARDSHIP



- Difficulties to have at scale the same level of political agreements between highest national and provincial health authorities
- Not possible to replicate the same type of intensive monitoring implemented in the JDP
- Provincial programs do not have authority to generate agreements on strategies to solve problems detected at health service level

## CHALLENGES TO CENTRALIZE LABORATORIES



- In some districts, reduced stewardship has limited the possibility to centralize and unify laboratories
- Obstacles to centralization in districts with laboratories in health establishments belonging to provincial and municipal levels
- After COVID-19 pandemics, HPV labs as part of virology departments, for re-utilization of PCR platforms during COVID-19 pandemics

## LACK OF LABORATORY CENTRALIZATION HAS SEVERAL IMPLICATIONS.....

- ✓ It is more complex to ensure quality in sample reading, specially with cytology
- ✓ It can be difficult to implement comprehensive quality controls
- ✓ The role of the centralized laboratory as a gate keeper can be compromised
- ✓ HPV, cytology and biopsy samples sent to different health establishments, transport complexity=problems



# CHALLENGES IN SITAM IMPLEMENTATION



**SITAM**  
SISTEMA DE INFORMACION DE TAMIZAJE  
PERFIL DE USUARIOS en LAB. COLOMBIA  
Test de HPV por categoría diagnóstica

Ministerio de Salud  
Presidencia de la Nación

Boletín, 5 de Abril de 2013

Inicio / Estadísticas / Test de HPV por categoría diagnóstica

CANTIDAD DE TEST DE HPV POR DEPARTAMENTO  
PCIA DE JUJUY, Período 01/01/2012 - 31/12/2012  
Rango de Edad --> Desde 0 hasta 105

Totales Absolutos

Departamento	total de pruebas HPV	positivos	Porc. Pos.	negativos	Porc. Neg.
BUENOS AIRES	607	24	3.95	583	96.05
CORDOBA	2.612	315	12.06	2.297	87.94
ENTRE RIOS	16.497	1.472	8.92	15.025	91.08
FORMOSA	922	27	2.93	895	97.07
MISIONES	2.705	343	12.68	2.362	87.32
NEUQUEN	1.233	212	17.20	1.021	82.80
RIO NEGRO	8	0	0.00	8	100.00
SANTA FE	42	5	11.90	37	88.10
TUCUMAN	2.705	337	12.46	2.368	87.54
VALLE HERMINIO	811	84	10.36	727	89.64
CHACO	14	2	14.29	12	85.71
CHUBUT	327	27	8.26	300	91.74
COMODOR RIVERO	747	47	6.30	700	93.70
LA RIOJA	184	10	5.43	174	94.57
SANTA CRUZ	94	2	2.13	92	97.87
TOTAL	24.634	3.133	12.72	21.501	87.28

Bajar Estado en formato:  Excel  CSV  XML  Texto

• Lack of lab centralization = personnel needed for data entry in SITAM in each laboratory; problems to fund additional HR

• Development of competing health information systems. We would need a unified information system!

• Partial and incomplete data that impact monitoring and evaluation of program performance

# SUMMARY

- Scaling-up of HPV-testing has faced reduced stewardship, difficulties to centralize laboratories, and limitations to expand the national information system on screening.
- Consequences in quality of sample processing, sample transport, and availability of data to monitor and evaluate screening performance
- We need evaluations of how these challenges influence disease detection, coverage and retention to follow-up/treatment.
- We need to understand the mechanisms through which stewardship/monitoring can be ensured in the scaling-up of demonstration projects. **Implementation Science Welcome!**

**Thanks!**

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