



17th TechNet Conference

Panama City, Panama | October 16-19, 2023

Immunization Programmes That Leave No One Behind

www.technet-21.org

Experiences and best practices of Implementation of Electronic Immunization Registries in Latin America and the Caribbean

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PAHO/WHO

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Global and regional context



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Global and regional context



Need for more information for program management



Transition from childhood vaccination to the life course



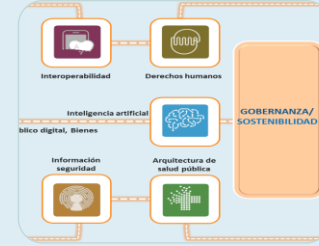
Increased focus on oversight and accountability in IA 2030 and Regional Resolution



New information and communication technology (ICT) and greater connectivity



Integration of Health Information Systems and National eHealth Strategies and Policies



Guiding Principles for Digital Health in the Region of the Americas



COVID-19 pandemic accelerated the implementation of digital tools in health and immunization



Urbanization



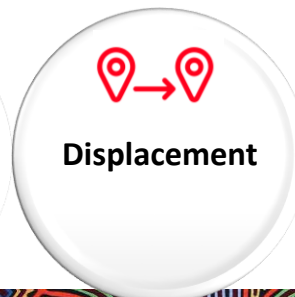
Natural Disasters



Political Context



Equity



Displacement

Background

WHO

- **Resolution on Digital Health** unanimously approved by WHO Member States in May 2018
- **Immunization Agenda 2030**

PAHO

- Roadmap for the **Digital Transformation** of the Health Sector in the Region of the Americas
- Policy On The **Application Of Data Science** In Public Health Using Artificial Intelligence and Other Emerging Technologies
- **Reinvigorating immunization** as public good for universal health
- **TAG** Recommendations

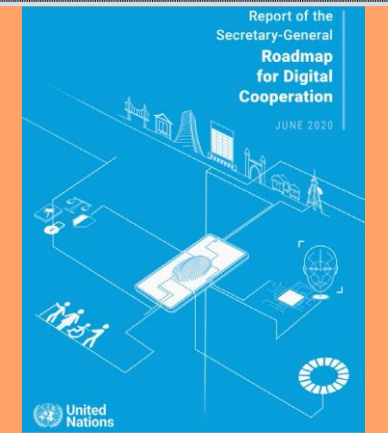
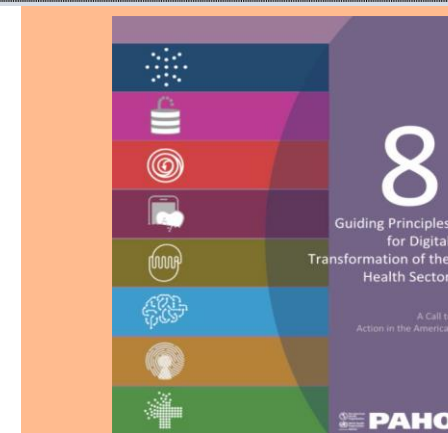


IA 2030



Accelerate innovation:
To improve Program performance, monitoring and quality, and increase access to data, considering lessons learned from other sectors.

- **Strategic Priority 1:**
- Strengthen immunization information within a robust health information system and promote the use of high-quality, "purpose-fitted" data for action at all levels.



Regional Resolution:
"Reinvigorating Immunization as a Public Good for Universal Health"



Strategic Action Line 2:

- Adoption of innovative technologies, including digital intelligence, georeferencing, strengthening the monitoring and surveillance system
- Develop and implement individualized immunization information systems, with reminder functions, making use of predictive, descriptive analysis..

Electronic Immunization Registries and digital tools for Immunization



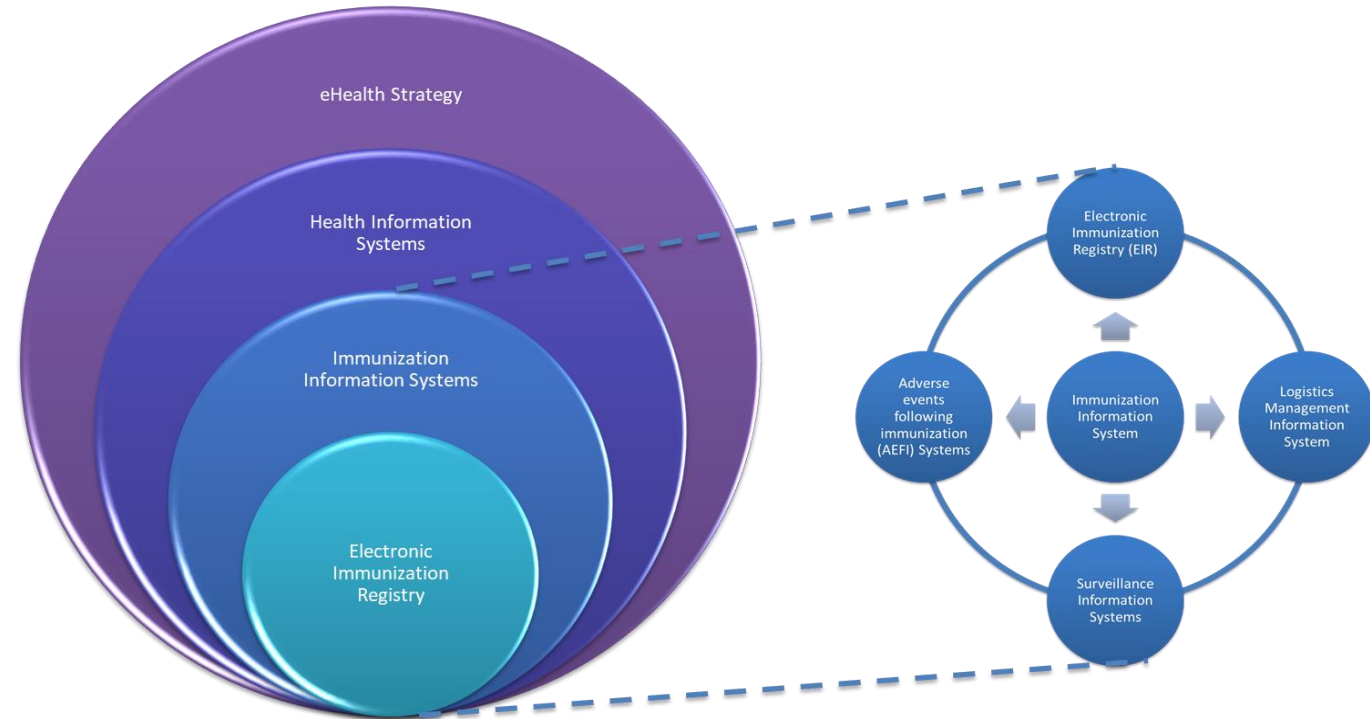
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What is an electronic Immunization Registry?

The EIR are those where the **vaccination data of each person are identified and access to their vaccination history.**

They are computerized nominal records and are part of the immunization information system, which can have online connectivity, be offline, or a combination of both [PAHO].

- It had outputs to facilitate coverage monitoring by vaccine, dose, geographical area, age and provider
- It supports individual (and timely) schedule follow-up



EIR “ideal”



Demographic record

- Thorough inclusion of all persons who are EPI target (vaccinated and unvaccinated), ideally at birth.
- Unique identification of all individuals.



Vaccination event record

- Information on the vaccine administered.
- Including all vaccination moments/acts.
- Traceability of vaccine products
- Follow up of ESAVI/AEFI.



Reports & individual follow-up

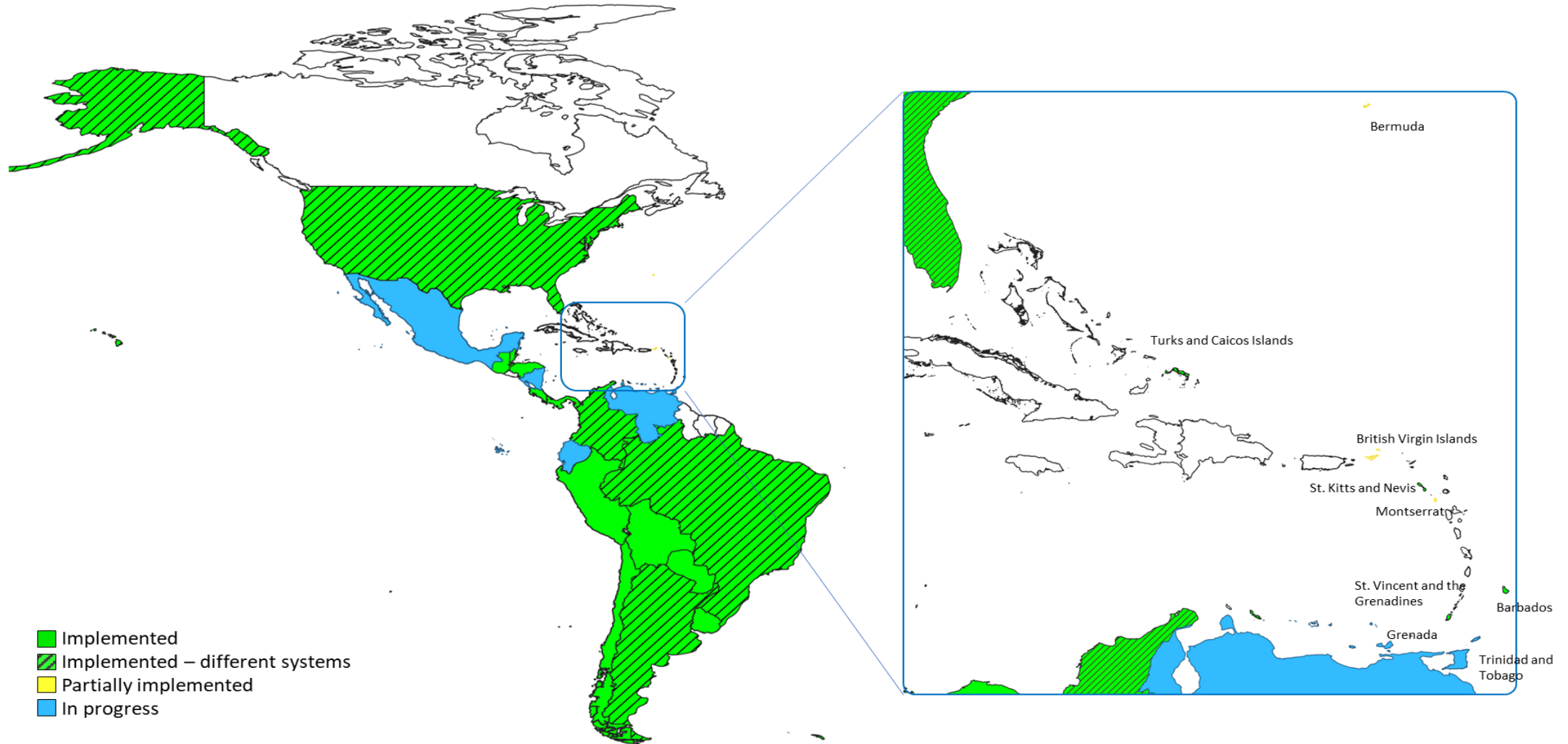
- Coverage data and other Program indicators.
- Consolidation of data at different administrative and geographic levels.
- Data and information on people with pending vaccinations .
- Data that feeds into graphic visualizations and risk maps.



System

- Data entry closer to the act of vaccination (in time and place)
- User friendly
- Data safety and privacy protection.

Current Implementation Status in the Region



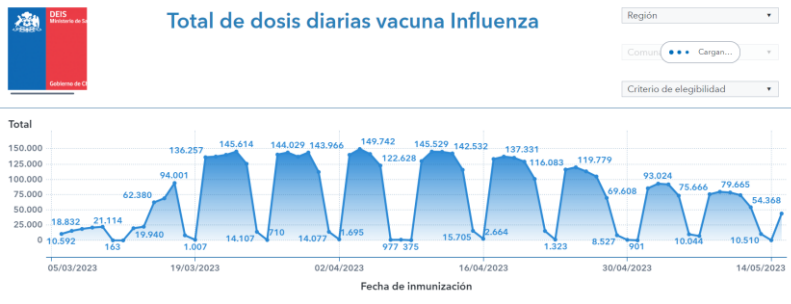
Country Experiences



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Dashboard

Chile Influenza vaccine monitoring



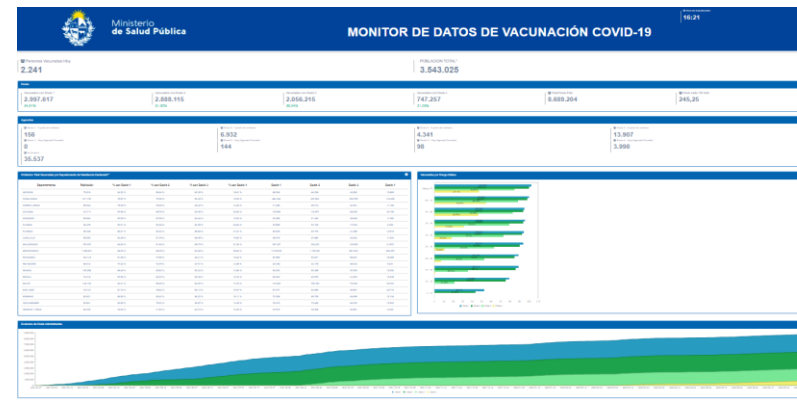
Nota técnica: Datos en proceso de validación

Porcentaje de avance de vacunación, según criterio de elegibilidad

Criterio de elegibilidad	Total Población	Vacunados 1ª y única dosis	Avance de vacunación
Niños y niñas de 6 meses a 5 años de edad	1,296,324	688,501	53,11%
Escolares de 1ª a 5º año básico	1,264,185	857,823	67,86%
Enfermos crónicos de 11 a 64 años de edad	2,005,039	1,112,980	55,51%
Personas mayores de 65 años y más	2,664,128	1,287,024	48,31%
Embarazadas	231,109	66,473	28,76%
Estrategia Capullo	44,271	7,384	16,68%
P. de salud: Privado	108,759	97,572	89,71%
P. de salud: Público	327,922	285,824	87,16%
Trabajadores de avícolas y de criaderos de cerdo	38,831	29,558	76,12%
Trabajadores de la educación preescolar y escolar hasta 5º añ...	247,775	227,488	91,81%
Otras prioridades	656,358	191,375	29,16%

https://informesdeis.minsal.cl/SASVisualAnalytics/?reportUri=%2Freports%2Freports%2F3279bfc4-8460-4707-9b8c-15f8935aa77b§ionIndex=0&sso_guest=true&reportViewOnly=true&reportContextBar=false&sas-welcome=false

Uruguay COVID-19 vaccine monitoring

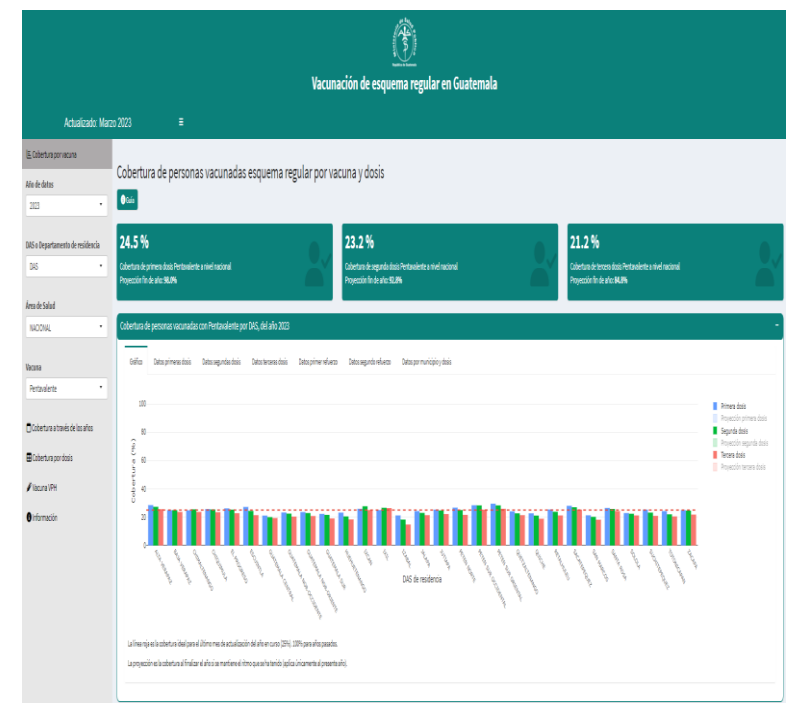


<https://monitor.uruguaysevacuna.gub.uy/>

Panama COVID-19 vaccine monitoring



Guatemala Routine Immunization



<https://tableros.mspas.gob.gt/vacunacionesquemaregular/>

Electronic Vaccine certificate for the Routine Immunization

Bogota, Colombia. Routine vaccination

The screenshot shows a web browser window with the URL <http://www.saludcapital.gov.co/Style%20Library/default.aspx>. The page displays a user profile for 'Oswaldo Argibay' and a sidebar menu with various health services. At the bottom of the sidebar, the option 'Consulte su Carné de vacunación' is circled in red.

2 Meses de edad				4 Meses de edad			
Fecha	Fecha	Número	Fecha	Fecha	Número	Fecha	Número
2013-01-15	2013-01-15	1000	2013-01-15	2013-01-15	1000	2013-01-15	1000
2013-01-15	2013-01-15	1000	2013-01-15	2013-01-15	1000	2013-01-15	1000
2013-01-15	2013-01-15	1000	2013-01-15	2013-01-15	1000	2013-01-15	1000

Argentina. Routine vaccination

The screenshot shows the SISA website interface. The user profile for 'CARLOS ALBERTO ROMERO, DNI 23484687' is visible. The sidebar menu includes options like 'Actualizar foto', 'Crear cuenta de usuario', and 'Acceso modo gestión'. The option 'Gestión del Registro de Vacunadores (NOMIVAC)' is circled in red.

Honduras. Routine vaccination

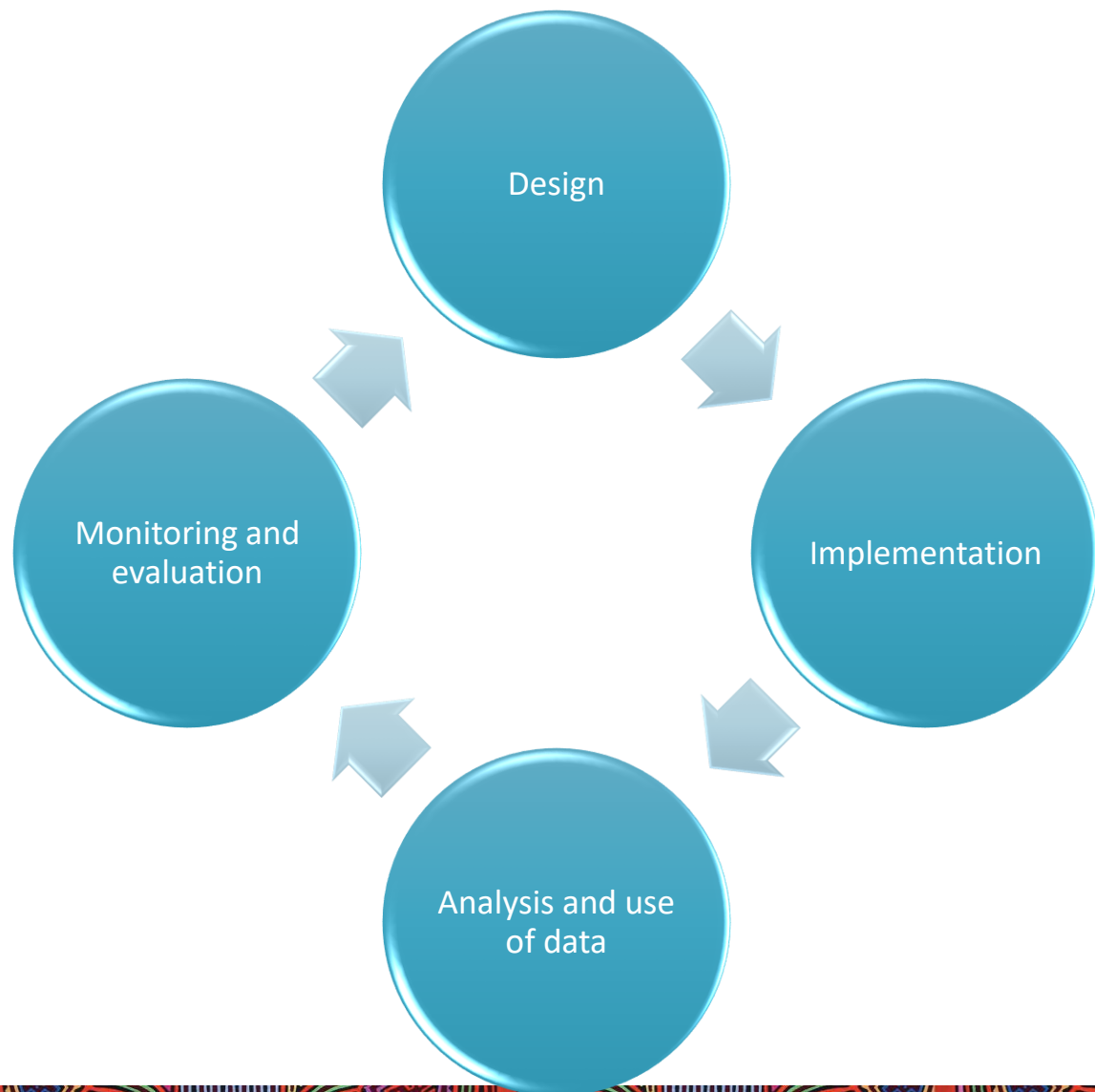
The screenshot shows the MisVacunasHn website interface. The main heading is 'MisVacunasHn' with the subtitle 'Plataforma de Certificado Digital de Vacunas'. Below this, there is a section titled 'Descubre los pasos para obtener el certificado de vacuna digital.' and another titled 'Esquema Nacional de Vacunación'. The sidebar menu includes options like 'Argentina en Línea', 'Agenda Sanitaria', and 'Central de Reportes'. The option 'Gestión del Registro de Vacunadores (NOMIVAC)' is circled in red.

PAHO Technical Cooperation



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PAHO Technical Cooperation



EIR diagnosis 2023

Diagnosis, evaluation, and proposal for improvement of the immunization information systems of the countries of the Region, with special emphasis on Electronic Nominal Vaccination Registries.

Are there units/department/agency, national coordination bodies for digital health?	Select
Are there leadership and political commitment to improve the digital health strategies at national level?	Select
Digital Health Policy	Yes
Did the country prioritize the investment in Information Technology and Communication (ITC) to improve the service?	No
	Doesn't know
Is there a national budget for investment/reposition/improvement of hardware, software and annexed equipment required to support digital health?	Select

Digital Certificates



1^a Conectaton LACPASS

8 LAC countries achieved technical equivalence of COVID-19 digital certificates with EU-DCC, achieving cross-border interoperation.



Certified maturity measurement Digital

11 LAC Countries measured their maturity level for the development and implementation of digital certificates



Diffusion Knowledge and Standards

2 Training Cycles to the associated countries, related to international standards of interoperability in health.



Working with enabling countries

Development and delivery of technical tools to facilitate implementation with interoperability standards.

Training

1. Online training with mentoring and peer support (Geneva learning Foundation): Participants developed peer-reviewed activity plans to improve EIR in their contexts of work and were awarded a certificate.

- **Spanish:** 77 participants joined, 58 participants (75%) from 16 countries.
- **English:** 66 participants joined, 42 participants (75%) from 21 countries (all WHO regions)

2. Development of a training course for PAHO virtual campus → **Coming soon!**



<https://iris.paho.org/handle/10665.2/34865>

Important factors to have in mind



Considerations

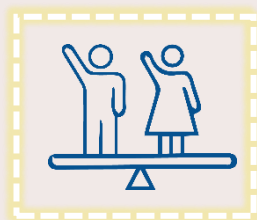


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Strengths



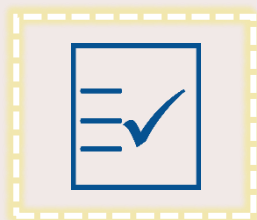
Better and more homogeneous coverage



Reducing inequities



Improve program management



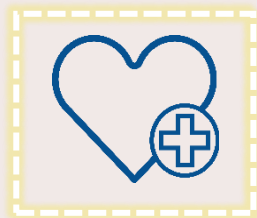
Better data quality



Better access to data



Better vaccine inventory management



Confidence in vaccination

Challenges



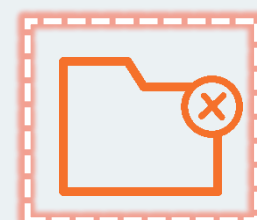
Infrastructure limitations: internet, electricity



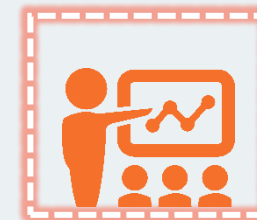
Governance and regulation



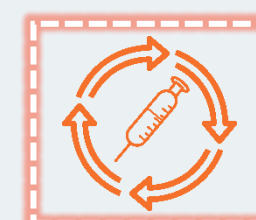
Digital literacy



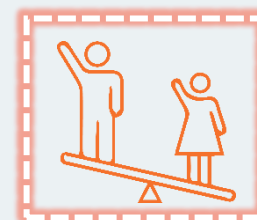
Deployments without in-depth review or pilots / evaluation.



Integration Training



Implementation of interventions without considering end users and / or health impact.



Inequalities



Thank You!

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