



Post-launch Assessment of Rotavirus Vaccine Implementation in Indonesia: Key Findings from 11 Provinces

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Rosyana Lieyanty¹, Indah Rosmawati¹, Anithasree Athiyaman², Denny Wicaksono¹, Intan Cahyani¹, Candora Tambunan¹, Kornelius Son¹, Niken Widyastuti¹, Tetrawindu Hidayatullah¹, Atiek Anartati¹, Prima Yosephine³, Endang Budi Hastuti³, Devi Anisiska³

Affiliation: ¹Clinton Health Access Initiative, Indonesia ²Clinton Health Access Initiative, Global Vaccine Delivery ³Directorate of Immunization, Ministry of Health of The Republic Indonesia

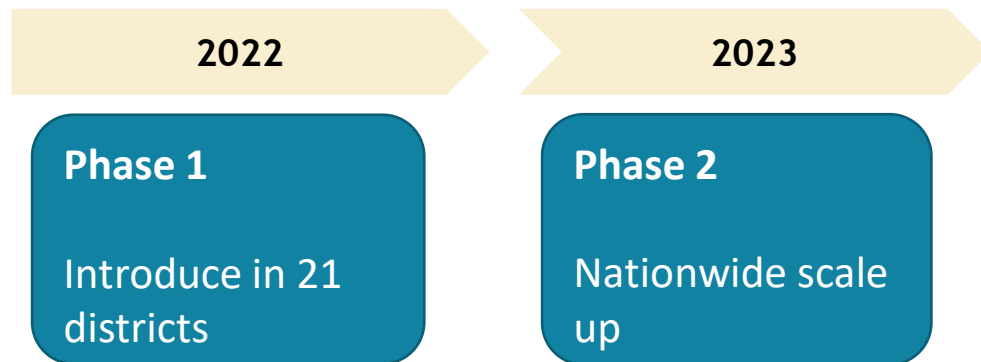
Background: Rotavirus Vaccine Introduction in Indonesia

Disease Burden



- Diarrhea is one of the top infectious causes of under-five mortality in Indonesia, causing an estimated 122,000 – 215,000 under-five deaths annually¹.
 - Diarrhea is the most common cause of death (10.7%) for the group of children under-5 (12-59 months), and the 2nd most common cause of post neonatal death (12.1%)².
- Rotavirus is the leading cause of severe acute gastroenteritis in children under-5, resulting in an estimated 45-61% of all diarrhea cases in Indonesia³.

Following 2019 NITAG recommendation, the MOH included Rotavirus Vaccine (RVV) into Indonesia's National Immunization Program, with nationwide introduction in August 2023.



Product used: *Rotavac*, frozen liquid (BBIL)

- 3 doses, oral administration with a **minimum interval of 4 weeks** between doses
- Administered alongside other routine antigens:
 - **2 months:** DTP-1, bOPV-2, PCV-1, **RV-1**
 - **3 months:** DTP-2, bOPV-3, PCV-2, **RV-2**
 - **4 months:** DTP-3, bOPV-4, IPV-1, **RV-3**

¹ Indonesia Basic Health Survey Data, 2018 (Data 2013 – 2017) ² Ministry of Health. Indonesia Health Profile 2019 ³Y. Soenarto, A.T. Aman, A. Bakri, H. Waluya, A. Firmansyah, M. Kadim, et al. Burden of severe rotavirus diarrhea in Indonesia, J Infect Dis, 200 (s1), 2009

Post-Launch Assessment (PLA): Purpose and Method



Purpose

1. Identify challenges in RV immunization rollout.
2. Determine support needs at subnational levels.
3. Document progress 7-8 months post-launch.



Method

- Self-assessment checklist (web-based, 20-30 min)
- Provincial workshops
- Monitoring visit to DHO and Primary Health Cares (PHC)

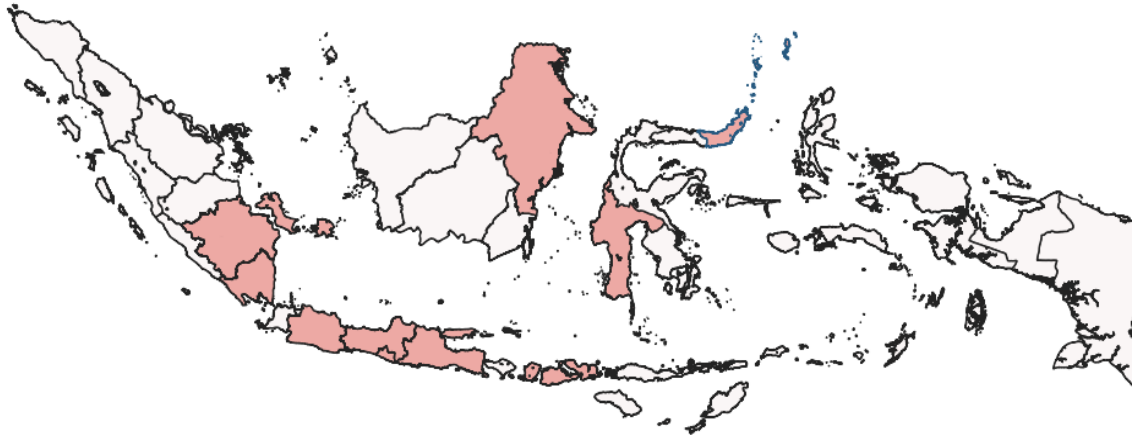
Dimensions Assessed by Level

Dimensions	Province	District	PHC
Policies and regulations	✓	✓	✓
Funding	✓	✓	✓
Microplanning	N/A	N/A	✓
Advocacy, socialization, and capacity building	✓	✓	✓
Logistics	✓	✓	✓
Cold-chain	✓	✓	✓
Waste management	N/A	N/A	✓
Data recording and reporting	✓	✓	✓
Monitoring and evaluation	✓	✓	N/A
AEFI Management	✓	✓	✓
Private sector involvement	N/A	✓	✓
Implementation challenges*	N/A	N/A	✓

* Implementation challenges were collected as descriptive responses and are presented separately, not included in scoring

Post-Launch Assessment (PLA): Sampling, Data Collection and Analysis

Purposive sampling, 11 selected provinces



Sampling and Participation by Activity

Activity	Target sites	Participation
Self-assessment	11 provinces (all PHOs, DHOs, PHCs)	11 PHOs (100%), 174 DHOs (100%), 3,597 PHCs (92%)
Provincial workshop	11 provinces (all PHOs, DHOs)	11 PHOs (100%), 174 DHOs (100%)
Monitoring visits	1 DHO + 2 PHCs per province	11 DHOs, 22 PHCs

Data Collection and Analysis:



- Scores aggregated into dimensions and summarized in dashboards.
- Qualitative insights from workshops and visits used to interpret and validate results.

Asesmen Pasca Pencanangan Imunisasi Rotavirus (RV) Tingkat Provinsi

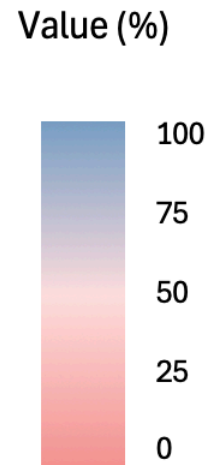
Lanjutkan nanti

A screenshot of a web-based self-assessment form. The form is titled 'Asesmen Pasca Pencanangan Imunisasi Rotavirus (RV) Tingkat Provinsi'. It contains two questions. The first question is 'G03Q02 Dinas Kesehatan Provinsi telah mengeluarkan Surat Edaran untuk introduksi imunisasi antigen baru' with a green checkmark icon and the instruction 'Pilih jawaban yang sesuai'. The options are 'Rotavirus (RV)' (selected) and 'Tidak mengeluarkan Surat Edaran'. The second question is 'G03Q03 Buku petunjuk teknis (baik cetak maupun elektronik) yang telah tersedia di wilayah kerja Anda' with a green checkmark icon and the instruction 'Pilih jawaban yang sesuai'. The options are 'Rotavirus (RV)' (selected) and 'Tidak tersedia buku petunjuk teknis'.

Example of Web-Based Self-Assessment Form

Key Findings Summary: PLA Scores Across Level

Dimensions	Level		
	Province n = 11	District n = 174	PHC n = 3597
Policies and Regulations	67	83	93
Funding	45	43	46
Microplanning	N/A	N/A	89
Advocacy, socialization, capacity building	96	80	70
Logistics	72	85	80
Cold-chain	96	91	97
Waste Management	N/A	N/A	100
Data Recording and Reporting	80	84	64
Monitoring and Evaluation	90	91	N/A
AEFI Management	100	86	90
Private Sector Involvement	N/A	59	51

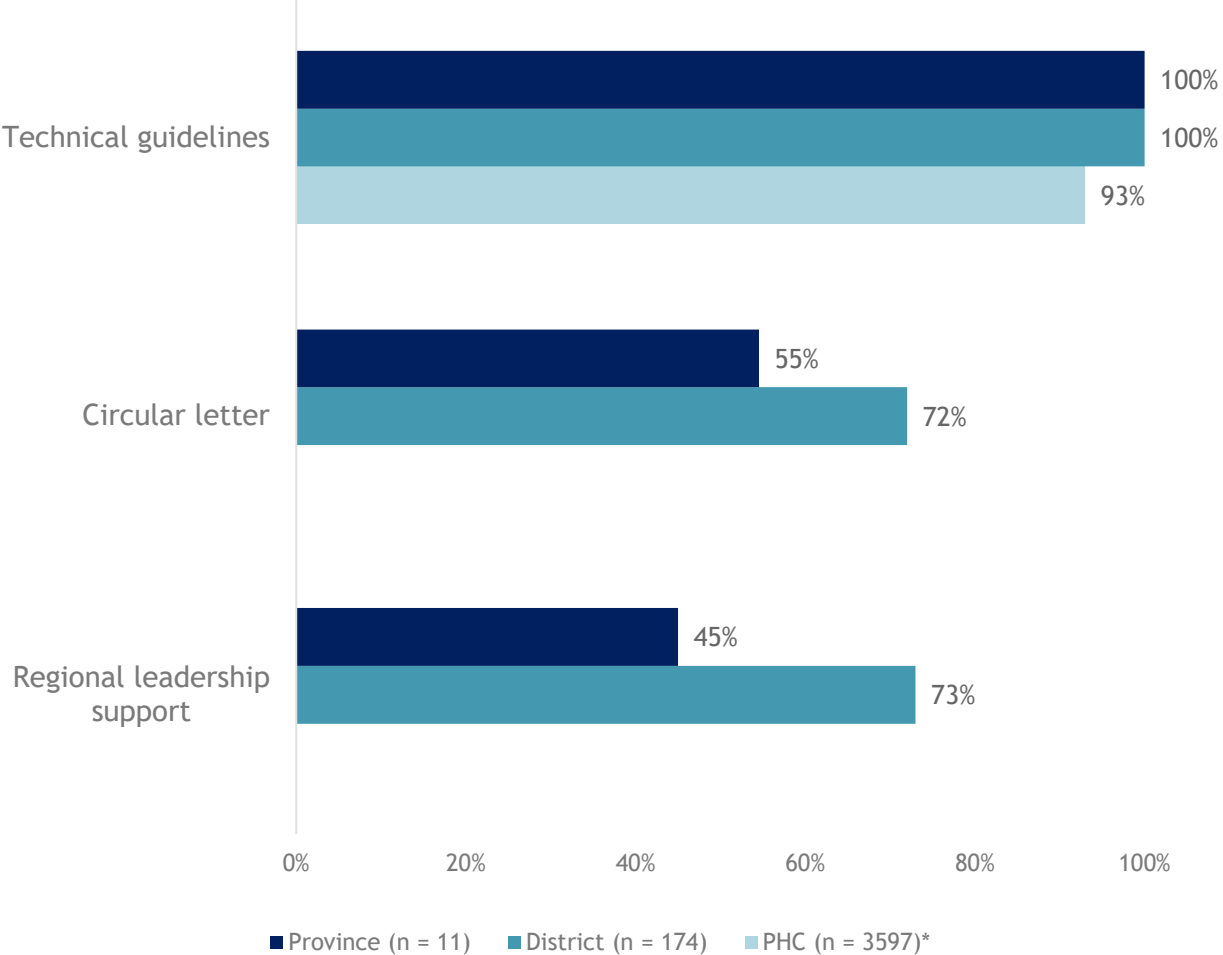


Highlights:

- Each level shows different scores, reflecting Indonesia's decentralized health system and varying capacities across levels.
- **Funding was consistently low across levels** due to the mid-year rollout.
- Provinces, districts, and PHCs adapted by leveraging routine immunization budgets and pooling resources with other programs.

Data disclaimer: scores are self-reported; question scope differs by level.

Regulations and Policies

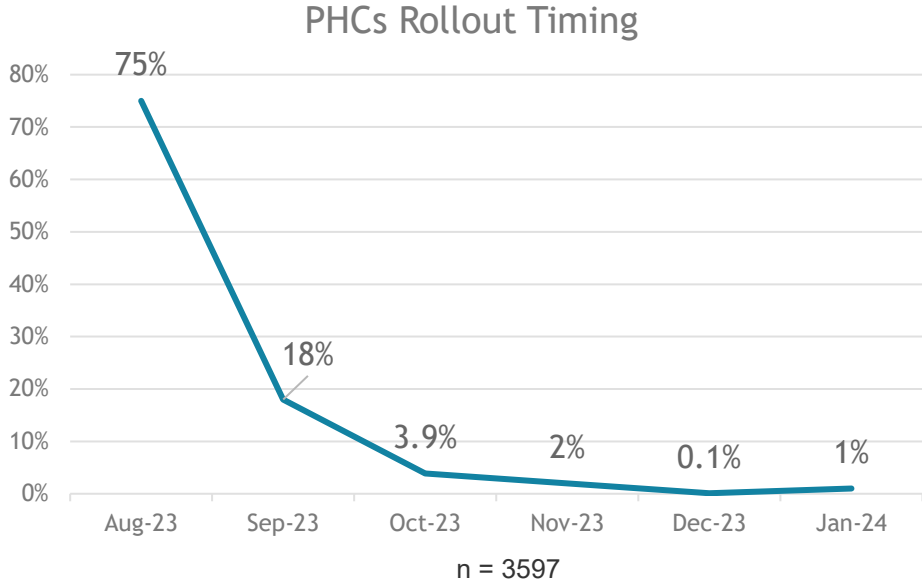
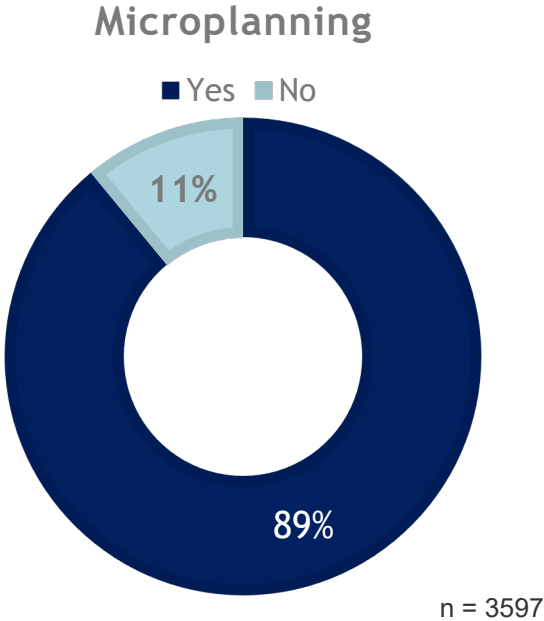


Technical guidelines were available across all levels, with almost all PHCs reporting access.

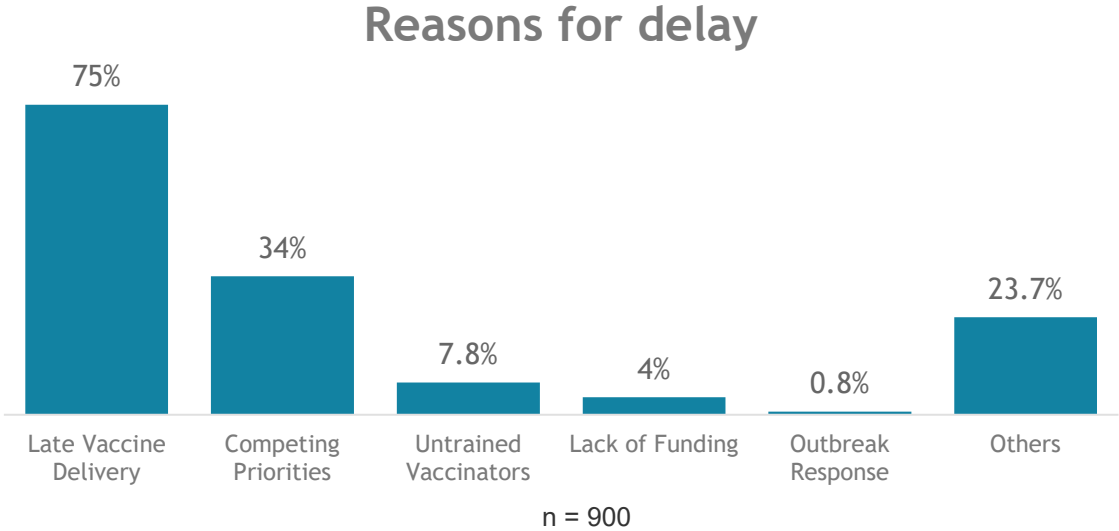
Circular letters and leadership support were more frequently reported at district level, consistent with Indonesia’s decentralized system where districts may issue local directives based on national or provincial guidance.

*At PHC level, only technical guidelines were assessed

Microplanning and Rollout Timing at the PHC Level

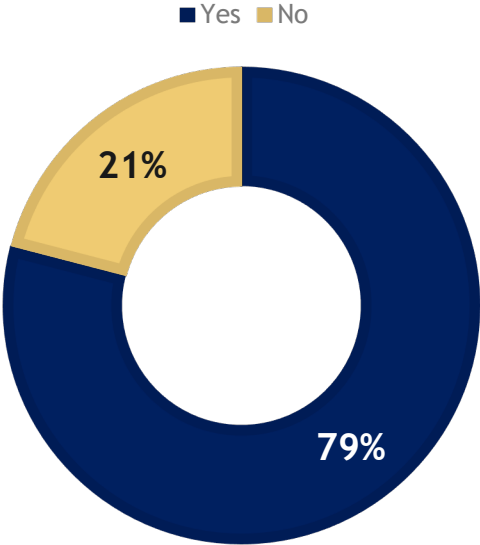


- Most PHCs had microplans in place, reflecting pre-launch preparation.
- Rollout was not simultaneous: about 25% of PHCs started later.
- Delays were mainly due to late vaccine delivery, competing priorities, and alignment with annual plans.
- Some districts synchronized RVV rollout with routine outreach activities to optimize coverage and minimize missed opportunities.



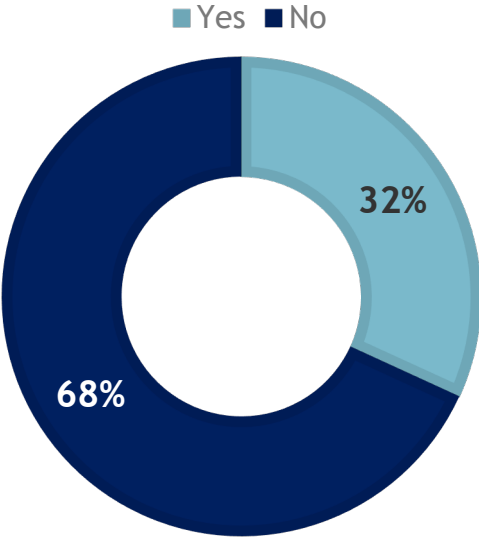
Vaccine Logistics and Supply Chain at the PHC Level

Received vaccine before launch

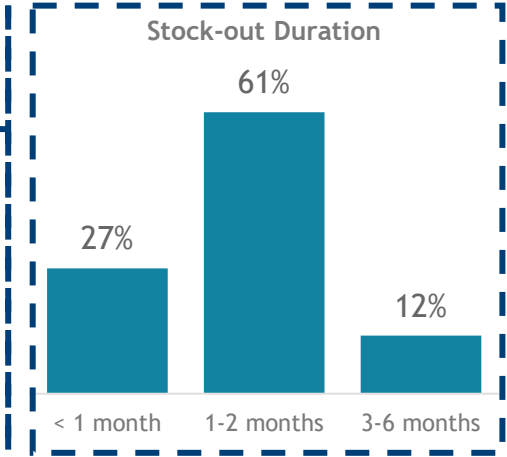


n = 3597

Vaccine stock-out



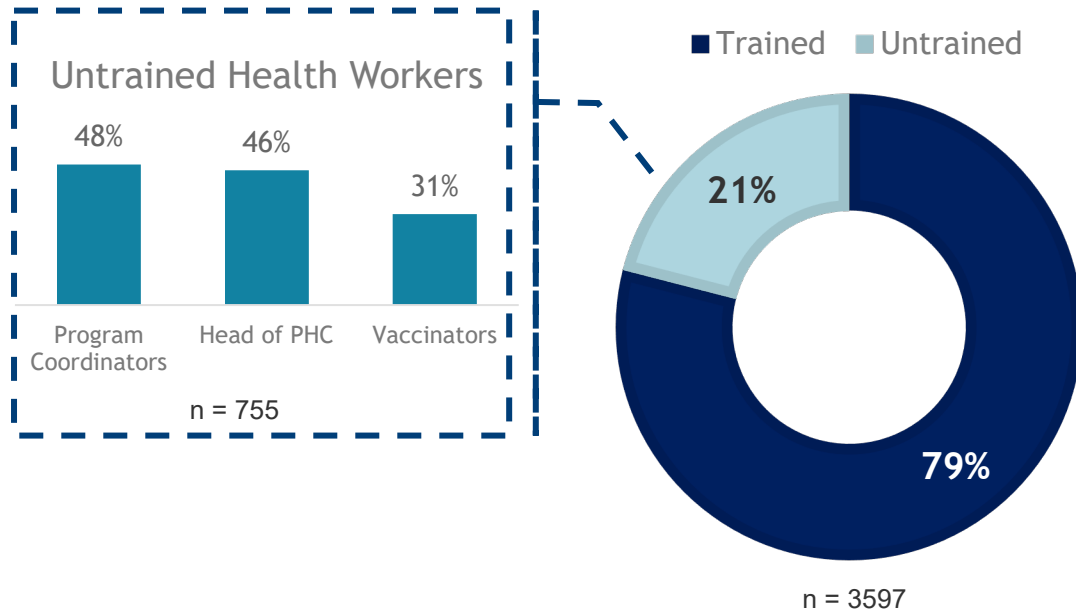
n = 3597



- **Most PHCs received vaccines prior to the national launch**, supporting timely rollout in many areas.
- Vaccine stock-outs occurred during implementation, with most lasting 1-2 months, reflecting challenges in planning and procurement.
- Indonesia uses eLMIS since 2022 as the national logistics system, which can enable reliable monitoring when updates are timely and accurate across all levels.

Health Workers Training and Private Sector Engagement

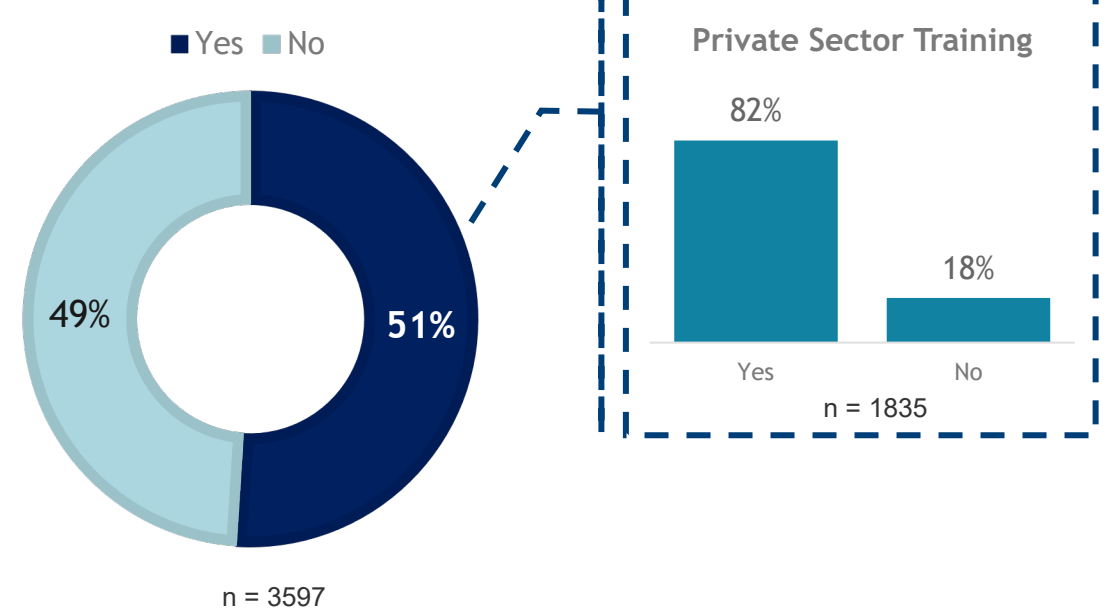
Health Workers training status at PHCs



79% of PHC staff trained, but gaps remain among program coordinators, PHC heads, and vaccinators.

High turnover and competing duties contributed to untrained staff.

Private sector engagement at PHCs

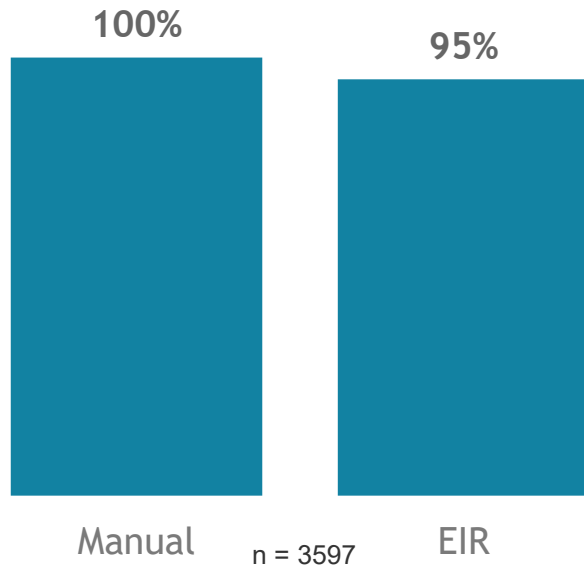


About half of PHCs reported collaboration with private facilities.

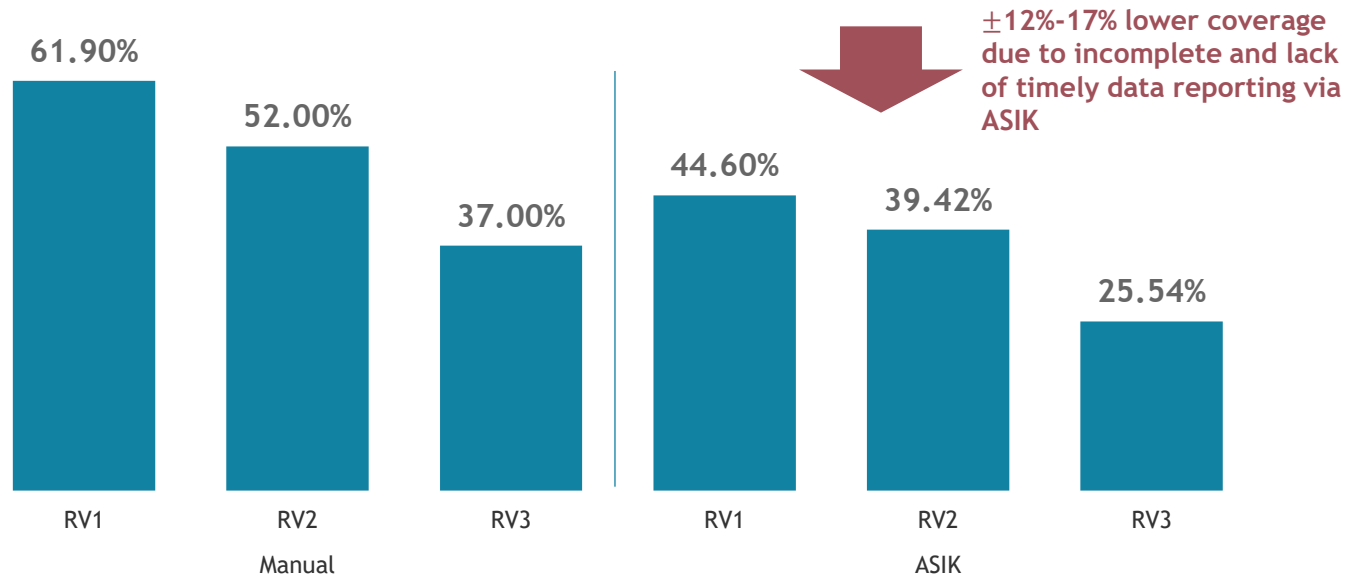
Most private facilities engaged received training, but coordination mechanisms remain limited.

Data Recording and Reporting

RVV data recording system



RV Immunization Coverage (Aug-Dec 2023)
Manual vs EIR Data

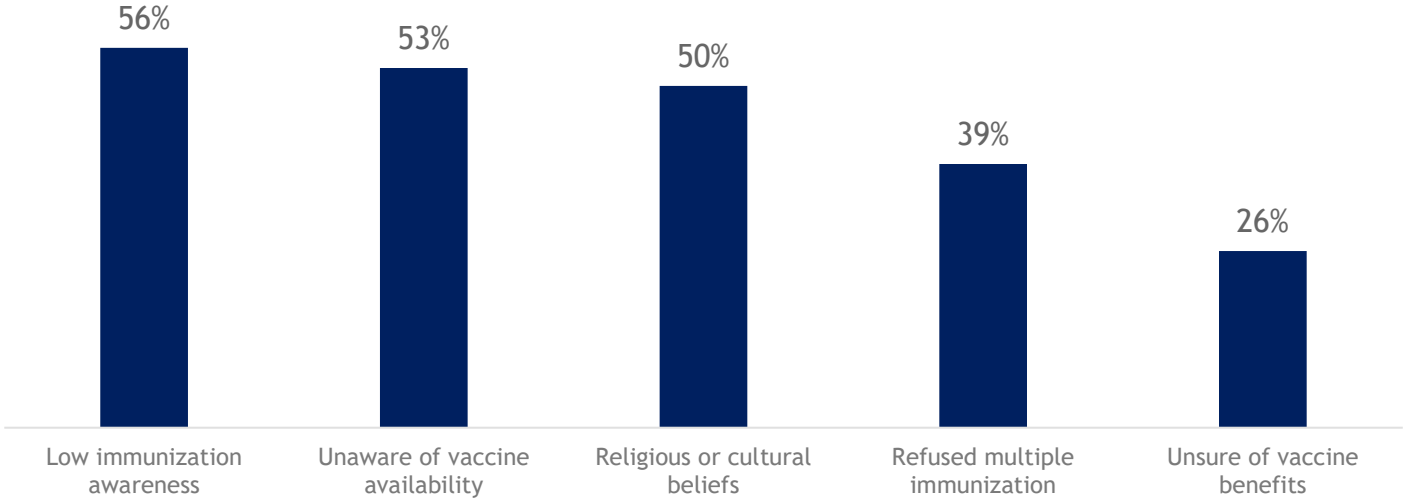


In 2023, Indonesia achieved a major step with **national use of ASIK (EIR)**, with 95% of PHCs transitioning from manual to electronic recording.

- Data entry delayed by 1-2 weeks → coverage gaps between manual and EIR.
- **Recording forms** at health facilities were not updated for new antigens, requiring staff to record RVV data separately.
- **Private sector reporting** remains limited, further contributing to under-reporting.

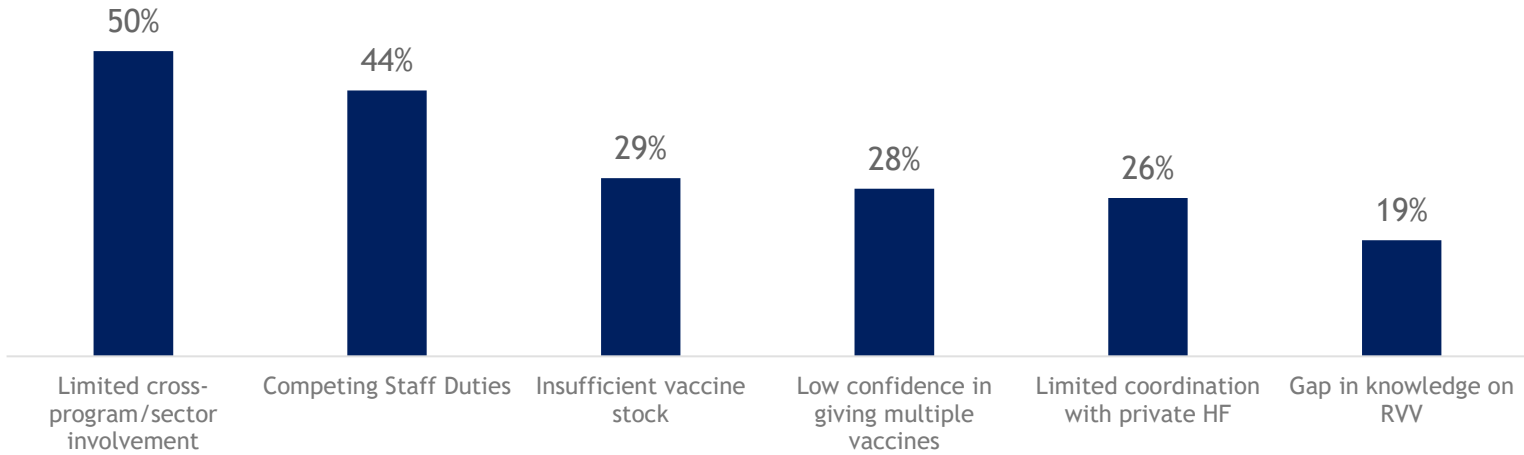
Challenges Reported at the PHC Level: Community and Service Delivery

Community-related challenges



Community-related challenges:
Low immunization awareness, limited knowledge of vaccine availability, and socio-cultural or religious barriers, show that caregivers still lack clear and consistent information on RVV within the national immunization program

Service-delivery challenges

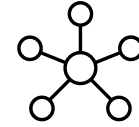


Service-delivery challenges:
Limited cross-program and cross-sector involvement affected mobilization and contributed to low awareness.
The least reported challenge was gaps in health worker knowledge (19%), though training gaps could reduce vaccinators' confidence.

Lessons-learned



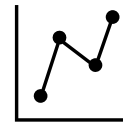
National policies exist but need reinforcement at subnational levels to align with decentralized governance. **Early announcement** of new vaccines are critical for **timely budget allocation** within fiscal cycles.



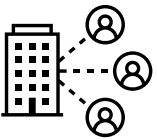
Clearer mechanisms and technical guidelines should be established to guide collaboration with private health facilities at district/PHC level.



Stronger planning and coordination before rollout, supported by real-time monitoring via eLMIS, are essential to avoid staggered starts and stock-outs.



Strengthening EIR use through timely data entry can reduce reporting delays and improve data quality for decision-making.



Regular OJT and supportive supervision play a key role in sustaining health worker confidence and skill.



Multi-sector involvement across programs and sectors are important to strengthen community mobilization and address gaps in caregiver awareness.

Key Recommendation to Strengthen RV Immunization Implementation and Future NVI



Policy & funding

Reinforce RV immunization policies at subnational levels and announce future NVIs early to allow local budgets to align with fiscal cycles.



Vaccine Availability

Strengthen procurement and forecasting, and ensure timely, accurate eLMIS updates to support responsive stock management.



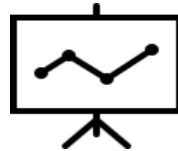
Capacity Building

Institutionalize regular OJT and supportive supervision, and provide job aids to help new staff adapt while awaiting formal training.



Private sector

Develop national and subnational guidelines for private sector coordination, and support DHOs to formalize collaboration through MOUs.



Data quality & use

Reinforce timely EIR entry and strengthen routine data review to improve data quality and support decision-making.



Community engagement:

Strengthen cross-program and cross-sector integration, leveraging media and community platforms to raise awareness, mobilize caregivers, and counter misinformation.



Thank You



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