

ACCELERATING VACCINE ACCESS IN A POST COVID-19 ENVIRONMENT

Concurrent Pneumococcal Conjugate Vaccine (PCV) and Rotavirus Vaccine (RVV) Introductions in the Republic of Indonesia

CASE STUDY

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The Republic of Indonesia's proactive approach to child health, marked by the introduction of the Pneumococcal Conjugate Vaccine (PCV) in September 2022 and the Rotavirus Vaccine (RVV) in December 2022*, showcases a strategic defense against the prevalent threats of pneumonia and diarrheal diseases, and a strong commitment to safeguarding child health. The concurrent introduction of these two vaccines within a year illustrates Indonesia's capacity to adapt and strategize effectively against logistical and healthcare challenges, laying a foundation for future public health endeavors.

Indonesia, has a large population of infants, more than 4.9 million annual births per year.¹ Vaccine introduction cohorts this size require considerable political will and logistics. In pursuit of documenting and analyzing this landmark effort, the Global Advocacy for PCV (GAP) project, under the International Vaccine Access Centre (IVAC) at Johns Hopkins Bloomberg School of Public Health, conducted six semi-structured interviews with national and subnational staff from the Clinton Health Access Initiative (CHAI) in Indonesia, highlighting critical enablers and opportunities that have underpinned Indonesia's successful vaccination initiatives, offering valuable lessons for global health stakeholders considering similar concurrent vaccine introductions.

CHAI, with support from the Bill & Melinda Gates Foundation, has supported the Indonesian government's immunization program since 2017, starting with the PCV demonstration activities and has provided continuous support for PCV and RVV during the national roll-out. At national level, CHAI established strong working relationships with stakeholders to coordinate and support introduction activities; conducted readiness assessments at provinces, districts, and health facilities; conducted advocacy meetings with broad range of stakeholders for an integrated approach (e.g. WASH program for RVV introduction); and provided capacity building to health care workers.

References:

1) UNICEF, State of the World's Children, 2023, New York: UNICEF, 2023

*HPV was also scaled up nationwide in Aug 2023.

Outlined below are the key enabling factors and opportunities for concurrent introduction and uptake of PCV and RVV in Indonesia. These enabling factors shed light on the governmental commitment, improved electronic data systems, strengthening of healthcare services, and the emerging opportunities for health worker training, re-aligning government roles, and private sector engagement, all crucial for successful vaccine implementation and uptake.

Enabling factors for PCV and RVV concurrent introduction and uptake

- Strong political commitment
- Improved electronic data systems for immunization
- Strengthened health services with introduction of multiple new vaccines

Opportunities for PCV and RVV concurrent introduction and uptake

- Improved health care worker training and provide additional support for health care workers
- Re-align government roles and increase collaboration
- Private sector engagement in health service delivery



Baiq Dewi and baby Arumi – the first child in the family to get PCV (UNICEF/UN0473677/Ijazah).

■ PCV and RVV were concurrently introduced in 2022 in 17 districts across 14 provinces.



Indonesia's journey in the concurrent introduction of PCV and RVV illuminates a path for global health initiatives in the evolving post-COVID-19 landscape. This case study, enriched by insights from CHAI staff interviews, celebrates the critical roles of innovation, collaboration, and adaptability in public health triumphs. Demonstrating how strategic initiatives can enhance vaccine coverage and safeguard children, it sets a benchmark for future immunization efforts. The shared lessons invite global partners to adopt these proven strategies, promoting resilient vaccine programs worldwide and underscoring the collective journey towards improved child health.

Enabling factors for PCV and RVV concurrent introduction and uptake

I. STRONG POLITICAL COMMITMENT

- Strong political will and commitment for PCV and RVV introductions by the Ministry of Health, despite stresses on the health system from COVID-19 response and vaccine roll-out.
- Cross-sectoral collaboration involved ministerial stakeholders, in-country partners, as seen in the integrated approach during the RVV introduction, which brought together vaccination and diarrheal stakeholders to improve coverage and equity.
- The shift aimed to reduce inequity by prioritizing geographically distant and hard-to-reach districts, improving services, access, and uptake.

"It was a decision made by our current minister of health... he is very impact oriented. When Indonesia achieved more than 70% coverage with COVID-19 and he realized that there were still childhood vaccines that could save children that had yet to be implemented, he decided that would be his legacy!" - Respondent 3

II. IMPROVE ELECTRONIC DATA SYSTEMS FOR IMMUNIZATION

- Coverage data was recorded using standardized paper-based immunization recording and reporting forms and through the rollout of ASIK (*Aplikasi Sehat Indonesiaku*), a new immunization reporting system, while supply chain data was tracked with the introduction of SMILE (*Sistem Monitoring Imuniasasi Logistik secara Elektronik*)
- The COVID-19 vaccination effort led to the creation of *Peduli Lindungi*, a robust electronic health registry, which in turn accelerated the development of *SatuSehat (One Health)*, a broader patient-based health data register, enabling real-time monitoring of routine immunization progress.

"The electronic data systems allow for real-time visibility, not just into supply, but also vaccine coverage data, which is powerful. This electronic system is beneficial for the whole health system." - Respondent 4

III. STRENGTHEN HEALTH SERVICES WITH INTRODUCTION OF MULTIPLE NEW VACCINES

- Supervision of new vaccine introductions included reviewing other routine immunization services and health programs at health posts and facilities and an opportunity for on-the-job training for healthcare workers.
- Preparatory activities for new vaccine introductions revitalized healthcare worker training and communication efforts.
- In 2021, cold chain infrastructure was updated for COVID-19 vaccinations, considering planned introductions of PCV, RVV, and HPV nationwide.

"Leveraging new vaccine introductions strengthened other health systems from health worker training to IEC materials to make the public aware of the overall benefits of immunization." - Respondent 3

Opportunities for PCV and RVV concurrent introduction and uptake

I. IMPROVE HEALTH CARE WORKER TRAINING AND PROVIDING ADDITIONAL SUPPORT FOR HEALTH CARE STAFF

- The shift to virtual healthcare worker training post-COVID-19 saved costs and expanded participation, yet compromised rigor and interaction, with participants expressing confusion and discomfort in asking questions in large online forums.
- Healthcare worker fatigue and burnout from COVID-19 response led to high turnover, hindering the prioritization of the new vaccine introductions and lowering coverage in certain districts as workers juggled competing priorities.

II. RE-ALIGN GOVERNMENT ROLES AND INCREASING COLLABORATION

- Priority alignment challenges due to multiple closely spaced new vaccine introductions limited preparation time between national and sub-national levels of government, causing operational budget stress and short-term vaccine stockouts.
- Sub-national government readiness for new vaccine introductions was hindered by delayed communication from national to subnational level, which resulted in insufficient planning time to secure the budgets needed for implementation.
- RVV procurement issues and stockouts resulted from domestic product unpreparedness and delayed local labeling compliance for the accelerated rollout.

"The sub-national level is not very clear on what and when activities are happening. The non-clarity and miscommunication cascades down. We need to ensure there is sufficient lead time between when an introduction is announced and when it is supposed to happen at the sub-district level." - Respondent 4

III. PRIVATE SECTOR ENGAGEMENT IN HEALTH SERVICE DELIVERY

- The private sector's involvement complemented the Expanded Programme on Immunization during COVID-19, providing financing, vaccine delivery, sites for vaccination, supply chain distribution, adverse event response, outreach, and community engagement.
- The expanded role of the private sector during COVID-19 could extend to new vaccine introductions in Indonesia and other middle-income countries, leveraging the mature private sector and higher disposable income among the population.