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# Evaluating the effective use of RapidPro (Real-time SMS Reporting and Feedback Platform) for the measles and rubella campaign in Indonesia

**Submission date**
14/08/2018

**Recruitment status**
No longer recruiting

**Registration date**
17/09/2018

**Overall study status**
Completed

**Last Edited**
17/08/2022

**Condition category**
Infections and Infestations

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

## Plain English summary of protocol

Background and study aims
The World Health Organisation (WHO) has been progressing eradication of the viruses measles and rubella (MR) around the world. In Indonesia, the Government has set MR eradication as a priority, after successfully eliminating other viruses such as smallpox and polio. Measles and rubella are still a problem, with over 23,000 measles and over 30,000 rubella cases reported in Indonesia between 2010 and 2015.
Indonesia now has a National MR Campaign, which aims to address the problems with MR and achieve immunisation coverage across Indonesia. Phase 1 of this campaign was completed between August and October 2017, and Phase 2 is scheduled to begin in August and September 2018 across 28 provinces and 395 districts of Indonesia. For daily feedback on campaign progress, a real-time monitoring platform called RapidPro has been used for program monitoring, data collection and information sharing. RapidPro is used in Indonesia with the aim of quickly identifying problem areas and better targeting of corrective action and outreach.
This study aims to look at the effects of RapidPro on achieving the goals of the National MR Campaign, with a focus on immunisation coverage.

Who can participate?
Officers assigned and/or directly related to MR campaign implementation

What does the study involve?
This study will use data from RapidPro to look at how much the platform is used, whether targets are being achieved, and how complete reports are. RapidPro users will be surveyed to determine their satisfaction, problem identification and corrective action. Additionally, there will be interviews with users from all levels in a wide range of environments, to gain a better understanding of their use of RapidPro.

What are the possible benefits and risks of participating?
Informants will help inform future adoption of RapidPro for other immunization campaigns and routine immunization. Participants will receive a small gift as token of appreciation and to reimburse their time given to participate in this study. Furthermore, sharing their experience

may be personally beneficial to their understanding of their work task and personal reflection of their corrective action; which in turn may increase their professional performance afterwards. There are no known risks to participants taking part in this study. We guarantee anonymity of informants and interviews will only be conducted after consent obtained. Informants are allowed to withdraw anytime or refuse to respond any question that they do not wish to answer.

Where is the study run from?
1. Reconstra (Indonesia)
2. HealthEnabled (South Africa)
3. UNICEF Indonesia (Indonesia)

When is the study starting and how long is it expected to run for?
July 2018 to December 2018

Who is funding the study?
GAVI, The Vaccine Alliance (Switzerland)

Who is the main contact?
Iwan Ariawan (iwan.ariawan@reconstra.com) (representing Reconsta, one of the study developers)

### Study website
N/A

## Contact information

### Type(s)
Scientific

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## Additional identifiers

### EudraCT/CTIS number
Nil known

### IRAS number

### ClinicalTrials.gov number
Nil known

### Secondary identifying numbers
Nil known

## Study information

### Scientific Title
Effective use of an SMS real time monitoring platform on Indonesia's National Measles and Rubella Immunization Campaign: a mixed methods evaluation of RapidPro

### Acronym
RapidPro MR

### Study objectives
We hypothesise that the effective use of RapidPro and RapidPro data will improve the tracking of immunisation coverage, identification of problems and monitoring the effects of corrective action, therefore increasing effectiveness and efficiency in reaching national measles and rubella immunisation coverage in Indonesia.

### Ethics approval required

Old ethics approval format

## Ethics approval(s)
Approved 03/10/2018, Ethics Board Faculty of Public Health Universitas Indonesia (Gedung A lantai 3 Rumpun Ilmu Kesehatan, Universitas Indonesia Depok Campus, Depok (city), Jawa Barat (province), Indonesia, 16424; Tel: +62 (0)21 7864975; Email: humas.fkm@ui.ac.id), No 695/UN2.F10/PPM.00.02/2018

## Study design
Observational prospective longitudinal study

## Primary study design
Observational

## Secondary study design
Longitudinal study

## Study setting(s)
Other

## Study type(s)
Prevention

## Participant information sheet
Not available in web format, please use contact details to request a participant information sheet

## Health condition(s) or problem(s) studied
Measles
Rubella

## Interventions
Employing mix method approach, the use of RapidPro in all health facilities in 28 provinces and 395 districts during Phase 2 of the National Measles-Rubella campaign in Indonesia will be evaluated quantitatively and qualitatively. The quantitative component will involve 2 main activities. First, a weekly data export from RapidPro will be analysed, to assess the following:
1. High versus moderate versus passive users
2. Daily target achievement data
3. Time to achieve 80% and 95% of target
4. Completeness of reporting, with a focus on dose response and outcomes (coverage, data completeness, and efficiency).
Second, a mobile-based survey (U Report Survey) will be conducted, where questions will be sent to all RapidPro users to assess perceived satisfaction, problem identification, and corrective action-to be conducted at end of school campaign (August 2018) and the end of the community-based campaign (September 2018).
The qualitative component will involve in-depth interviews with RapidPro reporters (Iimunisation coordinators at community health facilities) and receivers (district health office, province health office, Ministry of Health). In addition to analysis at the central level, we will visit 6 provinces (multi-stage random sampling, stratified by risk and readiness profile) to understand how RapidPro and its data is being used by stakeholders to achieve and measure the achievement of the MR Campaign targets at all levels of the health system.

### Intervention Type
Mixed

### Primary outcome measure
RapidPro effectiveness, translated as tracking immunisation coverage, assessed using secondary analysis of RapidPro data by comparing timely target achievement between highly vs moderate vs passive users on every two weeks during the campaign (August - October 2018)

### Secondary outcome measures
1. RapidPro effectiveness, translated as perceived satisfaction, problem identification, and corrective action taken by RapidPro users, assessed using a mobile based survey in the final weeks of the campaign (end of September - October 2018)
2. Effective use of RapidPro, translated as stakeholders experience on using RapidPro to achieve and measure the achievement of the MR Campaign targets, assessed using an in-depth interview during the final weeks of the campaign (end of September - October 2018)

### Overall study start date
01/07/2018

### Completion date
31/12/2018

## Eligibility

### Key inclusion criteria
Participants should be any of the following:
1. Central level: Immunisation program managers at MoH, UNICEF, and WHO
2. Province level: Immunisation program managers at Province Health Offices
3. District level: Immunisation program managers at District Health Offices
4. Sub-district level: Immunisation coordinators at community health center (Pusat Kesehatan Masyarakat)

### Participant type(s)
Mixed

### Age group
Adult

### Sex
Both

### Target number of participants
Qualitative component participants are at least 81 participants. We also anticipate some proportion of the 7000 users of RapidPro to participate in the mobile survey and will be analysing aggregated data on the number of children immunized throughout the campaign from over 6000 health facilities on 28 provinces in Indonesia.

### Key exclusion criteria

1. Stakeholders who are not entering and/or receiving RapidPro data
2. Stakeholders who are not stationed at selected study sites
3. Stakeholders who decline to participate on study.

### Date of first enrolment
01/09/2018

### Date of final enrolment
31/10/2018

## Locations

### Countries of recruitment
Indonesia

South Africa

### Study participating centre
**PT. Reconstra Utama Integra**
Menara Kadin, Regus Business Centre, 30th Floor, Suite 26. Jalan Haji R. Rasuna Said Kav. 2 - 3 Blok X-5, Kuningan, Kuningan Timur, RT.1/RW.2, Kuningan Tim., Kota Jakarta Selatan, Daerah Khusus Ibukota Jakarta 12950
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### Study participating centre
**HealthEnabled**
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### Study participating centre
**UNICEF Indonesia**
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## Sponsor information

**Organisation**
Gavi, The Vaccine Alliance

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**Sponsor type**
Other

**Website**
https://www.gavi.org

**ROR**
https://ror.org/0141yg674

# Funder(s)

**Funder type**
Other

**Funder Name**
GAVI Alliance

**Alternative Name(s)**
Gavi, Gavi The Vaccine Alliance

**Funding Body Type**
Government organisation

**Funding Body Subtype**
Trusts, charities, foundations (both public and private)

**Location**
Switzerland

# Results and Publications

**Publication and dissemination plan**

We aim to submit at least one paper to a peer reviewed journal by the end of January 2019.

## Intention to publish date
31/08/2019

## Individual participant data (IPD) sharing plan
RapidPro generated data will provide information on immunisation coverage on daily basis: number of children immunized as submitted by RapidPro users. Please kindly find details asked on U Report Survey and In-depth interviews attached (Rapidpro tools.pdf). Consent will be obtained from U Report survey participants and interview informants prior data collection. The data will be posted after the study is completed in conjunction with submission of findings to peer-review journals. It will be made available indefinitely or for as long as the database it is housed within makes it available.

## IPD sharing plan summary
Available on request

## Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---|---|---|---|---|---|
| Results article | results | 10/12/2020 | 11/01/2021 | Yes | No |
| Protocol file | | 01/06/2018 | 17/08/2022 | No | No |