



Lessons Learned: Rotavirus Vaccine Introduction in Madagascar

March 2016

Exhibit A-6

LESSONS LEARNED: ROTAVIRUS VACCINE INTRODUCTION IN MADAGASCAR

March 2016 Report

JSI, Research & Training, Inc. Exhibit A-6

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ACRONYMS

CHW Community Health Worker cMYP Country Multi Year Plan

COASAN Comité de Santé

CSB Centre de Santé de Base
CSO Civil Society Organization

EPI Expanded Program on Immunization

Fkt Fokontany

DVDMT District Vaccine Data Management Tool

HSS Health Systems Strengthening

ICC Interagency Coordinating Committee

JSI John Snow, Inc.

MCHW Maternal Child Health Week MoPH Ministry of Public Health

NGO
Non-Governmental Organization
PIE
Post Introduction Evaluation
SCM
Senior Country Manager
SV
Service de Vaccination
TOT
Training of Trainers
TWG
Technical Working Group

UNICEF United Nations International Children's Emergency Fund

VVM Vaccine Vial Monitors
WHO World Health Organization

ACKNOWLEDGEMENTS

The experiences, challenges and achievements captured in this report on the introduction of rotavirus vaccine in Madagascar are to serve as a reference for the country for strengthening rotavirus vaccine coverage/use within the routine immunization system and when introducing other vaccines in the future. JSI sincerely appreciates the collaboration and leadership that the Ministry of Public Health and the Ministry of Public Health's Service de Vaccination have exhibited throughout the preparation and implementation of introduction activities.

In addition, the role of partners has been invaluable in supporting introduction activities, from national level planning to facility level training of the vaccinators. We would like to especially acknowledge WHO and UNICEF for their technical, logistical and financial contributions.

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INTRODUCTION

Diarrheal diseases are the third leading cause of death for children under 5 years of age in Madagascar. To address this public health threat, the country applied to Gavi, the Vaccine Alliance (Gavi) and received approval to introduce rotavirus vaccine, which was launched in May 2014. This vaccine, in addition to the PCV-10 vaccine (introduced in Madagascar in 2012), presents a significant step forward for the country in addressing child morbidity and mortality since the political crisis that began in 2009. While diarrhea prevention and control activities were not directly integrated with the rotavirus vaccine introduction, Madagascar does have a strategy for diarrhea and pneumonia prevention and for community engagement that includes the "Champion Community" approach, within which the rotavirus and PCV introductions are now linked. This approach includes components such as:

- An EPI training module for health workers that includes a chapter on the different methods for preventing diarrhea, including the rotavirus vaccine, hand washing and use of latrines;
- During the national and regional launches for the rotavirus vaccine, sensitizations were conducted on hand washing;
- During community dialogue sessions before introducing the rotavirus vaccine, discussion included the causes of infant and child mortality due to diarrhea and methods for prevention such as the vaccine, hand washing, and using latrines.

In addition, integration of the rotavirus and PCV vaccines with the broader prevention and control of diarrhea and respiratory illnesses was discussed during a Civil Service Organization (CSO) workshop held in September 2014, with recommendations developed during that workshop for CSOs and the MOH to further link these interventions, including with HSS support for strengthening routine immunization.

Lessons learned and recommendations from the PCV-10 introduction and Post-Introduction Evaluation (PIE) were discussed by the Inter-Agency Coordinating Committee (ICC) in October 2013 and used by the Ministry of Public Health/Service de Vaccination (MoPH/SV) and partners to help reinvigorate collaboration as well as to stimulate and guide the planning for rotavirus vaccine introduction. The SV coordinated with various partners to prepare for rotavirus vaccine introduction, align support, and develop the activity plan and timeline. JSI provided technical support in Madagascar from September 2013 to March 2016, providing guidance for this process through adaptation of the scale-up map (see below) that had been used over the last seven years by JSI in support of new vaccine introduction (notably PCV and rotavirus) with several other countries throughout Africa.

Program Implementation Global National Actions Vaccine Launch Post-Launch Actions Preparation (3-6 months before launch) Assess magnitude of introduction support and long term funding mortality due to target Continuous Upgrade cold chain monitoring, Discuss and reach and logistics supervision Register the vaccine capacity building, review vaccine supply distribution system, and follow up to ensure full Select specific vaccine integration into the RI system product suitable for upgrade as n . country context As needed, improve Prepare or revise GAVI Monitoring Country morbidity application, obtain Hold public ministerial signatures, and submit on time. Develop/adapt learning and response submits/ relations and to any reported re-submits events to Update/prepare cMYP adverse events application launch the due to the and costing tables. Incorporate into national health sector plan Revise, print and targeted Conduct post-IRC makes distribute EPI management tools vaccine recommendpreventable evaluation (PIE) Initiate AEFI Conduct nationwid GAVI Board 6-12 months disease surveillance for the new vaccine and strengthen assessment of cold following vaccine chain storage space GAVI and logistics AEFI reporting system Secretariat Develop plan for vaccine Assess impact on introduction plan applications strategies and key messages to address morbidity and mortality for approval Initiate surveillance to establish baseline. concerns of caregivers and Solicit ICC endorsement Adapted from Implement demand MCHIP materials

Scale Up Map for New Vaccine Introduction in GAVI supported countries

Figure 1: Scale Up Map for New Vaccine Introduction in Gavi Supported Countries

The following report highlights successes, bottlenecks and lessons learned from the rotavirus vaccine introduction in Madagascar that can be used to inform new vaccine introduction and routine immunization strengthening in the country in the future.

Monitoring and Evaluation

creation for new vaccine

Planning and Preparation

implementation

The introduction of the rotavirus vaccine in Madagascar built upon the experience of PCV-10 introduction that took place in 2012, including adapting similar approaches for planning, training, implementation, logistics, community links, communication, supervision, data use, and management. Recommendations from the PCV-10 Post Introduction Evaluation (PIE) as well as feedback on those recommendations and suggestions for addressing them from ICC partners were considered as part of the rotavirus introduction planning and roll-out. A rotavirus introduction checklist, developed by JSI to help the SV and partners with preparations, was also used during the planning process (see Annex I).

This checklist was used to monitor the continuous progress of key steps of the rotavirus introduction process, linked with the partner rotavirus introduction activity timeline (see Annex II). Under the leadership of the DPEV, the timeline and this checklist were reviewed with partners (e.g. WHO, UNICEF, [SI, etc.) in order to monitor progress and inform any adjustments to the introduction plan that needed to be made along the way. Although this plan was used at national level through the launch, the RVV PIE conducted in May 2014 noted the unavailability of similar introduction plans at district and regional levels subsequent to the vaccine launch.

Routine data were used to calculate the target population for rotavirus vaccine, with the two dose schedule for RotaRix provided at 6 and 10 months. The planning and launch were also linked with the Maternal and Child Health Weeks (MCHWs), which have been implemented twice per year in Madagascar since 2006 and are viewed as an opportunity for providing health information to the public and communities and for launching new initiatives (as had been done with PCV, for example).

Funding for vaccine procurement and introduction activities is cost-shared between Gavi and the Government of Madagascar, which is committed to meeting its co-financing requirements, including for the addition of rotavirus vaccine. Discussions on financing for the rotavirus vaccine co-pay have been linked with the broader vaccine financing discussions for ensuring that the country meets its obligations to Gavi. This has included meetings organized by JSI between the Gavi Senior Country Manager (SCM), Prime Minister, Minister of Health and other government officials to discuss the importance of ensuring the co-financing for 2014, 2015 and coming years - as well as the possibility of a vaccine law to ensure protected government funding for vaccines and immunization.

For recommendations on planning and preparation based on lessons learned during the planning and preparation phase, please see page I 3: "Planning and Implementation".

Capacity Building for Health Workers

As part of the introduction, district-level training for all health workers was carried out in all 112 districts from November 2013 to April 2014, with the majority conducted several months before the launch of the vaccine. All supporting documents (i.e. guidelines, reporting tools, etc.) were ready and distributed in time for these trainings, with the exception of communication materials, which weren't yet ready in time for the trainings, as the communication strategy was not developed until closer to the launch. The communication strategy development was conducted in April 2014 in order to coincide with planning for the May 2014 MCHWs and the African Vaccination Week. The goal was to further integrate rotavirus vaccine introduction with the MCHWs (and broader child health preventive services, such as deworming and vitamin A), and build upon opportunities to cost-share for the development of communication materials.

Training was conducted via a cascade approach, starting with a national level training of trainers (TOT) held at the SV to train coaches. These coaches were then responsible for conducting TOTs at the regional level with "Regional Focal Points", who were in turn charged with training District Focal Points. The Districts then convened health workers from the Centres de Santé de Bases (CSBs) to conduct training for the lower level.

During post-training supervision visits conducted in June and July 2014 by the trained trainers and/or coaches from the technical committee, including feedback from representatives from CSBs convened at district level, several inadequacies were observed with the quality of training and with the level of knowledge among health workers. Observed weaknesses that should be addressed as part of strengthening rotavirus vaccine use within the routine immunization system included:

- Insufficient understanding of the vaccine schedule and importance of timeliness of vaccination, given that children outside of the recommended target age range were vaccinated:
- Insufficient reporting practices, such as incomplete vaccination registers or vaccination registers not used at all;
- Lack of understanding of the role of Community Health Workers (CHWs) and the community to assist with advocacy, mobilization, and tracking of children
- Weak interpersonal communication of health staff with parents.

The main training-related challenges included:

- Although follow-up supervision was to have been conducted one month after each TOT at each level, the higher level "Focal Points" were either too few or did not have enough time to be able to carry out follow-up supervision in all locations after the trainings to reinforce the content and provide any constructive feedback/support;
- As training is cascaded from higher to lower levels, continuity is compromised in this approach and key information is not always transferred down to the lowest levels. Because of this, comprehension is compromised at the lowest levels, with trainers at those levels not able to completely or sufficiently follow the training module when conducting their trainings;

In approximately 10% of the districts, trainings were carried out without a Master Trainer/Focal Point from the higher level, due to scheduling conflicts given the short timeframe in which to conduct the trainings and/or delays in release of training funding.

For recommendations on capacity building based on lessons learned during the RV vaccine introduction in Madagascar, please see page 13: "Training/Capacity Building".

Logistics and Cold Chain

In Madagascar, cold chain information, including stock status and functionality of cold rooms, is available at central, regional and district levels. During the rotavirus vaccine introduction, each of these levels reported sufficient quantities of vaccines being stored in appropriate storage conditions and with acceptable VVM status. From district level up, reporting is done electronically through the DVDMT (standardized District Vaccine Data Management Tool), which provides good visibility into the status of the vaccine management to the higher levels. However, district level capacity on logistics monitoring and reporting needs to be improved in certain districts, including the ability to report and analyze stock levels at CSBs to ensure there are no stock-outs or expired vaccines. This is currently in the process of being addressed through improved support in data reporting and communication between the designated "coaches" and these districts/CSBs.

Maintaining the cold chain is a continuous challenge in Madagascar. For the most part, storage is sufficient for stocking the rotavirus vaccine as part of the full composite of vaccines at all levels. However, some regions continue to have challenges with the operability of cold rooms, and there is a lack of (or challenges with spare parts for) some refrigerators and freezers in certain facilities, as described in the Effective Vaccine Management Assessment conducted from November 10 – December 31, 2014. In these facilities, there are limited numbers of solar powered refrigerators and insufficient funding to fully support the fuel needed to keep gas and kerosene-powered refrigerators running, thus resulting in cold chain problems for rotavirus vaccine and other vaccines. UNICEF and Gavi funds are used to assist in covering fuel expenses, but the government is not able to ensure regular availability of these funds. While the procurement of solar-powered refrigerators is included in Madagascar's multi-year plan (cMYP), the procurement and installation of the refrigerators has been slower than what is recommended in the plan, due to the delays in release and implementation of the Health Systems Strengthening (HSS) funds.

Funding constraints and delays affect other areas of the cold chain/logistics system as well. While there were no issues in integrating the rotavirus vaccine into the distribution system, most vehicles are, at minimum, in need of maintenance, while some are beyond repair and need to be replaced. Despite use of HSS funding to improve the quality of the existing fleet of transport vehicles, funding constraints continue to hamper full maintenance or replacement of transport vehicles.

For recommendations on cold chain and logistics based on lessons learned during RV vaccine introduction in Madagascar, please see page 14: "Logistics/Cold Chain".

Partner Engagement/ICC

Participation and collaboration amongst partners was strong and active with the rotavirus vaccine introduction planning and implementation in Madagascar, which also corresponded with the new government coming into place and some increased donor support. This new vaccine introduction planning and implementation was integrated into the agendas of both the senior Interagency Coordinating Committee (ICC) - government and key donor and agency partners - and ICC Technical Working Group. These partners ensured that recommendations from the PCV-10 introduction experience were taken into account; successfully oversaw that tools were adapted to include rotavirus vaccine in a timely manner and that all documents were validated; and made certain that the vaccine was accepted without issue into the vaccination calendar. In collaboration with the SV, these groups also worked together to ensure that the highest levels of leadership were involved,

including the President, the First Lady and the Prime Minister (with the latter two participating in the launching ceremony for rotavirus vaccine).

The MoPH provided instructions/guidance and worked to address all recommendations from the ICC. Three primary partners (WHO, UNICEF, and JSI) closely supported the MoPH/SV in the introduction and were active in the Technical Working Group (TWG) and various preparations, with their roles also including:

- WHO: facilitated the validation of products and provided recommendations/approval for using rotavirus vaccine in Madagascar; participated in the planning and training
- UNICEF: managed procurement of the vaccine; participated in the planning, training and supervision
- JSI: supported the day-to-day implementation of the planning and advocacy activities; conducted training and supervision and monitoring in the field

Reporting, Monitoring and Evaluation

In order to track the progress of the rotavirus vaccine introduction, the SV and partners used a general set of indicators for overall guidance (see Annex III) as well as more specific indicators tailored to the Madagascar context (see Annex IV). As noted previously, a rotavirus vaccine introduction checklist was also used to track progress with preparations (see Annex I). Although limited due to financial and human resource constraints, monitoring continued during this post-introduction period and in advance of the PIE, notably with assistance from partners like JSI and as part of the "coaching" process for supportive supervision.

Rotavirus vaccine data were integrated into the routine immunization reporting system prior to the launch. Monthly data is received for all vaccines through this system, and includes:

- Cold chain functionality
- Number of children vaccinated
- Drop-out rate
- Vaccine stock and materials used
- Coverage rate
- Surveillance of rotavirus

Data from a 2013 national coverage survey (30 cluster conducted in all 22 regions) were presented in a preliminary report released in July 2014. The survey confirmed that there is still a weakness in use of the electronic reporting system for administrative coverage. Therefore additional support is needed to improve immunization coverage reporting and tracking in the system, including for rotavirus vaccine. At this time, there is not a plan to do a separate rotavirus vaccine coverage survey.

As noted above, rotavirus vaccine coverage and stock data have been included in the monthly reports and RI system data collection and reporting. The PIE was carried out in April 2015, with results indicating that RV vaccine second dose coverage was less than penta3, and RVI-RV2 dropout was higher than pentavalent drop-out, in spite of RV vaccine's oral administration, compared to injectable penta.

Following are some key observations/recommendations on the implementation status for rotavirus vaccine introduction that were identified during the rotavirus PIE (and/or continue to need follow-up from the PCV PIE):

Use of "bac a fiches" at CSB level: while some improvement was observed, use of these
tickler file cards and system for active tracking of infants due for vaccination still needs to be
improved in some districts, particularly to ensure timely vaccination for rotavirus and to
reduce drop-out;

- Updated Community Register: While guides and training were provided to district immunization managers and the updated registers were distributed throughout the country, some CSB Medical Heads and Health Workers, and many CHWs, did not receive quality training on their use (this links to issues with cascade training discussed previously). For this reason, community registers to help identify and track children have not always been used due to health staff and CHWs awaiting further guidance.
- Supportive supervision post-training: as discussed above, while a limited number of supportive supervision visits have taken place, they have not occurred as frequently or widely as needed due to funding constraints (e.g. insufficient government or partner funds to support routine immunization and post-introduction supervision countrywide). There are, therefore, identified gaps in health worker knowledge in certain districts (as discussed previously). Supervision needs to be prioritized in lower performing districts (in line with coaching) and ensure that rotavirus coverage is a focus in the supervision visits.
- Continue to share information with communities (by Fokontany) and reinvigorate health committees (COSAN) to sensitize them on the importance of rotavirus vaccination, coverage trends, and the importance in reducing severe diarrhea caused by rotavirus disease.
- Ensure good stock management of the vaccine and the availability, updating, timeliness and completeness of monitoring tools and reporting from CSB to SDSP and from SDSP to DPEV (e.g. immunization registers, monthly reports, Carnet de Santé, and vaccination diplomas) to reinforce rotavirus vaccine as part of routine immunization and REC.

RECOMMENDATIONS FOR FUTURE NEW VACCINE INTRODUCTION

Planning and Implementation

- Simplify the planning framework to enable activities to be more easily tracked and reported on as well as for key focal points to be specifically identified to facilitate implementation;
- Include representatives from the regions in the micro-planning processes so that they can
 provide input at national level as well as better support district level roll-out, monitoring and
 supervision of new vaccine implementation;
- Organize at least annually (preferably twice per year, if possible) a micro-planning/review workshop at district level with the heads of health facilities. The workshops should enable sufficient time (e.g. at least 2 days) to review and update the catchment areas, analyze and discuss performance and data, and conduct planning for the next 6-12 month period (including surveillance and to carry out monitoring and supervision);
- To avoid potential stock-out of the vaccine and improve coverage, the target ages for vaccine administration need to be respected and the importance of this reinforced with health workers and mobilizers. This is also important to ensure the timeliness of rotavirus protection for infants.
- Reinforce sensitization before new vaccine introduction and ensure that messages and communication materials to support rotavirus uptake continue to be emphasized with parents and the communities as part of supervision and routine immunization service delivery and community engagement (e.g. with REC).

Training/Capacity Building

The cascade trainings were observed by the TWG to be the biggest weakness in the rotavirus introduction. While alternative options are recommended for the future, they will most likely require an increase in resources. Following are some suggested options:

- Increase the number of technicians who are trained and work with district staff so that there is sufficient manpower to carry out necessary supervision. (This of course would necessitate additional funds and a critical mass of people capable of participating in the training and conducting supervision as planned, which would be easier in some districts than others);
- Conduct trainings at least 2 weeks before the new vaccine introduction to allow sufficient time for questions and to determine where gaps in knowledge or training may need to be followed up (e.g. with subsequent refresher training, supervision, on the job monitoring);
- Increase available financing to support regular (preferably monthly or at least quarterly) review meetings at the district and regional levels. (These should be taking place, but there is often not enough funding to support these meetings in practice). If these meetings were held more regularly, this would facilitate information sharing and could reinforce the technical capacity of health workers, as well as be an opportunity for supervisors to provide feedback and support. At Central level, these meetings are held on a more regular basis;
- Improve reporting and availability of data (including baseline data on target population and incidence of VPDs) to inform decision making. This would include strengthening district health workers' capacity to use the electronic DVDMT database and to report in a timely manner, as well as the capacity of supervisors to check and review data/work plans/reporting forms and provide timely and regular feedback;
- Continue to conduct refresher training in routine immunization (and as part of REC), including additional focus on improving rotavirus and PCV coverage, for all EPI staff at regional, district and CSB level, given staff turnover and gaps in training since the political crisis.

Logistics/Cold Chain

- Strengthen health worker capacity at CSB level in vaccine management and reporting, including the use of refrigerator tags for monitoring temperature;
- Adjust the plan for cold chain rehabilitation to account for maintenance, spare parts, and repair of existing equipment and to consider realistic timeframes and transition planning as new technologies (e.g. solar cold chain equipment) are being added. The planning should also include advocacy for the required budget and mobilize local in addition to national/donor resources.

Reporting, Monitoring and Evaluation:

- Conduct DQS (data quality self-assessment) and use data for action and decision making to identify local solutions to improve coverage and reduce drop-out, linked with REC;
- Improve the timeliness and completeness of reporting from health facilities to SDSPs, and from districts to DPEV;
- Use data with districts, CSBs, and community mobilizers to reinforce the directive sent by DPEV for following the rotavirus vaccine calendar: i.e. Target population: 6 weeks to 11 months. Timetable: rota 1: At 6 weeks, rota 2: 10th week. Children behind in their schedule can also be vaccinated with rota 1 beyond 6 weeks (and received rota 2 with a 4 week interval between doses).

Social Mobilization/Communications:

- Provide information and rationale/need for the new vaccine to the community in advance in order to ensure that they are prepared for and ready to accept the new vaccine (and continue to reinforce these messages after introduction);
- There is a risk in integrating new vaccine introduction with other health related activities such as MCHWs, as new vaccine messages and specificities can get lost among and/or confused with the many other MCHW messages (WASH, malaria prevention, etc.). If, for reasons of logistics and/or cost savings, new vaccine introduction must be integrated into other activities, there should still be additional, separate communications targeted only for the new vaccine;
- Community dialogues can be effective and a viable way of disseminating information on new vaccines; however, these should be linked with service delivery improvements to ensure that other key elements of routine immunization are also in place (functioning cold chain, staffed health facilities, functioning COSANs and CHWs, available supervision);
- Continue to engage the CSO platform and involve them with the TWGs for immunization and new vaccine introduction to facilitate the relationship between CSOs and the health system at all levels in order to share information regarding child health, including vaccination. The CSOs should continue to be familiarized (e.g. through workshops, meetings, and/or technical and informational materials) with new vaccines and how they fit into routine immunization and link with the broader preventive and public health interventions. (This was addressed after the launch for rotavirus, through the CSO workshop facilitated by the SV, JSI and ASOS in Antananarivo in September 2014 and has been reinforced with COMARESS in Gavi-related meetings in 2015 and 2016.);
- As planned with HSS-2, HSS funds should be targeted to include financial support to CSOs for their assistance in monitoring and supporting the roll-out of the new vaccines and to improve routine immunization services, community partnerships, and coverage.

Future introductions

The county's ability to evaluate system preparedness for new vaccine introduction and ensure a solid routine immunization foundation must be strengthened at all levels. As part of advanced planning for new vaccine introduction, the country should be able to consider:

- If the vaccine is cost effective;
- The ability for sustained commitment by the government to strengthen and assure the quality of service delivery, and the availability/willingness of partners to participate and provide technical and management support to the introduction;
- If the logistics system is ready to receive and distribute new vaccines and store and manage additional volumes of vaccines in the system;
- If health workers can be sufficiently and thoroughly trained to ensure quality introduction and maintain this quality once the vaccine is rolled-out; and
- If quality M&E and supervision are possible at all levels.

ANNEX I: UPDATED ROTAVIRUS VACCINE CHECKLIST PRE-LAUNCH (MARCH 2014)

N°	Issue	Status	Action(s) to be taken	Lead Agency / Focal point					
1		Need for cold	chain equipment						
A	Assessment for cold chain equipment	Last assessment in 2011 9 solar refrigerators installed 13/13 cold rooms installed in 13 regions	Continue the cold chain assessment by desk review or in field visits and regularly the refrigerator inventory in the DVDMT, so solar refrigerators are included in HSS2, Budget of the Malagasy government, procured by the World Bank, OMS, UNICEF	HSS/Gavi SV cold chain responsible Mr. Alexandre					
В	Advocacy to target new partners for additional cold chain equipment	SV, UNICEF started this with HSS/Gavi	Technical support provided to SV for writing proposal for additional cold chain; included in HSS	SV and MoPH/Chief of SV					
С	Additional cold chain equipment needs (and if so, by when)	Advocated in central level by Chief of SV (in Madagascar HSS Gavi proposal)	Additional equipment needs included in HSS to cover cold chain needs	HSS/Gavi responsible, SV chief					
D	Distribution plan for new equipment	Distribution plan for solar refrigerator available	90 solar refrigerators installed in 2015, and 90 + 116 installation process, and finally 52 waiting the funds for their installation.	SV cold chain responsible Mr. Alexandre					
E	Distribution and installation of new CC equipment at district and health facility levels	In progress	Solar refrigerators to be installed in Mar/Apr; Follow-up to be conducted in advance of vaccine distribution	HSS/Gavi SV cold chain responsible Mr. Alexandre					
2	Revisi	on of recording, reportin	g and of the monitoring EPI	tools					
Α	Revision of technical guideline and other EPI policy documents	Technical manual and documents updated or developed but some of them need to be finalized (e.g. Logistic manual, Surveillance)	Inventory the list of technical documents & guidelines which need to be updated. Follow-up on finalization & supervision of printing and use	WHO SV logistic and cold chain responsible					
В	Revision of all EPI management tools (tally sheet, immunization register, child health card, reporting forms, etc.)	Developed	Follow-up & supervision of printing and use	SV, WHO, UNICEF, and JSI/Gavi					
С	Distribution of revised EPI tools	Distributed before launch; continued monitoring of their use needed	Follow-up & supervision of dissemination	SV					

D	Availability of the revised EPI tools at health facility level	Some tools not available at health facility level after the launch	Follow-up & supervision of dissemination and use	SV (technical development) and partners (supervision)
3		Training of health w	orkers and logisticians	
A	Availability of the adapted training materials (Trainers' guide, training modules for health workers at peripheral level)	Available only with the contents facilitators.	Develop or update materials with training focal points, and ensure availability for all team, and for training schedule	SV and partners
В	Training of trainers	National and regional training achieved	Monitoring and formative supervision planned in WP	SV, WHO, JSI/Gavi
С	Training of logisticians (installment and maintenance of cold chain equipment)	In progress	Training being conducted, followed by formative supervision	SV cold chain responsible, UNICEF, HSS/Gavi
D	Training of health professionals at the operational level	112/113 districts were trained for Rotavirus vaccine introduction. There was one Health district has recently created in 2015	Complete district trainings; Monitoring and formative supervision	SV
E	Training of community health educators and/or CSOs	Achieved	Monitoring and formative supervision	SV
4		Advocacy, Communica	tion & Social Mobilization	
A	Stakeholder sensitization and advocacy	Conducted	Monitoring and formative supervision	MoPH communication unit, SV social mobilization responsible
В	Key messages developed (to address KAP and any possible concerns of parents for this vaccine)	Messages developed and disseminated	Continued follow-up needed	MoPH communication unit, SV social mobilization responsible
С	Pretest of the messages and communication materials	Achieved and specific for each local dialect	Messages and materials to be further continued	SV, MoPH communication unit, WHO, and JSI/Gavi
D	Media identification and sensitization	achieved	Conduct monitoring and formative supervision	SV, MoPH communication unit
E	Communication in the community	Advocacy achieved in NGOs but Community health workers and FKT responsible not yet	Reinforce the community links with religious leaders, local NGOs, CSO, and committee in Fokontany	SV, MoPH communication unit, follow-up in supervision visits

		trained		
5		Vaccine and injec	tion material supply	
Α	Readiness to receive the vaccine and injection material	ICC evaluation allowed UNICEF to order the vaccine and injection materials	Recommendations from evaluation being followed by SV and in field to ensure readiness for vaccine arrival	UNICEF, GSK SV logistic responsible,
В	Reception of rotavirus vaccine and injection material	Received sufficient doses for three months, I month before the date of official launching launch)	Check the information with SV, UNICEF and in field	UNICEF, GSK SV logistic responsible
С	Registration of vaccine doses and of the syringes, etc.	completed	Monitor and follow-up distribution	SV UNICEF, JSI/Gavi
D	Availability of vaccine and injection material at all levels	Vaccine and injection materials distributed by SV/MoPH one month before launch	Check the information with SV , UNICEF and in field	UNICEF, SV Logistic responsible
E	Capacity verified at peripheral levels (including all districts)	CF SV cold chain sheet to be used to verify	Check the information with SV cold chain responsible and in the field	HSS/Gavi SV Logistic responsible
6		Injection safety, waste	management and disposal	
A	Availability of vaccines and syringes, needles, safety boxes, etc. at national level	CCIA evaluation enabled UNICEF to order the vaccine and injection materials GSK assisted	Check periodically with Chef SV and its partners	Sharing cost between SV and UNICEF. UNICEF ensures distribution to Health region or district.
В	Distribution of vaccines and syringes, needles, safety boxes, etc. to district and facilities	Vaccines arrived in Health District one month before the official launching, so every district has had their timing for vaccines and inputs distribution in their health facilities	Check the information with logistic responsible & EPI regional coach and carry out formative supervision	Regional and district Health responsible
В	Availability of functional incinerators at health facilities	Cf. SV team and should be checked during formative supervision	Formative supervision Or desk review	Health facility responsible
С	Training for the correct use of incinerators	Cf. SV team and check during formative supervision	Item	Regional and district Health responsible
D	Other tasks (to be defined)			
7	Surveilland	e system updated for VP	Ds and AEFIs related to New	w vaccines
Α	Surveillance system for rotavirus	Refer to SV surveillance team	To be followed by SV and partners	WHO, and JSI/Gavi SV surveillance DEEPI responsible Dr. Christian

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В	Surveillance for AEFI	Refer to SV surveillance team	Update the training materials	WHO SV surveillance DEEPI responsible Dr. Christian
С	Training of staff for surveillance?	Refer to SV surveillance team	Ask SV surveillance team for more information	WHO SV surveillance DEEPI responsible
				Dr. Christian
D	Surveillance reporting system activated for rotavirus	Refer to SV surveillance team	Take care of it with SV and its partners	WHO SV surveillance DEEPI responsible Dr. Christian
E	Other tasks for surveillance?	Refer to SV surveillance team	Update the training materials	WHO SV surveillance DEEPI responsible Dr. Christian
8		Launching cere	mony preparation	
Α	Introduction date set	Planned for May 2014	Pre-launch and launch preparations underway	CCIA committee
В	Site for launching ceremony determined	CCIA meeting	CCIA decision to determine this	CCIA committee
С	Preparation of the site with IEC materials and media	In progress	Reinforce in field the sites preparation and monitor the availability & multiplication of IEC materials and media	SV/HSS Gavi funds/ JSI-Gavi
D	Ceremony arrangements	Advocacy achieved with regional health responsible and MoPH community unit link strategies in progress	Arrangements to be finalized next quarter for launch ceremony	SV/HSS-Gavi funds, JSI-Gavi SV chief and New vaccine responsible Dr. Voahangy and Dr. Tiana
9		Docun	nentation	
A	Monitoring system in place for tracking introduction and roll-out	Checklists developed for tracking introduction and roll-out monitoring	Materials and toolkits being integrated into the routine vaccination tools	SV/HSS-Gavi funds, JSI-Gavi SV chief and new vaccine responsible Dr. Voahangy and Dr. Tiana
В	Plan for follow-up in under-performing areas or districts where additional training/capacity building is needed	Discussed as part of rotavirus introduction and PIE	Develop the plan for rotavirus introduction follow-up and link with RI coach activities	SV/HSS-Gavi funds, JSI-Gavi SV chief and new vaccine responsible Dr. Voahangy and Dr. Tiana
В	Supportive supervision	Cf. SV to check if supportive supervision checklists for rota developed and updated	Reinforce formative supervision with partners	SV Monitoring and Evaluation Dr. Haja and Dr. Monique
С	Plans for PIE	PIE conducted in May	Tools and materials for	WHO, UNICEF, JSI-

		2015	rotavirus post introduction developed and PIE recommendations documented	Gavi SV/HSS-Gavi funds SV chief and new vaccine responsible Dr. Voahangy and Dr. Tiana
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ANNEX II: ROTAVIRUS INTRODUCTION ACTIVITY TIMELINE

PLAN DE TRAVAIL ANNUEL 2013-2014 POUR L'INTRODUCTION DU VACCIN CONTRE LE ROTAVIRUS

		Calendrier d'execution									,
STRATEGIES ET ACTIVITES	1 2	T 3	T 4	T 1	2 3	T .	4	Respons able	Indicateur s de processus I	Indicateur s de processus 2	Appui de JSI
1. Stratégie 1: Organisation sanitaires vaccinantes du		nin	nati	on	des	S Sé	éan _	ices de vacc	ination dan	is toutes les _.	formations
1.1-Mettre en place les divers comités à tous les niveaux								DSEMR- OMS- UNICEF- SV-DRS- SSD	Nb de réunion	Nb de comité mise en place	
1.2. Elaborer, reproduire et distribuer un guide de vaccination pour l'introduction du vaccin Rotavirus								DSEMR- SV- PARTEN AIRES	Nb d'atelier réalisé	Nb de guide multiplié	Coordination avec les autres programmes de prévention de la diarrhée
1.3. Actualiser et reproduire les outils de gestion, plan de session et outils des formateurs								DSEMR- SV- PARTEN AIRES	Nb d'atelier réalisé	Nb et type d'OG actualisé, Type d'OG Multiplié	(séance avec experts, sensibilisation des responsables chargés de la santé de l'enfant sur l'importance et la révision de la politique de la santé de l'enfant)
1.4. Former les responsables Centraux, régionaux (FDF) en introduction Rotavirus et vaccination pratique. Niveau 1								DSEMR- SV- PARTEN AIRES	Nb d'atelier de formatio n, Nb de plan de formatio n	Nb d'AS formés à chaque niveau, Nb de rapport de formation disponibl e	,
1.5. Former les responsables des districts sur (FDF) en introduction du Rotavirus Niveau 2 (lieu: Région)								DSEMR- SV-DRS- PARTEN AIRES	Nb d'atelier de formatio n,	Nb d'AS formés à chaque niveau, Nb de rapport	

]							de	
								formation disponibl e	
1.6. Former les prestataires de service sur l'introduction du rotavirus, surveillance (épidémiologique et MAPI) et vaccination pratique : Niveau 3 (lieu: District)						DRS-SSD	Nb d'atelier de formatio n,	Nb d'AS formés à chaque niveau, Nb de rapport de formation disponibl e	
Stratégie 2 : Disponibili	té p	ern	anen	te er	ı vacc	rins			
4.1. Effectuer l'entretien des matériels roulants pour l'acheminement des intrants						DSEMR/S V	Nb de requête honorés	Nb de véhicules fonctionne Is	
4.3 Faire la Livraison des vaccins, matériels de vaccination au niveau central						DSEMR/S V	Nb d'approvi sionneme nt réalisé	Nb de mois de rupture de stock	Faire le suivi de l'approvisionn ement
4.4 Faire la livraison des vaccins, matériels de vaccination, aux dépôts régionaux et de districts						DSEMR/S V	Nb de transfert de fonds réalisé, Nb d'approvi sionneme nt réalisé	Nb de mois de rupture de stock	Faire le suivi de l'approvisionn ement
4.5 Acheter et doter en porte vaccins les CSB						DSEMR- SV- PARTEN AIRES		Nb de SSD doté en Porte vaccins	
Stratégie 3 : Assurer la cl	haîn	e d	e froid	d poi	ur un	e bonne con	servation de	es vaccins	
3.1. Maintenir les Chaines de Froid						DSEMR- SV- PARTEN AIRES	Nb de demande d'appui reçu	Nb de réfrigérate urs réparés	Faire le suivi de la fonctionnalité de CF (district)
3.2. Doter en thermomètre enregistreur les CSB (fridge tag)						DSEMR- SV- PARTEN AIRES		Nb de CSB doté en Thermom ètre enregistre ur	
3.3. Doter en pièces de rechanges (mèches, bruleur)						DSEMR- SV- PARTEN AIRES		Nb de mois de rupture de stock et pièces de rechange, Taux de fonctionna lité des	

				réfrigérate urs	
3.4 Doter en pétrole les refrigérateurs des FS (01 mois pour 2600 CSB au prix de 2500 ar/l)		DSEMR- SV- PARTEN AIRES	Nb de Districts approvisi onnés	Nb de mois de rupture de stock en pétrole	

Stratégie 4 : Renforcement de la communication en faveur de la vaccination et de l'introduction des nouveaux vaccins

des nouveaux vaccins					
5.1. Production, multiplication et distribution des supports IEC		DSEMR- SV-		Nb de support IEC disponible	
Mettre à jour les supports IEC		PARTEN AIRES			Vérifier l'élaboration et finalisation des supports
5.2. Campagne de médiatisation radiophonique et télévisée		DSEMR- SV- PARTEN AIRES	Nb de campag ne réalisé	Nb de SSD ciblé,	Suivre la réalisation; documenter
5.3 Effectuer un lancement officiel: prospection et lancement: janvier 2014		Comité CCIA/ DSEMR/ SV	Nb de descent e réalisé	Nb de participant s, Nb d'invités, Nb d'autorités , Nb d'enfants vaccinés, Taux de couverture en Rotarix	Participer
5.4 Faire un focus avec les cliniciens (comité scientifique)		DSEMR- SV- PARTEN AIRES	Nb d'atelier réalisé	Nb de cliniciens sensibilisé s	Participer
5.5 orientation des journalistes		DSEMR, DICOM	Nb d'atelier de formatio n	Nb de journaliste formés, Nb de plan de communic ation disponible	Participer
5.6. Développer la participation communautaire dans l'identification, le recensement et la recherche des cibles		DRSP	Nb d'atelier réalisé	Nb de plan d'action communa utaire disponible	Plan stratégique du développeme nt de la participation communautair e; liaison avec RSS et sante de l'enfant et les OSCs

Stratégie 5 : Mise en œuvre des activités de vaccination, gestion des déchets et sécurité des injections

6.1. Renforcer la mise en œuvre de l'approche ACD stratégie avancée				DSEMR-SV- DRS-SSD- CSB- PARTENAIR ES	Nb de plan de mise en œuvre ACD	Nb de SSD bénéficiai re, Nb de rapport ACD	Appui technique et correspondan ce avec RSS et approche communautair e (avec OSC)
6.2. Assurer la gestion des déchets CSB et la sécurité des injections				DSEMR-SV- DRS-SSD- CSB- PARTENAIR ES			Suivi
6.3. Opérationnaliser le système de surveillance MAPI				DSEMR-SV- DRS-SSD- CSB- PARTENAIR ES	Nb de réunion réalisé	Nb de rapport MAPI, Nb de guide MAPI,	Suivi de la performance du system de surveillance (promptitude et complétude)
Stratégie 6 : Renforcemen	t du S	uivi-évaluati	on				
6.1. Effectuer la supervision pré introduction				DSEMR- SV-DRS- PARTEN AIRES	Nb de descente réalisé	Nb de SSD supervisé	
6.2. Superviser le processus de l'introduction dans les SSD moins performants				DSEMR- SV-DRS- PARTEN AIRES	Nb de descente réalisé	Nb de SSD supervisé	Appui technique de la performance
6.3. Effectuer une évaluation post introduction (6mois à 12 mois)				DSEMR- SV-DRS- PARTEN AIRES		Nb de Rapport d'évaluati on disponibl e	du system de vaccination (promptitude, complétude, respect technique de la vaccination (performance - PCV, TA, calendrier, etc.)
6.4. Assurer la bonne gestion du programme: management cost				sv	Nb de descente réalisé	taux de complétu de des PJ, taux de justificati ons des dépenses	
6.5. Assurer les revues périodiques							Suivi de plan de réalisation
6.5.1. appui à la Revue annuelle de coordination au niveau central				DSEMR- SV-DRS- PARTEN AIRES	Nb d'atelier réalisé	Nb de participan ts, Nb de rapport disponibl e	Suivi de plan de réalisation
6.5.2. Revue semestrielle au niveau régional				DSEMR- SV-DRS- PARTEN AIRES	Nb d'Atelier réalisé	Nb de participan ts; Nb de rapport	Suivi de plan de réalisation

							disponibl e	
Stratégie 7: Renforcement de la recherche								
Appuyer et doter le site sentinelle en congélateur pour la surveillance Méningite, pneumonie et les diarrhées dues au Rotavirus (HUMET)					DSEMR- SV- PARTEN AIRES	Nb de réunion réalisé	Nb de rapport de surveillan ce disponibl e, Nb de cas suspect en Méningite Bactérien ne Pédiatriq ue et de Diarrhée par Rotavirus , Nb de cas confirmé	Participer
Réhabiliter le laboratoire du site sentinelle HUMET					DSEMR- HUMET- SV			

ANNEX III: ILLUSTRATIVE INDICATORS FOR NEW VACCINE INTRODUCTION

Indicateur illustratif	Définition/clarification	Source des données /Méthode de collecte	Fréquence de collecte des données	
Workstream 1: Introduction de nouveau vaccin				
Plan d'introduction finalisé et mis en œuvre	# des plans préparé et mis en œuvre; Sous-comité du CCIA mis en place et réunions régulièrement tenues	Revue documentaire	Trimestriellement-	
Les outils de collecte de rapportage et de suivi des données révisés, imprimés et distribués	Outils de gestion PEV révisés pour refléter les informations du nouveau vaccin	Revue documentaire	Une fois avant l'introduction du vaccin	
Professionnels de santé avec des aptitudes pour utiliser les nouveaux vaccins	Minimum d'agents de santé formés par centre de santé (public ou privé); Minimum d'un enseignant par école impliquée formé (public ou privé)	Revue des documents	Au moins une fois avant l'introduction du vaccin	
Nouveau vaccin complètement intégré dans le système de vaccination de routine	Guide technique révisé pour refléter le nouveau vaccin; outils de rapportage révisés; nouveaux vaccins disponibles et utilisés régulièrement dans la majorité des formations sanitaires; trimestriellement (mensuellement si possible (pour rota) rapporté en post introduction; Supervision	Revue documentaire et visites de supervision	Une fois lors de revue documentaire; Continue à travers le suivi et supervision	
Processus de co- financement du pays et communication avec Gavi	Réunions de plaidoyer conduites; téléconférence/réunion de discussions tenue entre le pays et Gavi; co-financement inscrit dans l'agenda de la réunion de CCIA	Annual Progress Report to Gavi	Atelier d'élaboration du rapport annuel de progrès	

ANNEX IV: MADAGASCAR SPECIFIC ILLUSTRATIVE INDICATORS FOR NEW VACCINE INTRODUCTION

Composantes:	Indicateurs de processus	Source de données/ méthode de collecte	Fréquence de collecte des données
Plaidoirie et implication communautaire	nombre d'ONGs/OSC: Associations impliquées avec l'introduction (nationale pour le vaccin Rota	Revue documentaire.	Une fois, avant l'introduction des vaccins
Logistique: Livraison des vaccins et chaine de froid	Disponibilité nationale de vaccin dans tous les districts au moment de lancement (RV). Système de distribution / approvisionnement en vaccin révisé et des améliorations faites	Revue documentaire et visites de supervision	Une fois, avant l'introduction de vaccin; Monitorage continue à travers la supervision
Prestation des services	# et % d'agents de santé formés Formation finalisé avant l'expédition des vaccins (rota). Disponibilité de toute la population et du nombre absolu de population cible pour RV et centres de santé; # de visites de supervisions formatives réalisées.	Revue documentaire	Au moins une visite avant l'introduction de vaccin; visites de supervision trimestrielles
Gestion et rapportage	Disponibilité d'enfants vaccinés et qui ont abandonné (RV)	Revue documentaire	Une fois, avant l'introduction de vaccin.
Communication	Matériels IEC disponibles dans les districts avant le lancement Les leaders communautaires et certains membres clés (ex. Chef de Fokontany, OSCs) informés de l'introduction de nouveau vaccin en avance et sont en train d'aider avec la mobilisation	Revue documentaire	Une fois, avant l'introduction de vaccin
Mobilisation Sociale	Rapport sur le # de mobilisateurs communautaires assistant à identifier les populations cibles / # de mobilisateurs par domaine d'intervention	Revue documentaire	Une fois avant l'introduction du vaccin; monitorage continue à travers la supervision