# A conversation with Suvita, November 22, 2021

# **Participants**

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**Note:** These notes were compiled by GiveWell and give an overview of the major points made by Ms. Conlon and Ms. Venugopal.

# Summary

GiveWell spoke with Ms. Conlon and Ms. Venugopal of Suvita as part of its investigation into a grant proposal from Suvita for SMS reminders for immunization in Maharashtra, India. Conversation topics included background about Suvita, its SMS reminders program, its immunization ambassadors program, a randomized controlled trial of strategies for increasing immunization in Haryana, government interest in increasing immunization uptake, and room for more funding.

## **About Suvita**

Suvita was launched in 2019 after the co-founders participated in Charity Entrepreneurship's Incubation Program. Its aim is to increase uptake of childhood immunizations to close the immunization gap. Suvita currently works primarily in two states in India: Bihar and Maharashtra.

At about the same time as the incubation program, initial results from a study conducted by the Abdul Latif Jameel Poverty Action Lab (J-PAL) in partnership with the government of Haryana (see below) showed that selecting network-central community members, nominated by others in their community for their tendency to spread information, and asking them to share health information with their neighbors was a promising and cost-effective strategy for increasing vaccination uptake. A later publication from the study suggested that combining these "immunization ambassadors" with SMS reminders could be even more cost-effective.

Based on these results, Suvita had initially focused on piloting an immunization ambassadors program with a view toward scaling it up. Another organization, Charity Science Health, had been focusing on SMS reminders. The two organizations merged as they expected this would lead to more efficient coordination and greater impact when scaling both programs together. The merged organization retained the name Suvita and has been led by Suvita's co-founders since the merger.

Charity Science Health had been implementing SMS reminders for several years prior to the merger, so that program is more ready to be scaled up. The immunization ambassadors program needs additional iteration prior to scale up.

## SMS vaccination reminders in Maharashtra

In 2021, Suvita signed a memorandum of understanding (MOU) with the State Family Welfare Bureau in Maharashtra to scale up SMS reminders across the entire state over five years. In Maharashtra, Suvita sends reminders to pregnant women about pregnancy care, and to new parents about childhood vaccinations.

At the government's request, Suvita began sending SMS antenatal care reminders earlier this year to pregnant women in Satara, a district with about 3% of Maharashtra's total population. The government conducted an internal evaluation of the program's initial implementation, which showed that more than 90% of the recipients received the messages and/or used antenatal services. Suvita then received government approval to provide vaccination reminders in Satara as well; it began sending those reminders in October 2021.

Suvita approached GiveWell with a funding proposal for delivering SMS reminders across the whole state of Maharashtra for three years.

After demonstrating its ability to implement the program across Maharashtra, Suvita may then be able to partner with the central government or other state governments to implement SMS reminders elsewhere in India.

## **Program reach**

In accordance with their signed MOU, Suvita uses contact information from the state government's Reproductive Child Health (RCH) database to send its reminders. The database includes a telephone number for every child born in a public health facility, which is about 56% of the total number of births in Maharashtra. In most cases the telephone number is for one of the child's primary caregivers or another member of the household. For the small number of families without a cell phone, the number is typically of the ASHA, an accredited social health activist (community health worker) in the village, who can then follow up with those families.

About 35% of children in Maharashtra are born in private facilities, and about 5% of births do not take place in health facilities; children in those groups may not be reached by Suvita's SMS reminders.

#### **Other SMS reminders**

SMS reminders provide an opportunity to share other messages about cost-effective evidence-based services, such as antenatal care appointments and supplementation of iron and folic acid uptake during pregnancy. For example, Suvita includes breastfeeding messages in its vaccination reminder sequence because of government interest in doing so, though it has not fully vetted the evidence about the effectiveness of the breastfeeding messages.

## Randomized controlled trial

The MOU provides permission to carry out an RCT to build the evidence base for SMS reminders. The RCT is currently scheduled for year 3 but could take place

earlier if the scale-up takes place more quickly. Suvita believes SMS reminders probably have a positive effect on vaccination uptake. If funding were available to scale up without a randomized controlled trial (RCT), Suvita would likely prefer to do so in order to increase vaccination uptake more quickly.

## Immunization ambassadors

Immunization ambassadors are local influencers nominated by people in their communities and then selected to share health information with their neighbors. The idea of systematically identifying nodes in a local social network and engaging with them to improve the uptake of health interventions is relatively new. Suvita planned to replicate the approach taken in the J-PAL Haryana study, then to modify the program to make it more effective, scalable, and cost-effective.

The intervention in the Haryana RCT involved traveling to a village and surveying a selection of households, asking for nominations of people who tend to spread information in their community. Suvita modified this protocol, conducting surveys by telephone instead of in person. In early 2021 it recruited an initial cohort of 200 ambassadors in Bihar. Suvita recently recruited another 200 ambassadors and is now conducting a third recruiting round.

Program implementation is currently being routinely monitored in several ways:

- Nominations per survey. The program in the Haryana RCT averaged four nominations per household in its in-person surveys, and Suvita aims for the same number per telephone survey.
- Overlap among nominations. Suvita aims to improve the overlap among nominations so that the ambassadors selected for the program have been nominated by many households.
- Recruitment percentage. This is the proportion of selected influencers
  who agree to become immunization ambassadors when invited. Suvita
  has had promising results on this metric so far, with a large majority of
  contacted influencers agreeing to become immunization ambassadors.

Suvita has some anecdotal evidence that ambassadors are effective at spreading information. Suvita conducted an initial test by providing ambassadors with a telephone number that parents could call to enroll their children for SMS reminders. The pattern of phone calls to that number in the period after it was shared with ambassadors suggested that the first cohort of ambassadors had shared information about immunization and that parents chose to act on it.

Suvita has been in conversation with J-PAL about how to best measure the program's effectiveness, and Suvita may conduct an impact evaluation in the future.

# Learning from the study in Haryana

J-PAL partnered with the government of Haryana to compare strategies for increasing vaccination uptake such as conditional cash transfers, SMS reminders,

and immunization ambassadors. Suvita's programs have drawn on the results of that study, modifying some of the approaches used in the study's interventions.

#### **SMS** reminders

The first paper to be published from the Haryana study suggested that SMS reminders were not particularly effective on their own; a later paper showed that combining SMS reminders with other strategies can be effective.

It's possible that the RCT may not have been sufficiently powered to detect small changes in uptake as a result of SMS reminders. A number of obstacles prevent all SMS reminders from leading to treatment. For example, some people are not literate, and not everyone checks or responds to SMS messages regularly. Because the cost of sending each SMS message is quite low, the program may be cost-effective with only small increases in vaccination uptake as a result of the reminders.

Geographically-bounded RCTs may miss some effect of SMS reminders amongst migrant populations (who are particularly at risk of under-immunization). A person who migrates outside the area of the RCT during the study (e.g., to another state) will continue receiving SMS reminders, which may help them maintain their immunization sequence in their new location. But they may not be recorded as having received their vaccines in the study results, because this took place outside the area of data collection.

Suvita's SMS reminders program differs in some ways from the intervention studied in the RCT. For example, Suvita enrolls all children for whom it has data, not only those who show up to their first vaccination visit. Suvita then continues to send reminders regardless of whether children show up for subsequent vaccination visits, which may be more likely to help children get back on track if they miss a single dose.

## Immunization ambassadors

Suvita reviewed research on programs that identify and use nodes on a social network to improve uptake of health interventions, both in India and elsewhere. The Haryana RCT is one of only a few studies of this network-driven approach, and the only one Suvita knows of that focuses on immunization. The Haryana RCT showed that the intervention was effective and that combining immunization ambassadors with SMS reminders was a more cost-effective strategy for increasing vaccination uptake.

Suvita's ambassador program differs in some ways from the one studied in the Haryana RCT. For example, Suvita surveys villagers by telephone rather than in person, in part because of COVID-19 (though it would have wanted to experiment with this approach anyway, as Suvita expects it could be more cost-effective than in-person surveying). Suvita also collects nominations from new parents (who are enrolled for its SMS reminders), rather than from a random sample of the population.

#### Cash transfers

Suvita recognizes the potential effectiveness of cash transfers for increasing immunization demand, but has not yet actively looked into this approach. Other programs have faced obstacles implementing cash transfers in India. In addition, Suvita is engaged in a pilot study in Maharashtra examining the effect of congratulation messages sent to caregivers once a child has been vaccinated. One arm of that study examines cash transfers to ASHAs as an incentive to mobilize children to be vaccinated, as the government was not interested in cash transfers to parents.

If Suvita were to implement cash transfers, it expects the most feasible strategy would be mobile credit payments, as Suvita already has caregivers' telephone numbers. Incentives would need to be sent quickly following vaccination so that the incentives are clearly linked to getting a child immunized; this would depend on a robust data infrastructure.

One long-term approach might be for Suvita to begin by implementing SMS reminders at scale, then eventually shift to providing incentives as the government transitions to implementing SMS reminders itself.

# Partnering with government

The central government of India is actively supportive of SMS reminders for immunization.

The central government has an agreement with the health nonprofit ARMMAN to implement the Kilkari mobile health education service, which was first implemented by BBC Media Action and sends out health reminders, including reminders about immunization. The program's coverage varies from state to state because it uses RCH data, which also varies in quality and coverage from state to state.

The central government seeks to build a comprehensive data infrastructure to support SMS reminders across the country through Auxiliary Nurse Midwife Online (ANMOL), a system that would allow nurses and midwives to enter vaccination data into the RCH database in real time via tablets. The technology has been piloted in some areas, but it will likely be several years before it is widely adopted across India.

Suvita believes that it is realistic to have a long-term goal of transitioning the SMS reminders program entirely to the government, perhaps over the course of five or more years. Suvita could provide the government with ongoing technical assistance to ensure program continuity after this transition. Suvita believes that the immunization ambassador program is less likely than SMS reminders to be adopted by the government.

# Scale up and room for more funding

#### Maharashtra

Suvita has currently budgeted to continue SMS reminders in Satara, with tentative plans to roll out implementation in three other districts in Maharashtra in January, April, and June 2022.

Suvita would like to scale up reminders to the entire state of Maharashtra; the grant request for \$1.6 million would cover implementation of SMS reminders in the entire state for three years. The three-year timeframe would provide continuity of care, permit Suvita to identify and overcome possible barriers to government adoption, build government capacity to carry out the program, and provide time to partner with the government to secure additional funding. The budget does not include carrying out an RCT.

Once funding has been secured, it will be operationally very straightforward to scale up the SMS reminders program across Maharashtra state.

Suvita also aims to begin the ambassadors program in Maharashtra; it is in the early stages of discussions with the state government about this.

#### Bihar

Suvita currently delivers SMS reminders in one district in Bihar (Saran) and is about to launch in a second district (Patna). The enrollment process is more labor-intensive in Bihar than Maharashtra due to differences in the underlying data infrastructure - in Bihar, Suvita's data officers digitize data directly from primary health center birth records to enroll new babies.

Currently, the immunization ambassador program is focused on part of one district in Bihar. Over the next year, Suvita would like to expand the program across the entire district. Once it is being implemented at the district level, Suvita will have an understanding of how best to scale the program and will be able to expand it further.

In Bihar, the annual cost of SMS reminders state-wide would be around \$2.5 million, which is more expensive than in Maharashtra because of the more costly data collection process. Implementing the immunization ambassadors program at a state-wide level in Bihar, including conducting an annual survey to refresh the ambassador cohort, would likely add about \$5 million per year to the cost of SMS reminders.

Suvita has also had some initial conversations with Kilkari about the possibility of connecting its digitization process directly to Kilkari or to the RCH database in order to improve Kilkari coverage in Bihar.

## Scale up to additional states

Within India, 70% of underimmunized children live in six states. Suvita aims to expand both the SMS reminder and immunization ambassador programs to those six states over the next five years.

The cost to implement the programs varies based on the size of the state and whether health data need to be digitized, as data collection is a substantial portion of the overall cost.

Suvita has not yet examined the data systems in each of the six states. If Kilkari has high coverage in some of the states, then Suvita may not need to provide SMS reminders.

Under the current program models, the overall annual cost to implement the ambassadors program in the six states is estimated to be around \$29 million per year, and the cost to provide SMS reminders in the six states is estimated to be around \$14 million per year.

## **Funding for 2022**

Suvita is currently seeking funding of around \$0.5 million for part of next year; this funding would permit it to iterate the ambassador model and prepare it for scale up; to continue the planned roll-out of SMS reminders; and to generate stronger evidence around the impact of both programs.

All GiveWell conversations are available at <a href="http://www.givewell.org/research/conversations">http://www.givewell.org/research/conversations</a>