

ANMs being trained on nominating ambassadors through ANMOL in Gurgaon.. Photo Credit:: Movin Ansari, J-PAL SA

# Elevating Immunization Demand: Harnessing Social Networks and Reminders

A Case Study Based on a Policy Pilot in Haryana

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#### **Section 1: WHY**

Vaccination against childhood diseases is one of the most important public health interventions. Although vaccines for several life-threatening diseases are now available, low vaccination coverage continues to be a problem, especially in low-income and middle-income countries (LMICs). The <u>Immunization Agenda 2030 (IA2030)</u> has also identified reaching out to zero-dose children as a strategic priority and has set a target of a 50% reduction in the number of zero-dose children by 2030.

India's Universal Immunization Programme (UIP), launched in 1985, targets approximately <u>26 million newborns annually</u>. Over the years, the program was strengthened by adding newer vaccines, achieving self-sufficiency in vaccine production, adopting an open-vial policy, improving cold-chain and logistics management, strengthening surveillance for vaccine-preventable diseases, and reporting adverse events following immunization. Despite these initiatives, as of 2019, only <u>76.4 percent</u> of Indian children were fully immunized against these diseases. Based on administrative data and research conducted by J-PAL South Asia (SA), over <u>95%</u> of Indian children receive the first vaccine, however, this is followed by steep drop-offs in the coverage of subsequent immunization shots. This suggests that there is no <u>strong</u> <u>opposition to vaccination</u>, except for in a few specific regions with a community specific hesitancy issue<sup>1</sup>.

While interventions strengthening the supply side of immunization by ensuring availability and reliable provision of vaccines are important, low coverage is also often driven by demand-side factors such as limited or inaccurate information, lack of trust or behavioral biases among caregivers. Therefore, long-term improvements in immunization coverage will likely require systemic changes to both the supply and demand sides of immunization programs.

J-PAL SA affiliates have evaluated the impact of <u>multiple interventions</u> addressing both the supply and demand sides of immunization. Evidence from J-PAL SA's work in

<sup>&</sup>lt;sup>1</sup> For example, the district of Mewat in Haryana has the lowest full immunization rate (54%) in the State of Haryana. This district is also categorized as the only <u>aspirational district</u> in the State out of the 112 most underdeveloped districts identified in 2018 as a part of the <u>Aspiration Districts Program</u>

Rajasthan suggests that while addressing supply side issues through organizing reliable camps and ensuring staff attendance improves immunization rates modestly, providing small incentives to caregivers is more effective, and cost-effective in improving immunization rates. Previous research suggests that offering incentives, sending reminders, and using influential individuals in the community, can build parental demand for vaccination and increase child immunization. Yet these programs were rarely evaluated to examine impact at scale, compare different variants of each strategy, or test these policies in combination with one another.

# A Randomised Evaluation of Demand-Side Policy Bundles

To complement UIP, the Government of Haryana was interested in innovative interventions targeted towards increasing parental demand for immunization. The Haryana government collaborated with researchers and J-PAL SA to conduct a randomized evaluation in seven districts with especially low vaccine coverage. From 2016 to 2018, J-PAL SA affiliate researchers evaluated the <u>effect of a combination of three policy tools</u> on increasing demand for immunization, both individually and in combinations. These interventions included:

- 1. Non-financial incentives Mobile credits were provided to caregivers of children aged between 0-12 months and receiving at least 1 of 5 of the scheduled vaccines. The mobile credit was intended to offset any costs to the parents during the day they took their children to be immunized. Different variations of incentives were introduced, including flat rate incentives for all doses of the vaccine, sloped incentives (progressively increasing upon the administration of each successive dose), high value incentives and low value incentives.
- 2. SMS reminders Customized reminders were sent to caregivers for vaccines due for children aged 0-1 years.
- 3. Local immunization ambassadors Community members were requested to nominate individuals who are skilled at spreading information in their social networks. These individuals were enrolled as local immunization ambassadors to disseminate information on immunization on a voluntary basis. Variations were introduced in the types of individuals who were selected as ambassadors, such as individuals trusted by community members, individuals skilled at spreading information (gossips), trusted individuals who are also skilled at spreading

information or random individuals selected by the research team to test the effects of each.

The evaluation tested the effect of around 75 policy packages combining different variations of these interventions<sup>2</sup> on parental demand for immunization. The study involved 140 Primary Health Centres (PHCs) and 755 Sub – Centres (SCs) in 2360 villages across 7 districts of Haryana.

The results from the evaluation proved to be promising showing that certain combinations of interventions helped boost routine immunization substantially. Based on the evaluation and results found, two models with the potential for scaling were identified using <u>machine-learning techniques</u>:

• Package 1: Ambassadors (Gossips)<sup>3</sup> + SMS Reminders:

This package consists of (1) deploying local immunization ambassadors to disseminate information on immunization and (2) sending monthly text reminders to caregivers of children. This proved to be the most cost-effective intervention for improving full immunization, increasing full immunization rates by 26%, and increasing the number of immunizations per dollar by 9.1 percent relative to the comparison group.

# • Package 2: Ambassadors (Gossips) + SMS Reminders + Sloping Incentives:

This package consists of (1) local immunization ambassadors and (2) text messages, combined with (3) small incentives conditional on the vaccine delivery as nudges to boost parental demand for immunization. This package was the most effective combination, increasing full immunization rates by 45

<sup>&</sup>lt;sup>2</sup> The basic interventions for increasing parental demand for vaccination includes non-financial incentives, SMS reminders and local immunization reminders. These interventions were varied and cross-randomised to arrive at 75 combinations. The variations in incentives included - High incentive flat payment, high incentive increasing payment, low incentive flat payment and low incentive increasing payment. The types of local immunization ambassadors tested were - Information hubs (gossips), trusted individuals, trusted information hubs and random individuals. Further, the researchers also randomly varied the fraction of caregivers receiving reminders in a chosen catchment area as 0%, 33% and 66%. More details on the research design can be found here

<sup>&</sup>lt;sup>3</sup> In the Haryana study, 3 types of local immunization ambassadors were tested for their impact on vaccinations. Gossips or individuals highly skilled at spreading information were found to be most effective in combination with SMS reminders and incentives. For the remainder of the document any reference to ambassadors would imply a reference to gossip.

percent. It was particularly effective in areas with very low coverage, increasing full immunization by nearly <u>500% from 2 to 13 measles shots</u> per village per month.

These results suggest that local immunization ambassadors amplified the effect of the other interventions, by diffusing information about the incentives widely and explaining the content of personalized SMS reminders.

# Section 2:WHAT

# The Ambassador Program Pilot In Haryana

Based on the evidence on the effectiveness of the packages mentioned in the previous section in improving parental demand and thereby full immunization rates, J-PAL SA began exploring pathways with state governments to implement these packages at scale.

In 2019, the National Health Mission (NHM), and the Government of Haryana (GoH) entered into a Memorandum of Understanding (MoU) with J-PAL SA for using real-time administrative data for better program delivery and decisions. Under the MoU, NHM Haryana expressed interest in piloting to scale the ambassador and text message program (Package 1) in three districts, Palwal, Gurugram, and Mewat. Package 1 was selected since the state was already running an SMS immunization reminder program for caregivers, and since this package was identified as the most cost effective way of ensuring the program could be sustained in the long term keeping in mind budgetary requirements. Having an active strategy for text message reminders, the Government of Haryana requested J-PAL SA to focus on developing a strategy for the identification of ambassadors. This led to the development of the Ambassador pilot.

The pilot aimed to find a scale-up pathway best suited to identifying ambassadors most cost-effectively and accurately. The objective of the pilot was to learn about the feasibility of operationalizing the Ambassador program through government infrastructure, and to identify a sustainable pathway to scale the program across the state of Haryana. In consultation with the Government of Haryana, two pathways were identified for piloting: a. ANMOL: NHM, Haryana wanted to test the recently launched mobile application, ANM Online (ANMOL), aimed at digitizing the workflow of frontline workers - Auxiliary Nurse Midwives<sup>4</sup> (ANMs). This application was launched with the objective of streamlining and reducing paperwork in the data entry tasks of ANMs, who otherwise enter data related to births, deaths, maternal and child health, non-communicable diseases, etc. in around 15 physical registers.

ANMOL was chosen as a pathway for ambassador selection based on interest from NHM, with the intention of encouraging real-time usage and data entry on the platform. ANMOL also provides a one-stop access to data on children to be immunized and allows for regular monitoring of the pilot and reliable tracking of immunization outcomes. Another advantage of using ANMOL as a pathway was that the original evaluation in Haryana was implemented using SANA, a similar mHealth platform developed by J-PAL for the purposes of the evaluation.

ANMs were tasked with collecting nominations for ambassadors from parents who visited immunization camps, and entering these nominations on ANMOL, which allowed for real-time tracking. The government first suggested conducting the pilot in two districts, Gurgaon and Mewat. The low take-up of ANMOL in Mewat prompted the government to suggest Palwal and Gurugram, allowing for testing the ANMOL pathway in both urban and rural contexts.

b. Mobilizer Mitras: In Mewat, the penetration of ANMOL was significantly lower. This was due to several reasons including the presence of very few ANMs in the area as well as a close knit community which is uncomfortable in interacting with ANMs who are not from their community. This meant that an alternate pathway had to be explored for identifying ambassadors. The Government of Haryana suggested deploying Mobilizer Mitras, an existing special cadre of workers selected from within the communities to complement the work of ANMs and build consensus and support for immunization within the district, for conducting

<sup>&</sup>lt;sup>4</sup> In the course of the project, we engaged with 3 types of frontline workers -

<sup>1)</sup>Auxiliary Nurse and Midwives (ANMs): ANMs are fixed salaried workers who immunize children as per due-lists and maintain records on MCP cards, their registers/ diaries as well as ANMOL. 1 ANM is usually assigned per 10,000 people. ANMs are supported by ASHAs

Accredited Social Health Activists (ASHAs) are usually assigned per 1000-2500 people. They mobilize pregnant women and children for immunization and get incentivized by the government in return. They are paid on an incentive basis.
 Mobilizer Mitras (MMs): A special cadre of health workers in the district of Mewat were created with the objective to improve access and mobilize the underserved population for immunization. 80-100 MMs are employed in Mewat.

door-to-door data collection of ambassador nominations and enrolling the top nominees into the program. Mobilizer Mitras are unique to Mewat and are not found in other districts in Haryana, or in other states, making it a non-viable pathway to scale-up the ambassador program statewide. However, the team decided to go ahead with this pathway considering the need to pilot this program in Mewat, given that the district has the lowest immunization rates in Haryana.

# Section 3: HOW

To ensure operational simplicity, the ambassador program, which involved identification of ambassadors to spread information on Routine Immunization, was rolled out in three phases:

- a. **Phase I:** In-person collection of ambassador nominations<sup>5</sup> from community members/caregivers by ANMs or Mobilizer Mitras based on the most popular nominations.
- b. **Phase II:** Field identification and enrollment of ambassadors for voluntary information dissemination tasks. This involves on-field identification of nominated ambassadors by frontline workers and seeking their consent for enrollment in the program.
- c. **Phase III:** NHM sends text messages to ambassadors containing general information on the importance of immunization and encouraging them to inform caregivers in their network about immunization sessions in the village.

# Implementation through ANMOL

The implementation of the ambassador program through the ANMOL app required close collaboration between J-PAL SA staff and various levels of the Haryana government responsible for immunization. The process involved the following:

<sup>&</sup>lt;sup>5</sup> Identifying gossips or ambassadors involved two main steps - (i) Collecting ambassador nominations from residents of a chosen community level (village): In social networks research, it has been found that people are able to name good information diffusers even if they don't have information about the social networks of other residents in a village (<u>Baneriee et.al. 2019</u>). Therefore, identifying ambassadors would entail collection of nominations from residents of a village. The top nominee, therefore, becomes the chosen ambassador for the village. In the scale-up pilot, ANMs were tasked with collecting these ambassador nominations from caregivers before administering the vaccine. A minimum of 15 nominations per village was required to be collected. (ii) Identification and enrollment of ambassadors: Once 15 nominations were received, the top unique nominees were identified using an algorithm designed by us. The ANM was then tasked with identifying the nominee in the village and seeking their consent for voluntary information dissemination.

- Identification of Key Officials: Identifying key officials at all levels of the government was a crucial first step to support the program rollout and subsequent decision-making. The officials included department heads and nodal officers at the state level, Chief Medical Officers and District Immunization Officers at the district level, Medical Officers at the Block level, Information Assistants at the PHC level and even influential ANMs in some areas. Leveraging support at each level helped in streamlining implementation, from obtaining permissions and training dates to pushing front-line workers on the ground.
- Ground analysis and Integration of program within existing infrastructure: J-PAL SA, in partnership with NHM Haryana, explored options to integrate the ambassador program into ANMOL. It was decided that the ambassador identification would be integrated into the child registration module in ANMOL. Whenever an ANM pulled up the record of a child whose caregivers have not yet nominated a member of the community as an ambassador, ANMOL prompted ANMs to ask caregivers to nominate individuals in their communities who were good at disseminating information. The app then prompted ANMs to ask a few questions to collect identifying information for the nominees.
- Monitoring and Feedback: To ensure program buy-in and progress tracking by government officials, J-PAL SA created a real-time dashboard based on ambassador nominations data collected by ANMs in Phase I. Officers at the district as well as the state level were trained by J-PAL SA staff on the key variables to track to ensure timely completion of Phase I. In addition to this, the J-PAL SA team also sent weekly progress reports to these officials to ensure concurrent monitoring of the ambassador nomination process. This top-down monitoring approach helped in identifying and following up with ANMs in low-performing areas<sup>6</sup>.

<sup>&</sup>lt;sup>6</sup> The dashboard was taken offline after the completion of Phase I. This is because the dashboard was designed to track ANM data entry trends in ANMOL as well as specific data entry trends for the ambassador nomination questions that were integrated in ANMOL. Once Phase I was complete, the ANMs were required to enroll 1 ambassador per village as a part of Phase II. To track the completion of this phase, the J-PAL SA team shared a spreadsheet template with Information Assistants at the PHC level, who coordinated with the ANMs to track and digitize the completion of this task per village.

- Training of Implementation Officials: Frontline workers who would collect data on ambassadors and enroll them needed to be trained on the process and new additions onto ANMOL. Initially, Accredited Social Health Activists (ASHAs) were considered as the front-line workers to carry out the field enrollment process. Training of the trainers i.e. Information Assistants (IAs) at the district level were also conducted in Palwal and Gurgaon. However, post this, there was resistance from the ASHAs as this additional task did not fit into their existing incentive-based payment structure. Due to this, ANMs were chosen to take up this task based on discussions with the state government. The model of training was also changed from training-of-trainer to a direct model where the training was led by the J-PAL SA staff.
- Recording of Ambassador Nominations: Once ANMs were trained to ask relevant questions, they collected ambassador nominations during routine immunization sessions in villages. The ANMOL app guided ANMs (here) to ask caregivers to nominate individuals in their communities skilled at informal information dissemination.
- Collation of Nominations: After collecting a minimum of 15 nominations per village, J-PAL SA ran an algorithm devised during the evaluation to ensure centrality of ambassadors to shortlist the top 6 ambassadors in each village. In 58 villages where no nominations were collected by frontline workers, mop-up surveys were conducted by J-PAL SA field staff leading to identification of 56 ambassadors.
- Enrollment of Ambassadors: Once the list of top ambassadors were compiled, it
  was shared with the government. J-PAL SA trained ANMs to identify ambassadors
  on ground based on the list, obtain their consent, and gather their contact
  information for program enrollment. Ambassadors then receive text messages at
  intervals set by the Government of Haryana to encourage people in their village
  to get their children immunized.
- Sending Text Messages to Enrolled Ambassadors: Immunization related text
  messages approved by NHM Haryana were sent to the ambassadors on a
  weekly basis, highlighting the importance of immunization, details of local routine

immunization camps and prompting the ambassadors to encourage people in their communities to get their children vaccinated.



# Process Chart for the Ambassador Program

# Roles and responsibilities of Government officials in the implementation process

District Immunization Officer (DIOs)	Medical Officer (MOs)	ANMs
<ul> <li>Nodal officers managing the program at the district level</li> <li>In charge of overseeing overall progress of the program and PHC wise performance</li> <li>DIOs use the progress report shared by the J-PAL SA team to take measures to improve ANM performance on the</li> </ul>	<ul> <li>Direct supervisors of ANMs and responsible for the performance and progress of ANMs attached to different PHCs</li> <li>Incharge of supervision of ANMs to ensure they are administering the questionnaire properly</li> <li>Incharge of tracking nomination numbers for their PHC and each ANM</li> </ul>	<ul> <li>Incharge of collecting nomination data from caregivers by collecting information at immunization sessions</li> <li>ANMs use ANMOL app to record nominations made by parents</li> </ul>

program	using the J-PAL SA ANMOL Dashboard	
	- Point of contact for	
	feedback on how to	
	improve data collection	
	by ANMs	

# Implementation In Mewat Through Mobilizer Mitras

In Mewat, J-PAL SA collaborated with NHM to train the mobilizer mitras (MMs) to collect nomination data through short door-to-door household surveys. The process followed to collect the information was similar to that of the original study.

The process for collection of nominations through the special cadre of Mobilizer Mitras is detailed below:

- 1. J-PAL SA adapted the ambassador nomination questionnaire for the mobilizer mitras for door to door data collection.
- 2. The mobilizer mitras in Mewat were trained in administering the questionnaire to beneficiaries.
- 3. The mobilizer mitras collected ambassador nominations from a random sample of households through door-to-door surveys.
- 4. The ambassadors were identified by running the nomination data through an algorithm developed by J-PAL SA to identify the top 6 nominations in each village.
- 5. Mobilizer mitras were then trained on the ambassador enrollment protocols
- 6. The ambassadors were enrolled in the program by Mobilizer Mitras, which involved seeking their phone numbers, and consent for voluntarily disseminating information on routine immunization in their villages.

# Section 4: RESULTS

Through the course of the pilot, the nominations data collection was launched in 935 villages acrossPalwal (439), Gurugam (445) and Mewat (51). At the time of completion of the ambassador pilot, a total of 857 ambassadors were identified and enrolled from

884 villages across Gurugram, Mewat and Palwal. The ambassador enrolments were successfully completed by 419 ANMs, with enrolment completion rates close to 96% in Gurgaon, and 90% each in Mewat and Palwal.

#### **Overall Lessons**

The primary goal of the Ambassador pilot was to assess the feasibility of scaling up the ambassador program using the Government of Haryana's M-Health platform, ANMOL. The choice of ANMOL was based on its integration into government infrastructure. However, field observations from the operationalization of the pilot suggested that ANMs (Auxiliary Nurse Midwives) were not consistently using the ANMOL platform.

#### Challenges encountered during the pilot

Between 2020 and 2022, the J-PAL SA team, with support from NHM, Haryana, conducted diagnostic activities to analyze the usage patterns of the ANMOL application. The aim was to understand how extensively ANMOL was utilized for recording service delivery data and health outcomes related to routine immunization. The key findings from this diagnostic exercise are listed below:

- 1. Low Usage of Child Services Modules: In 2022, only 83% of ANMs used the ANMOL tablet once a month to record any service, and module-wise data entry for child registration and vaccinations remained low at 34% and 60%, respectively.
- High Completeness but Low Frequency of Data Entry: Comparing entries in RCH registers with ANMOL, 94% of children in Palwal and Gurugram's RCH registers were also found in ANMOL. However, the frequency of data entry was low, with only 43% of ANMs registering any child in the Child Registration module in May 2022.
- 3. Very Low Usage of Vaccine Module: Compared to child registration, ANMOL's vaccine module had minimal usage, with only 0.8% of vaccinations recorded in the registers reflected in ANMOL. This figure was 24% for BCG and dropped to 3% for later vaccines like MR-1. Consequently, full immunization rates in ANMOL were only 3%. The low uptake was attributed to barriers in data entry, such as a complex user-interface that hindered ANMs. There was a lack of awareness

among ANMs about advanced features, and the inability to generate due-lists by session-date, record migration, or filter by due-date were also challenges.

- 4. High Data Accuracy When Data Is Entered: Despite low usage, data quality was good. Data accuracy for dates of vaccines and date of birth was 97.8%.
- 5. Lack of Data Demand: The primary tracking for vaccination outcomes was through HMIS, leading to limited utilization of vaccination data from ANMOL at the district and state levels.

# **Other Challenges:**

- a. **Parallel data entry:** Parallel data tracking systems are maintained by the government at the Public Health Center level (HMIS) and at the child level (RCH Registers). The resulting double data entry requirements led to low uptake of the app and resistance from ANMs who preferred manual registers.
- b. Low scope for scaling up ANMOL: The Government of Haryana does not plan to expand ANMOL to cover all districts in the future.
- c. **Need for constant follow-ups:** The need for constant monitoring, follow-ups, training, and meetings with state and district officials to collect ambassador nominations and enrollments through ANMOL.

Based on the diagnostic activities analyzing ANMOL, J-PAL SA suggested simple user-interface tweaks, including generating tracking lists by eligibility and training ANMs to use advanced features and barcoding. Additionally, it was suggested that data demand could be increased through additional cuts on the dashboard, such as indicators for eligible children vaccinated, registrations, and overall vaccinations. Data quality audits, including outbound calls to beneficiaries and ANMs for testing and follow-up were also recommended to enhance data quality and usage.

In summary, while ANMOL had the potential to be a cost-effective government pathway for scaling the program, issues related to ANMOL's usage and ANMs' technical proficiency necessitated close collaboration between the J-PAL SA team and the government to ensure the program's success.

# Learnings from the Mobilizer Mitra pathway

During the pilot of the ambassador program through Mobilizor Mitras in Mewat District, the J-PAL SA team collated learnings on key issues that hindered the scalability of the model:

- District Support is vital: The lack of district support was a significant cause of delays in launching the program in Mewat. State-level directives alone were insufficient to initiate timely implementation. Success depended on the combined backing of both state and district officials, which only became possible with the appointment of a new District Immunization Officer in Mewat.
- Establishing Direct Communication via WhatsApp: To facilitate efficient communication, block-wise WhatsApp groups were created, connecting cluster coordinators, block mobilizer coordinators, district mobilizer coordinators, and the J-PAL SA team. Mobilizer Mitras were expected to report their progress within these groups, allowing real-time resolution of doubts and concerns from all stakeholders.
- 3. In-Field Monitoring: The J-PAL SA field staff actively monitored the data collection process by shadowing Mobilizer Mitras at least once. They also conducted multiple in-person visits to low-performing Mobilizer Mitras to provide retraining and clarify any issues. This proactive approach accelerated the data collection process.
- 4. **Specialized Cadre:** The Mobilizer Mitras are a specialized cadre only present in the district of Mewat and have been hired under the aspirational districts program. The cadre does not exist in any other district or state, therefore making it a non viable scale-up option.

# Section 5: SO WHAT

J-PAL SA's <u>RCT in Haryana</u> highlighted the effectiveness of cost-effective demand-side interventions in substantially improving parental demand for immunization. The ambassador pilot explored the ANMOL platform as a pathway for the implementation

of Package 1 (a combination of SMS reminders and information dissemination by local ambassadors) through government infrastructure.

Learnings from the pilot showed that while mHealth platforms are potentially cost-effective pathways for ambassador enrolment, its effectiveness depends on the level of uptake and usage by frontline workers. Therefore, it is imperative to identify alternate tech-based pathways to scale the program effectively. J-PAL SA conducted a scoping exercise, covering several implementation organizations working on immunization in India. Through our research, we have identified two NGOs that may be suitable partners for helping scale the Ambassador program - Suvita and Khushi Baby.

Suvita is an NGO that is currently implementing the ambassador program in Bihar and Maharashtra, having been inspired by the evidence generated by the original evaluation of the program in Haryana. They use phone surveys to collect ambassador nominations and enroll top nominees into the program. The BID pilot in Gurugram and Palwal has shown the need to find a pathway that can overcome the issues of take-up of ANMOL due to constraints in government capacity in terms of tech literacy and uptake of newer programs. J-PAL SA is therefore interested in identifying if the phone survey model employed by Suvita could work as an alternate pathway to scale up the Ambassador program. We are exploring the potential of working with Suvita to verify their methodology for the identification of ambassadors on the ground.

Khushi Baby is an NGO that is the Nodal Technical Support Partner to the Department of Health in Rajasthan. Khushi Baby looks to address the challenges we faced with ANMOL through CHIP ("Community Health Integrated Platform"), a digital public health good, developed over the last 7 years, which is currently being scaled across Rajasthan, India's largest state, in phases. CHIP includes offline-ready, m-health applications for the three key health workers of the Indian public health system: the ASHA, the ANM, and the Medical Officer.

In addition to these two NGOs, we are also exploring other partners and pathways for scale if the stated pathways don't seem feasible.

#### Section 6: LESSONS LEARNED

Through the course of the Ambassador Pilot with NHM Haryana, the J-PAL SA team learnt some important lessons related to scaling up a health program through government infrastructure. These lessons are as follows:

#### 1. Importance of securing stakeholder support and trust at different levels:

It is essential to understand the operational and institutional hierarchies of the government department as well as identify key champions who are able to fast-track activities on ground, even if they are not central to the program on paper. For example, Information regarding the potential bottlenecks of engaging ASHAs in the enrollment phase was communicated to us by a key district level official, which led to larger conversations with the state. Hence, such engagement is essential as a way of risk mitigation against bureaucratic shuffling and subsequent delays.

#### 2. Creating tools/ systems that enable direct stakeholder engagement:

The ANMOL Dashboard proved critical in phase I, which was the most labor intensive and time consuming phase of the program. For instance, at the district, block and PHC level, officials were trained on how to monitor the incoming nominations data on the dashboard. It was observed that an upward trend in the usage of the dashboard coincided with the increased weekly nominations received through the ANMOL App. The easy interface enabled the supervisors to directly reach out to specific ANMs where nominations data collection was lagging behind.

# 3. Generating a sense of ownership over the program amongst implementers is requisite for successful scaling up :

Resistance from front-line workers was a recurring challenge across both phases of the Ambassador program. Given the heavy workload of ANMs and Mobilizer Mitras, the task of nomination data collection and enrollment was primarily viewed as an additional task on their plate. For long term sustainability and scalability of the program, a sense of ownership over the program would need to be developed amongst the supervisory staff both at the state and district level. This could be implemented through generating demand for programmatic data in a continuous and consistent manner. For instance, Discussions about the progress of the tasks under the program should be facilitated at PHC-level monthly meetings or through existing official whatsapp groups.

#### 4. Communicating urgency in an effective manner with Front Line Workers:

At the ground level, Frontline workers like ANMs and ASHAs are tasked with a multitude of ad-hoc tasks over and above their departmental mandate. Setting clear expectations and timelines would encourage the workers to prioritize the programme. In the specific context of the ambassador scale-up, communicating fixed timelines and targets for a task proved more effective than the expectation of delivering recurring tasks without a specific end date. For instance, in phase I, ANMs were instructed to collect nomination data at all routine immunization sessions indefinitely. However, towards the end of the first phase, the instruction was tweaked and they were told to collect a minimum of 15 nominations by the end of the month. This fastened the pace of data collection.

# Annexure

Ambassador Nomination Questions integrated into the ANMOL app		
S.no.	Questions	
1.	Who are the people in this village, who, when they share information, many people in the village get to know about it?	
	For example, if they share information about a music festival, street play, fair in this village, or movie shooting many people would learn about it. This is because they have a wide network of friends, contacts in the village and they can use that to actively spread information to many villagers. Could you name one such individual, male or female, that lives in the village/mohalla/sector (within OR outside your neighborhood in the village/mohalla/sector) who when they say something many people get to know?	
2.	Are you sure there are no such people in your village?	
3.	Name of nominee (Instruction to ANMs: please ask for full names)	
4.	Nickname of nominee	
5.	Gender of nominee	
6.	Age of nominee	
7.	Occupation of nominee	
8.	Household head's name	
9.	Landmark near nominee's house	
10.	Nominee's village/slum/mohalla/ward/locality name	
11.	Nominee's Phone number	