

# Bihar: Vaccine Support Group

Key Learnings Document



February 2022

BILL & MELINDA  
GATES foundation

Dalberg

PCI

care

FAT

QUILT.AI

# Executive Summary

- In October 2021, **only ~40 million eligible individuals in Bihar** had taken any dose of the vaccine, driven in part by supply side constraints and demand side hesitancy<sup>1</sup> towards getting vaccinated
- **BMGF** worked with Dalberg and FAT to **create an engine** comprising on-ground workers, private players, and multi-lateral institutions to **aid state government programs addressing vaccine hesitancy** and communicate the importance of the vaccine to diverse demographics in Bihar
- During post-Delta apathy, the engine **assisted the government's monumental efforts** in transforming Bihar into the **4<sup>th</sup> largest vaccine administrator in India** through the following methods:
  - **Strategic segmentation** of hesitancy (e.g., PLW, loss of income issue)
  - **Tailored communication** based on behavioural insights (e.g., community appeal, loss aversion)
  - **Supportive on-ground capability** enhancement (e.g., job aids for healthcare workers)
- As **Omicron hit** and ground realities changes, the **engine pivoted to tackle new requirements by:**
  - **Repurposing existing solutions** (e.g., rapid response teams),
  - **Using existing behavioural insights** for two doses for adolescents (e.g., video-based testimonials) and booster shots for the elderly (e.g., provider appeal)
  - **Quick digital based delivery** (WhatsApp bots)
- With **COVID cases falling**, the **engine aims to use its experience and network to assist in the uptake of telemedicine** to help support the continuous effort of the Government of Bihar to drive better healthcare

Note: For the purpose of this document, we have evaluated hesitancy, as exhibited by individuals, across 3 different levels – Individuals who are fully unvaccinated, partially unvaccinated and those who are yet to avail booster doses

# Together, these partners formed an engine to support different government programs to improve vaccination uptake

## Government

### State Health Department of Bihar

- Successful record of launching campaigns in Bihar
- Successful track record of active assistance in multiple government health programs
- Line of contact and credibility with the ACS (Health), AED (Health) and Dr Hemant
- Active tracking of government priorities and programs (e.g., RRT, e-Sanjeevani)
- Connected to COWIN database, ASHA Workers

## Multi-Lateral Partners

### UNICEF, CHAI, Other Dalberg connects

- Established relationship through project and prior collaborations with UNICEF, CHAI
- Currently engaged in COVID vaccination and policy design work across other emerging market countries

## On-Ground Partners

### PCI, Care, CFAR

- Weekly cadence with the all on-ground partners in the RCCE forum
- Hotline with PCI, CARE to ideate-discuss-test findings (e.g., Understanding of e-Sanjeevani amongst ANM, testing job aids)
- Synergistic working mechanism including data and insight sharing to provide leverage to each other
- Tested/Proven execution mechanism

## Private/Tech Actors

### Quilt.AI, Yellow, WhatsApp, Facebook

- Established working relationship with Quilt. Yellow
- Established understanding of requirements, capabilities of Facebook and WhatsApp
- A deep understanding of the potential uses/add-ons to leverage designed interventions



# The engine has worked with the GoB across all the stages of COVID : from apathy to crisis to forward looking interventions

Challenges

Interventions

## 1 / Delta and post-Delta apathy

October '21 - December '21

**COVID loses its urgency among citizens leading to lower vaccination**

- COVID appropriate behaviors declined
- Misbeliefs, complacency, and changing guidelines led to low rates of vaccination

- Targeted specific high-priority groups (PLWs) with information needed via government (and digital) channels
- Built trackers to empower local communities with the relevance of and reminders for their 2<sup>nd</sup> dose

## 2 / Omicron crisis mode

January '22 - February '22

**Omicron requires tactical support along with booster /adolescent vaccination**

- Omicron proved to be very infectious
- Newer forms of vaccination coincided with confusion over responses to Omicron

- Designed solutions for bolstering adolescent and 3rd dose uptake
- Built solutions for increased WhatsApp use enabling faster access to relevant info
- Identified areas for RRT (rapid response team) strengthening

## 3 / Building resilience

February '22 - April '22

**Forward looking interventions and systems for Bihar deal with future challenges**

- Strengthening governmental response structure
- Reducing impact of COVID on thematic areas such as schools

- Opportunity to build sustainable communication channels within government and its nonprofit partners
- Opportunity to improve mechanisms to ready for next wave
- Other interventions as necessary

# Bihar has administered ~117 million doses through strong government initiatives, with the engine playing a supporting role in these programs

## The BMGF engine has supported a few of the government's strong multi-channel outreach programs



The Vaccine Mitra bot has **~800k unique users**, **~126 million messages**<sup>i, 1</sup>



Campaigns have recorded **~2 million engagements** on Twitter<sup>2</sup>



**Job aids for HCWs** on hesitancies for specific segments have been created<sup>2</sup>



**185k+ post engagements** generated on Facebook<sup>2</sup>

## The government has administered ~117 million doses to a majority of the eligible population<sup>3</sup>



**~65 million** first doses administered



**~51 million** second doses administered



**~700k** precautionary doses administered



**4<sup>th</sup>** among total doses administered **per state**

Notes: i. As of January 2021

Sources: 1. Yellow Messenger; 2. Friday and Theo; 3. CoWIN data, February 17<sup>th</sup> 2022

# This document has learnings across solution approach, solution themes and on-ground solution execution for two phases of work



## Approach

*Adapting a 8 week diagnostic and design approach suitable for tackling apathy to a rapid 2 week diagnose-design approach to tackle Omicron-led rapidly changing situations on the ground*



## Themes

*Identifying suitable message, messaging style, channel, influencer changing as per target audience of - PLW, Senior Citizens, Adolescents*



## Execution

*Adapting a physical presence heavy execution style to digital delivery to help increase speed of implementation and leverage existing government programs*

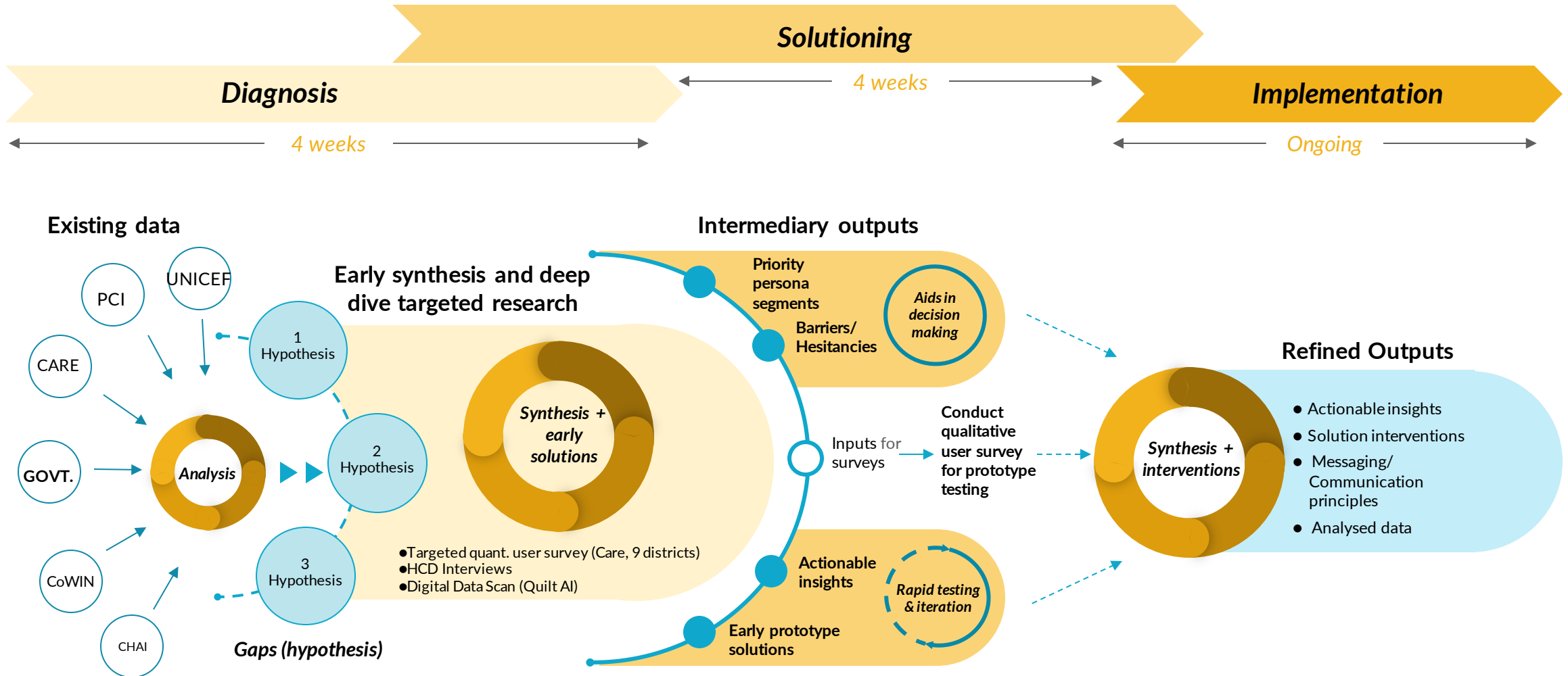
1 /Delta and post-Delta apathy

# Over the 8 weeks in Phase 1, the project synthesized existing information, plugged gaps for a detailed diagnostic and solution design

Execution

Themes

Approach



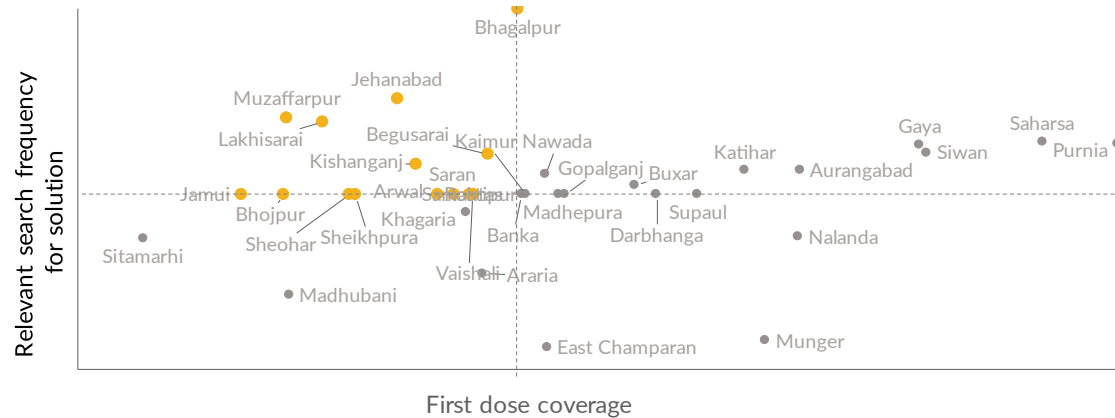


# The engine used social listening to analyse online search terms relevant to our solutions to arrive at district level focus

## Prioritization Matrix:

Based on vaccination coverage and frequency of relevant internet searches<sup>1,2</sup>

**Solution 1: 'Mother safe, child safe' – shifting the narrative for PLW and their families**

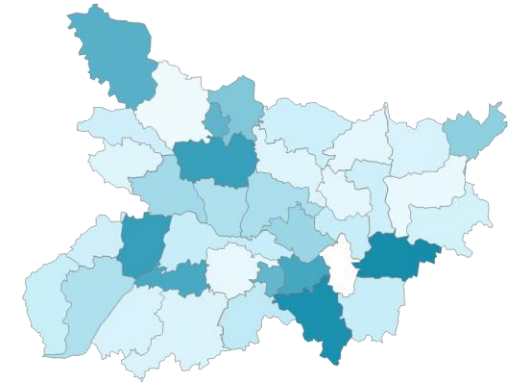


## Highest priority districts:

Based on standardised averages of search frequency and vaccine coverage

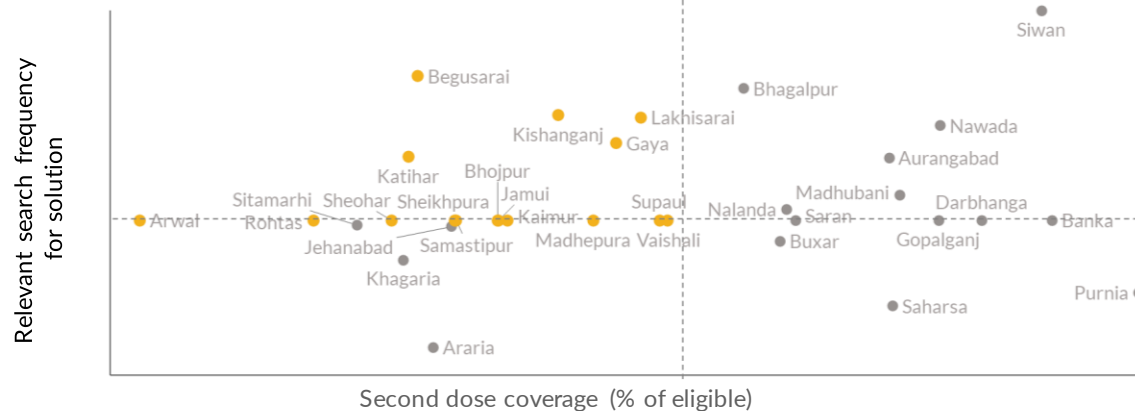
### Highest priority districts<sup>3</sup> -

- Bhagalpur (R)
- Jamui (R)
- Bhojpur (R)
- Muzaffarpur
- Lakhisarai
- Jehanabad
- West Champaran (R)



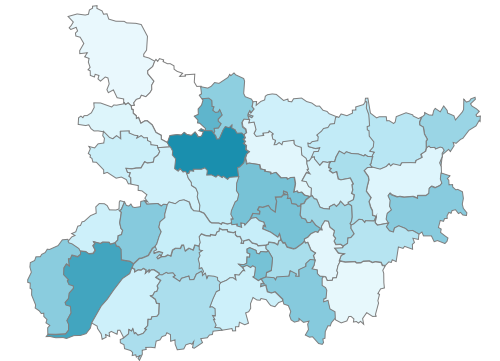
Based on an index score calculated using standardised values of "access to dosage" and "relevant searches". Darker shades indicate higher priority due to greater number of searches and lower vaccination coverage

## Solution 2: Reinforcing relevance and due date of 2nd dose



### Highest priority districts<sup>3</sup> -

- Muzaffarpur
- Rohtas
- Sheohar
- Sheikhpura
- Samastipur
- Begusarai
- Bhojpur (R)



Notes: 1. Relevant internet searches are on COVID vaccination around pregnancy and COVID certificates 2. Internet search data is available for 24 out of 38 Bihar districts; interpolated with average values for others 3. Recover (R) districts refers to those in which PCI is running a vaccine support program on the ground;

# District-level hyperlocal interventions were identified using correlations between demographic variables and vaccine internet searches

The following variables were tested for correlations...

## Vaccine status and searches

- Took first dose
- Took second dose
- Eligible for second dose
- Missing after being eligible for second dose
- Search frequency for solution 1, 2

## Health factors

- Health issues: Anemia, Blood pressure, hypertension, cancer screening
- Tobacco and alcohol consumption
- Child feeding practices
- Child access to healthcare and vaccination
- HH with health insurance coverage
- Women and children's nutritional status
- Maternal and delivery care

## Demographics:

- Marriage, fertility, family planning
- Birth rates
- Women and children's education
- Use of clean cooking fuel

## Connectivity and access to public services:

- ASHAs, ANMs per 1000 people
- Population density
- Road length per sq. km
- Access to electricity, water, sanitation

... to identify potential hyperlocal markers as those showing high correlation with an underlying rationale

	% first dose	% Eligible	% Second dose	Missing	Missing / Eligible	Search per 100 people relevant for soln 1	Search per 100 people relevant for soln 1B
Banks per 100,000	11%	17%	4%	19%	9%	40%	29%
% who had 4 or more ANC visits	-30%	11%	-11%	29%	25%	-26%	3%
% with an ANC visit in the 1st trimester of pregnancy	-29%	-4%	-16%	15%	18%	-13%	8%
% who received two or more TT injections during pregnancy	-26%	6%	7%	-1%	-5%	-9%	12%
% whose last live birth was protected against neonatal tetanus	-19%	13%	4%	12%	6%	9%	28%
% who were given or bought IFA	27%	5%	6%	-2%	-5%	32%	19%
% who took IFA for atleast 100 days	13%	29%	16%	18%	7%	19%	-10%
% who took IFA for atleast 180 days	-2%	20%	3%	23%	17%	17%	-10%
% who took an intestinal parasite drug	-4%	-4%	-9%	7%	7%	13%	8%
Per Capita Gross District Domestic Product (2004-05) Price (2011-12)	19%	8%	13%	-7%	-10%	15%	1%
CAGR paved road rural	10%	-1%	-1%	0%	1%	9%	-13%
NH per 100 msq	-3%	35%	8%	38%	18%	-2%	36%
SH per 100 msq	23%	28%	16%	17%	4%	14%	10%
DR per 100 msq	6%	10%	20%	-13%	-21%	33%	30%
Rural per 100 msq	2%	10%	21%	-15%	-21%	6%	37%
Vehicle per 1000 people	11%	-24%	-9%	-21%	-10%	11%	40%
81. Children age 6-59 months who are anaemic (<11.0 g/dl) (%)	-3%	10%	-17%	37%	38%	21%	12%
82. Non-pregnant women age 15-49 years who are anaemic (<12.0 g/dl)(%)	14%	12%	-13%	34%	31%	41%	8%
83. Pregnant women age 15-49 years who are anaemic (<11.0 g/dl)(%)	0%	-4%	-15%	14%	17%	-10%	-23%

# Stage 1 generated key learnings around the origins of vaccine hesitancy and potential for driving uptake

Execution

Themes

Approach

Learnings

Solutions

## 1 COVID-19 vaccine support



Growing indifference to Covid-19

Importance of community ties

- When cases were low, Covid-19 felt like a **lower priority** than immediate concerns around **education, livelihoods, etc.**, especially in rural areas with a less severe 2<sup>nd</sup> wave

- Campaigns that position vaccines as enablers for **education and livelihoods**

## 2 Segment specific support



Demographics and social patterns driving hesitancy

Need for trust with perceived health restrictions

- Vaccine hesitancy or unwillingness was either **rooted in or linked to social and economic factors**, such as **religion, caste, occupation, income, literacy level**

- Content (posters, videos, etc.) that is **explicitly inclusive to different communities**
- **Relying on influencers** from to relay important messages

- Those with **heightened need for vaccines** (e.g., PLW, chronic disease patients) also had **lower uptake rates** because they wanted **credible sources of information**

- **Experts (e.g. doctors)** affirming they could take the vaccine through videos
- **Hyperlocal testimonials** from the community building trust in vaccines

## 3 Healthcare system support



Gaps in information flow

Heightened support for healthcare workers

- People as well as HCWs are often **unaware of dates, times and locations of camps** in advance and unable to plan their days to accommodate getting vaccinated

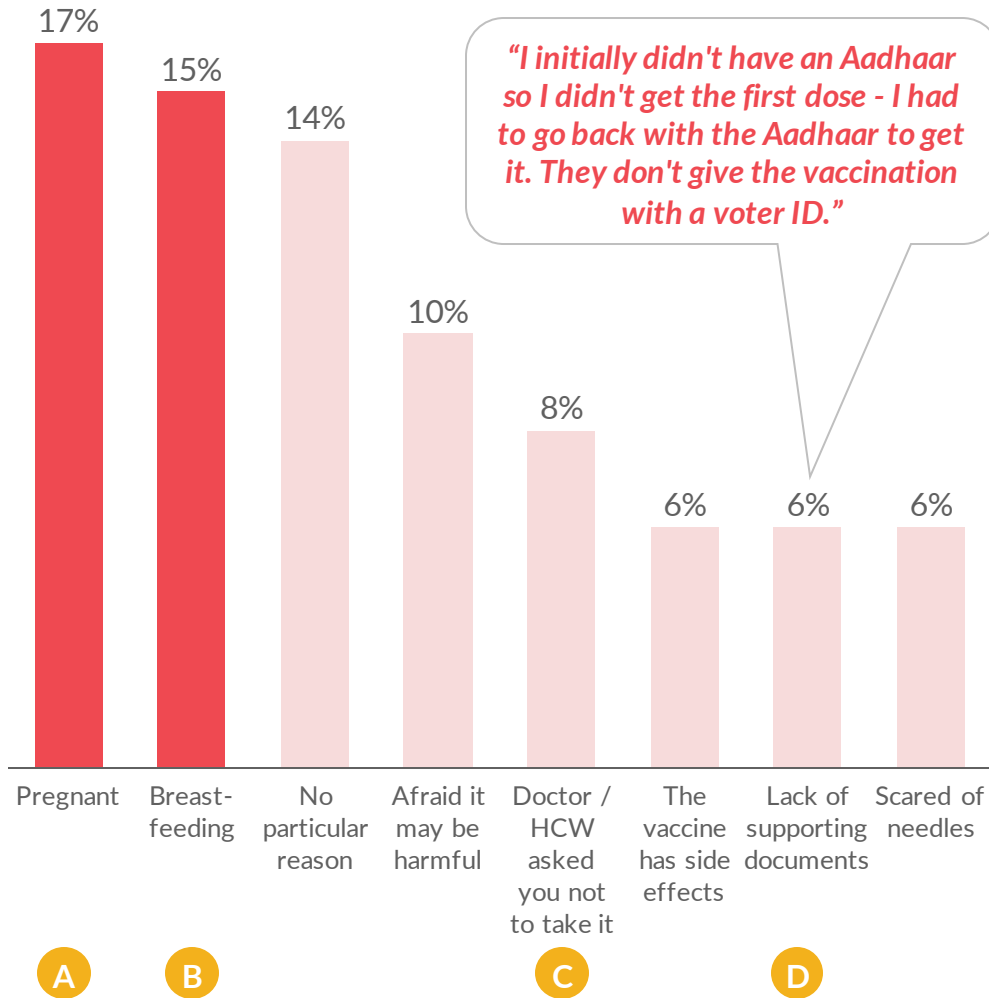
- Improving information flows to provide advance knowledge around the **dates, times, places of camps**
- Extending camp timings and locations in non-urban areas

- Healthcare workers became the face of vaccination efforts, but were unable to get **requisite training (including on soft skills)** or **clarify their doubts or ask questions** due to other demands on their time

- Providing healthcare workers with **job aides, congregation points, and ways to communicate upstream** can help them better solve questions on the ground

# Example: We found detailed insights on particularly vulnerable populations such as pregnant and lactating women (PLWs)

Willing (77% of eligible population) Reasons for not getting the 1<sup>st</sup> dose<sup>i</sup>  
 % of total eligible population who is willing, 9 districts, October 2021  
 (N = 3423)



## Deeper insights from HCD in-depth interviews

- A** **Outdated information on pregnancy/lactation risks**  
In earlier drives, some pregnant and lactating women were advised to avoid the vaccine and this guidance may still prevail.
- B**
- C**
- D** **Lack of Aadhaar documentation**  
Some vaccination registration staff specifically ask for the Aadhaar card and refuse to take any other form of ID for vaccination registration.

**Irregular or last-minute information**  
Some residents are unable to attend vaccination camps or drives because they find out about them on the same day they're meant to take place. As a result, they are not able to plan ahead and make time to attend.

**Competing household priorities**  
Inconvenient timings (during the day only) or long waiting times can prevent some from attending vaccination drives.

**Mobility constraints**  
Physical restrictions to movement due to age, disability or cultural gendered norms.

## Emerging opportunities:

**Overcommunicate changed norms**  
Leverage existing HCW outreach channels to frequently share updated medical protocols.

**Refresher trainings on eligibility**  
Refresher trainings for camp staff, highlighting alternatives for those without common documents (e.g., other IDs acceptable instead of Aadhaar).

**Bulk and frequent individual reminders**  
Voice, SMS/WhatsApp, and village level broadcast reminders for upcoming vaccine camps. Use lunar calendar events as markers for reminders.

**Revising booth / camp timings**  
Organizing camps that are open in the late evenings or early mornings, when individuals working outside the home are able to attend.

**Last-mile connectivity**  
Door-to-door or remote connectivity for elderly, disabled or young women.

Note: i. Of those asked this question, 14% responded under the "other" category. Also note that HCW refers to Healthcare Worker, including ANMs (Auxiliary Nurse Midwives), ASHAs (Accredited Social Health Activists), and AWWs (Anganwadi Workers).

# Example: We honed in on identifiable characteristics to target different types of hesitancies among the fully unvaccinated

## Top sub-groups of interest

Groups which show a higher incidence in these categories:

Second group is a sub-set

**Overcautious**  
29% of total unvaccinated



Over 60 years old  
• In sample: 20%



Over 60 years, with above 5th std education  
• In sample: 4%



Among <60, no group indicated higher incidence of overcautious with any statistical significance

**Perceived restricted**  
20% of total unvaccinated



All Women under 30 years old  
• In sample: 21%



Rural women under 30 with education below 5th std.  
• In sample: 8%



Among men, no group indicates higher incidence of perceived-restricted with statistical significance

**Indifferent**  
14% of total unvaccinated



Individuals from Muslim community in urban areas  
• In sample: 2%



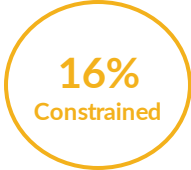
Individuals from Hindu community in urban areas with education above 5th std  
• In sample: 3%



**Constrained**  
11% of total unvaccinated



Men between 30-44 years of age  
• In sample: 14%



Rural men between 45-59 years of age with below graduate level of education  
• In sample: 8%



**Misbelievers**  
5% of total unvaccinated



Individuals in pakka and semi-pakka homes from Muslim community  
• In sample: 16%



Individuals in pakka and semi-pakka homes from Muslim community in age group of 45 and 59:  
• In sample: 4%



Higher incidence of misbelievers could not be found in the non-muslim groups with sufficient statistical significance

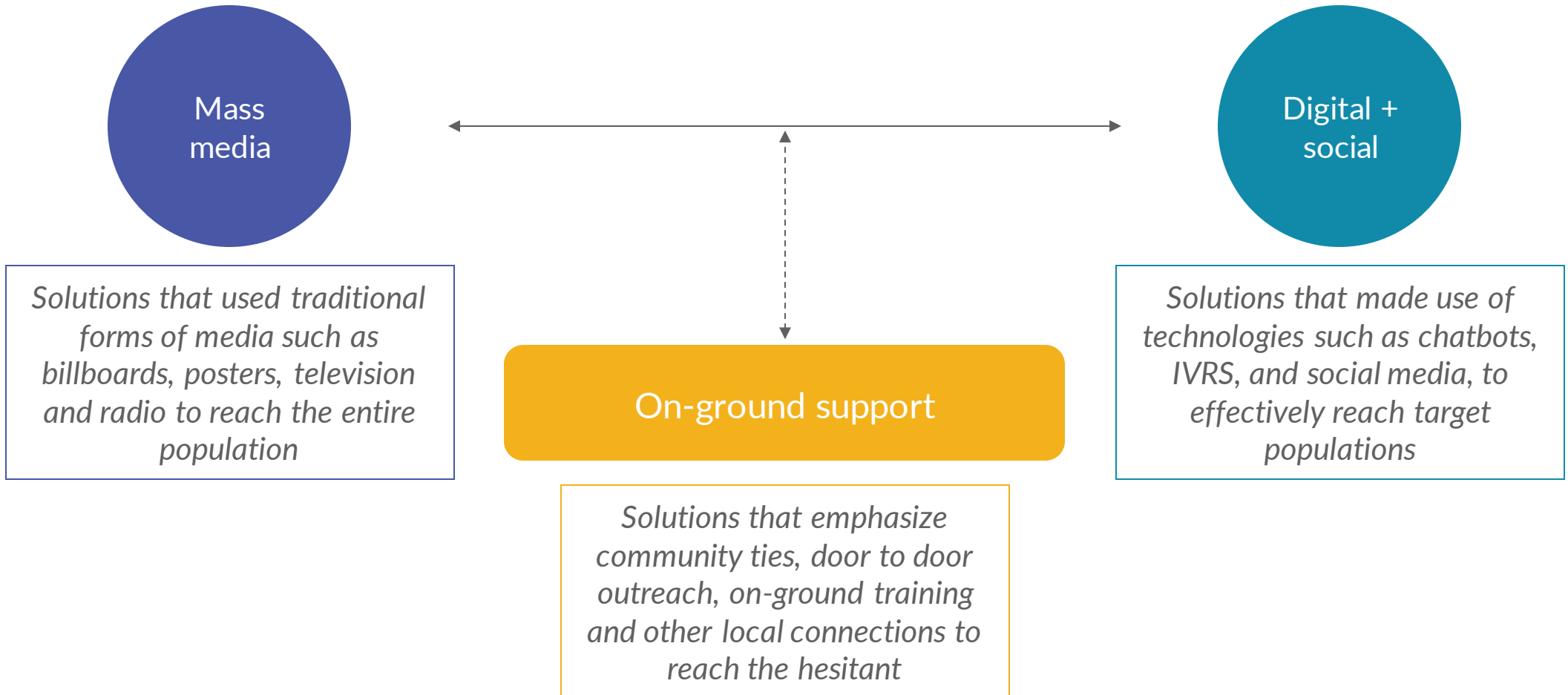
Note: Based on Care survey data conducted in 9 districts of Bihar in October 2021 – the 5 groups above are based on Dalberg segmentation of reasons specified in the survey for not taking the vaccine; given an individual could select multiple reasons, same reasons may appear across groups; 21% of those who are completely unvaccinated fall under the “Other” category for the reason for not getting the vaccine; Due to small sample size, some of these are more directional

# The solutions reached target segments through 3 approaches that emphasized both depth and breadth

Execution

Themes

Approach



# Traditional mass media channels were used to highlight the importance of taking both doses of the COVID-19 vaccine

## 1 COVID-19 vaccine support



- Television ads promoting the value and ease of vaccination were broadcast in Bihar
- The ads touched on the importance of both doses



- Print campaigns emphasizing the two dose routine were designed to drive 1<sup>st</sup> and 2<sup>nd</sup> dose uptake

# Videos answering common doubts and hesitancies among pregnant and lactating women were successfully broadcast on social media channels

## 2 Segment specific support

Execution

Themes

Approach



FAQ videos have been posted on social media and are being broadcast to all users in Bihar to spread awareness

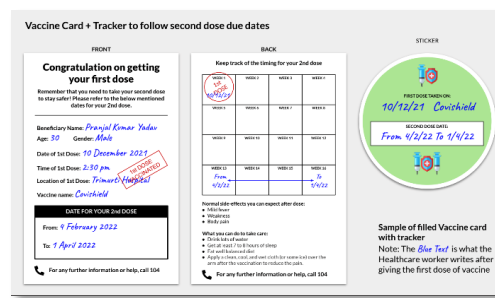


# On ground trainings for ASHAs and local community murals for second dose reminders were piloted successfully and well received

- 2 Segment specific support
- 3 Healthcare system support



- Posters guiding HCWs on how to speak to PLW and their families were piloted in two districts to very positive feedback from the HCWs
- They being distributed digitally to all ASHAs and ANMs in the state



- Wall paintings were designed to reinforce the need for the 2<sup>nd</sup> dose and provide easy guidelines to calculate when it might be due
- Take-away slips given after 1<sup>st</sup> doses were administered were re-designed to provide a visual guide to the appropriate dosage interval
- After piloting, these were de-prioritized considering the 3<sup>rd</sup> wave and new priorities around adolescent and precaution vaccine doses

Omicron crisis mode

# In the second stage (Omicron crisis), we modified our approach to move even faster from diagnostic to solution implementation

Execution

Themes

Approach

## 1 / Post-Delta apathy (October– December '21)

## 2 / Omicron crisis mode (January – February '22)

Diagnose

**Extensive sharing with partners:**

Worked with regional partners (CARE, CFAR, PCI, etc) to combine on-ground understanding and data and build out solutions through regular calls and a large workshop



**Co-creating rapid solutions with implementation partners:**

Regularly working with implementation partners to quickly roll out solutions on the ground and via combined networks

Ideate

**In-depth research and analysis:**

Synthesized HCD interviews with 450+ stakeholders across Bihar, digital scans of all vaccine related terms in Bihar, survey data from 50,000+ stakeholders to build solutions



**Rapid research with government and partner-brainstorming**

Using literature scans, calls with on-ground implementers, building on knowledge from phase 1; customized digital scans for immediate concerns such as boosters

Implement

**Drawing up on-ground solutions similar to our partners' work:**

Built out an extensive list of solutions, with the most relevant being implemented, however, the work did not substantially build on government and partners' work



**Providing additionality through digital solutions:**

Working on new territory by relying on digital networks to help scale up quickly and diagnose faster

**As required check-ins with approving bodies**

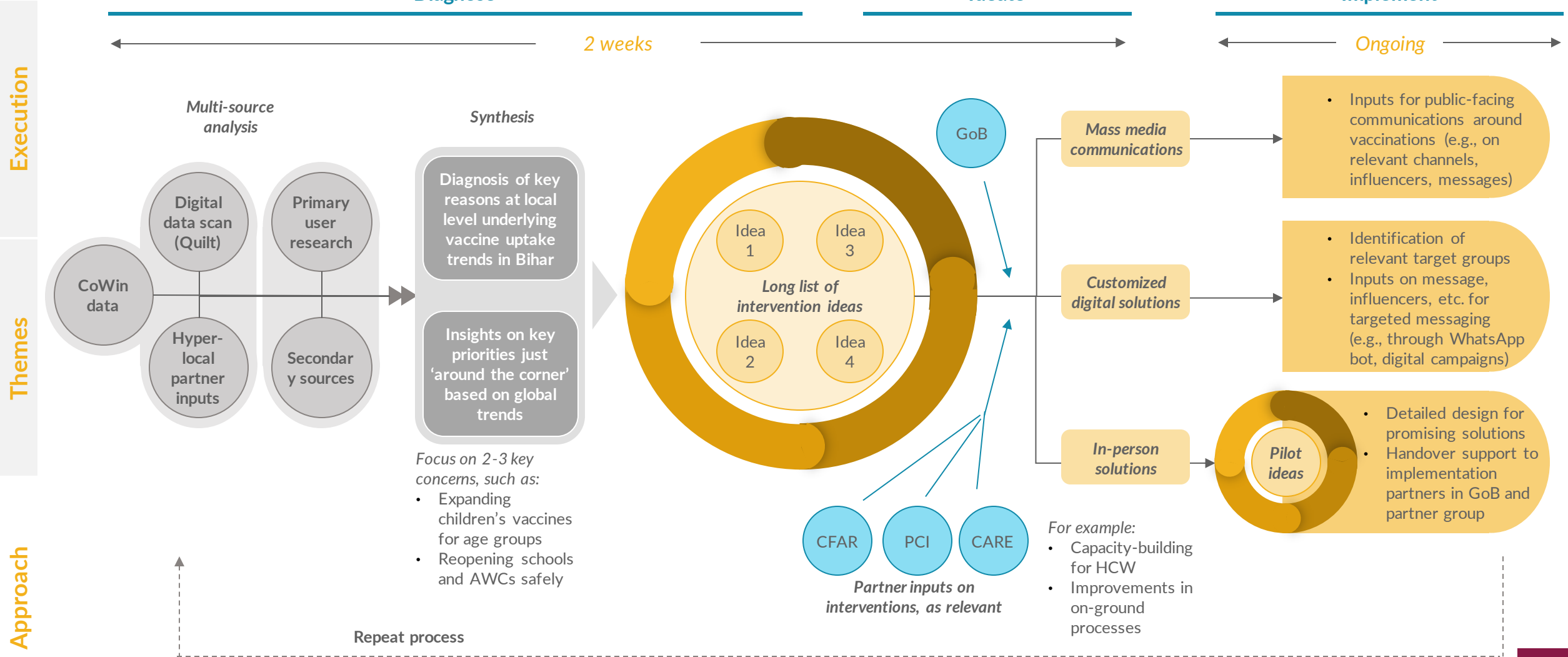
Identified pressing problems and ideated relevant solutions but were unable to establish a working rhythm with the ACS and AED to get approval for a quick rollout



**Established communication lines with relevant stakeholders:**

Weekly cadence with Dr Hemant, who conveys updates to the ACS, and set up of a WhatsApp group with the AED will allow for quicker implementation and roll out at scale

# The revised approach took under 2 weeks to diagnose and ideate, co-creating solutions with implementation partners



Note: Secondary sources include news articles, journal articles, projection models, as well as secondary datasets (e.g., NFHS) that can be analysed alongside CoWin data

# Stage 2 generated key learning around reinforcing existing systems, messaging, family as a target audience and the importance of digital

## 2 Segment specific support



## 3 Healthcare system support



### Relevance of family as a health-seeking unit

- **Positive correlations** have been observed between **rate of adult and adolescent vaccines** in different districts
- Parents seem to be big influences on children and adolescents, who rely on them to make decisions

### Power of loss aversion messaging for elders and adolescents

- Relative to campaigns focusing on the benefits of getting vaccinated, **promotion materials** laying out the **potential negative consequences of not getting vaccinated** have been found to be **particularly impactful**

### Strengthening on-ground systems

- Local systems such as **PHC call centres, Rapid Response Teams (RRTs)**, and **infrastructure and devices** for HCWs (e.g. tablets for ANMs) have been **configured to support vaccination** and pandemic action

### Use of digital for quick and mass outreach

- Digital tools such as Facebook, WhatsApp, and IVRS have **quick reach at a very high scale**
- Certain media types are more **effective to reach target demographics** – e.g. short clip social media (Instagram, Moj, Takatak) for adolescents

Learnings

Solutions

- Campaigns targeted at parents, treating the **family as a decision making unit**
- **Targeted outreach to communities and families with lower adult vaccination** seems to be crucial to vaccinate adolescents

- **Campaigns built to tap into this fear** - e.g., of not being able to take exams without protection through vaccination, or children falling sick due to lack of vaccines – **will be effective to convince parents, elders, and adolescents**

- **PHC call centres** can be used to **allay doubts on booster and other new vaccinations**
- Tablets can be used to **connect users on the ground with doctors in PHCs**
- **RRTs** can be assigned **local mandates** to strengthen vaccine uptake

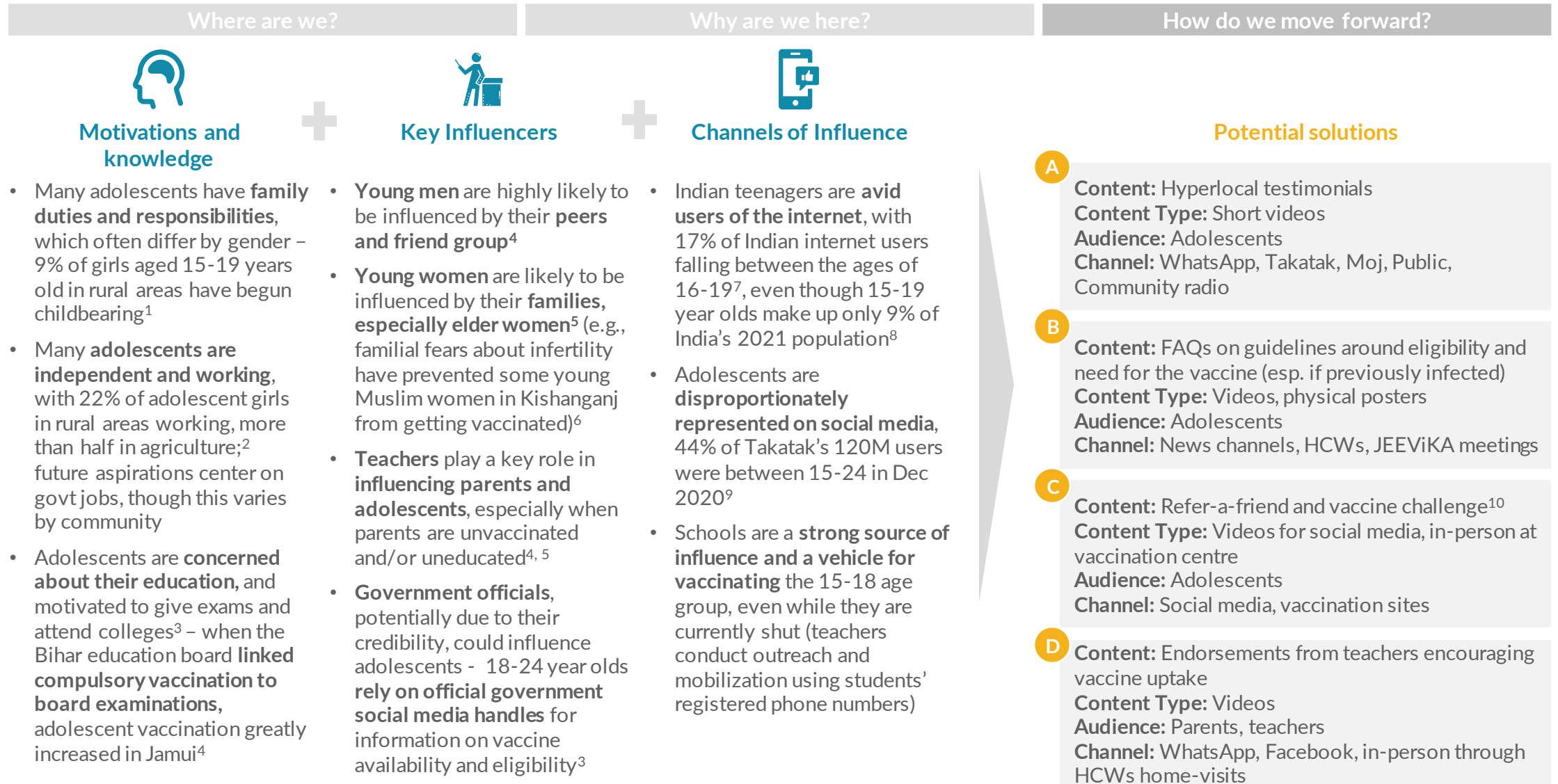
- Use of **local influencers** to reach adolescents via reels and **relatable clips**
- Use of **bots to answer specific questions** and address doubts

Execution

Themes

Approach

# Example: Our solutions on adolescents looked at influence and motivations on a social and behavioural level



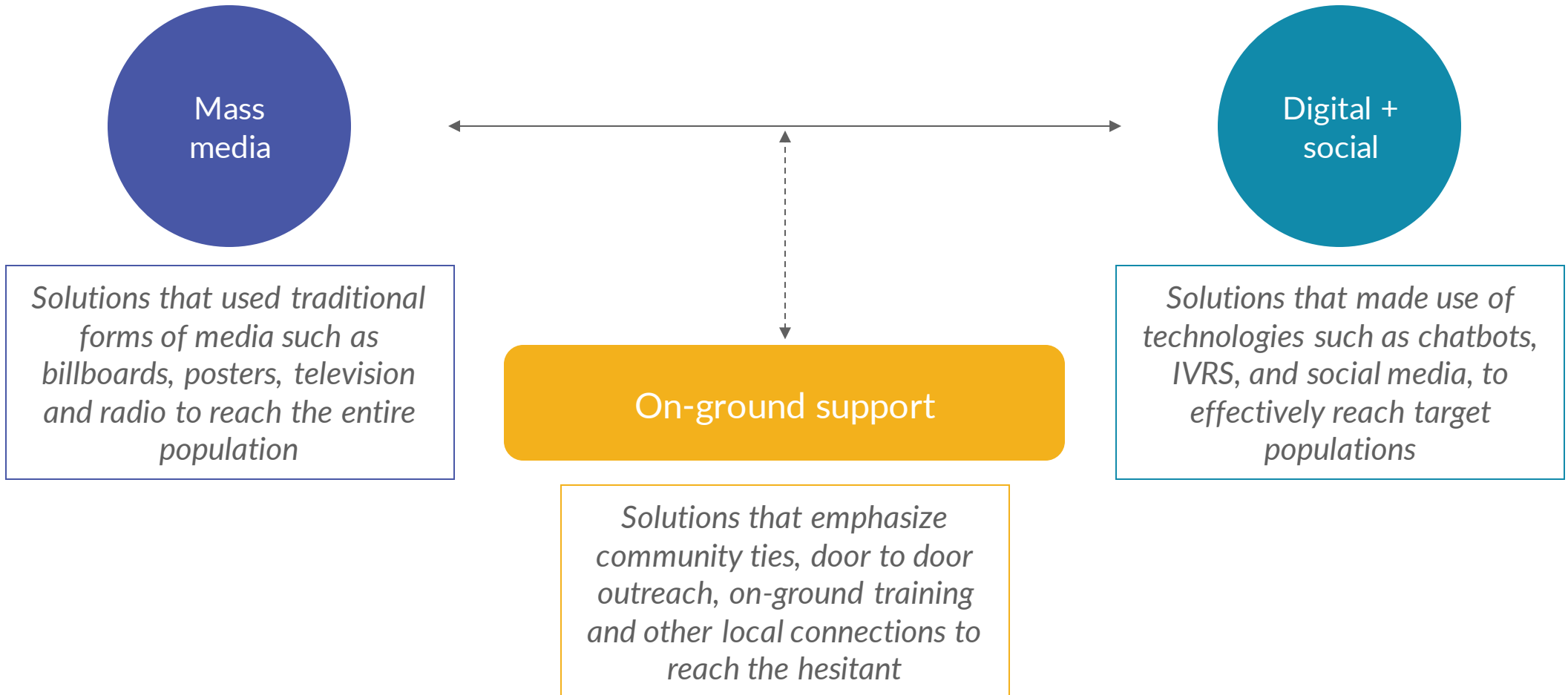
Source: 1. UNICEF India, [Adolescent development](#); 2. Previous Dalberg work, Dasra Adolescent Collective, 2016 3. Dalberg Analysis, Talkwalker; 4. Dalberg Interview, i-Saksham, Jamui; 5. Dalberg/PCI Male Engagement Study, 2019; 6. Dalberg Interview, Project Potential, Kishanganj; 7. Statista, [Indian internet demographics](#); 8. NHM [Population Projection](#); 9. Indiantelevision.com, [MX Takatak's monthly active users up by 150%](#), 2020; 10. Behavioral Evidence Hub, Refer-a-Friend to Family Planning

# The solutions reached target segments through 3 approaches that emphasized both depth and breadth

Execution

Themes

Approach



# Mass media campaigns built general awareness around the importance of booster doses and eligibility of adolescents

## 2 Segment specific support



**10वीं /12 वीं बोर्ड के सभी छात्र**

26 जनवरी 2022 तक कोविड टीका लगवाकर परीक्षा के लिए एक सुरक्षित परिवेश बनाने में अपना योगदान दें।

28 दिन बाद और 42 दिन के अंदर दूसरा टीका लगवाएं, कोरोना से सुरक्षा पाएं

**बिना तैयारी, परीक्षा है अधूरी**

आशा दीदी या निकट के स्वास्थ्य केंद्र से संपर्क करें

अधिक जानकारी के लिए हेल्पलाइन नंबर 104 पर संपर्क करें

जीवन्त बिहार... सपना हो साकार



**अपने बच्चों को दें कोरोना टीके की सुरक्षा का भरोसा**

सभी माता-पिता चाहते हैं कि उनके बच्चे हमेशा स्वस्थ रहें इसलिए बिहार सरकार 15 से 18 वर्ष के बच्चों को कोरोना का सुरक्षा टीका लगा रही है।

28 दिन बाद और 42 दिन के अंदर दूसरा टीका लगवाएं, कोरोना से सुरक्षा पाएं

**बच्चे होंगे टीकाकृत आगे वाला कल होगा सुरक्षित**

आशा दीदी या निकट के स्वास्थ्य केंद्र से संपर्क करें

अधिक जानकारी के लिए हेल्पलाइन नंबर 104 पर संपर्क करें

जीवन्त बिहार... सपना हो साकार



**आप सबके सहयोग से बिहार में**

**11 करोड़ कोरोना के टीके लगाये जा चुके हैं**

घन्यवाद बिहार

जीवन्त बिहार... सपना हो साकार

आशा दीदी या निकट के स्वास्थ्य केंद्र से संपर्क करें

अधिक जानकारी के लिए हेल्पलाइन नंबर 104 पर संपर्क करें



**कोविड से सुरक्षा के लिए तीसरा टीका अवश्य लगवाएं**

अगर आप की आयु 60 वर्ष या उससे अधिक है और आपको ब्लड प्रेशर, शुगर, मोटापा, सांस की तकलीफ है या अन्य कोई बीमारी है तो दूसरे टीके के 9 महीने बाद तीसरा टीका लगवाएं

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- Posters addressing a **successful vaccination campaign** have been distributed throughout Bihar
- Posters focused on **target audiences (adolescents and elderly)** are logically persuading users to come take the vaccines they are newly eligible for



# We designed interventions utilizing digital and in-person channels to boost uptake of and engagement with the Vaccine Mitra bot

Execution

Themes

Approach

	Overview	Channel
Higher priority	Encouraging people who are already using the bot to spread the word amongst their network	<ul style="list-style-type: none"> <li>WhatsApp Bot</li> </ul>
	Short reels on “How to use Vaccine Mitra” and its other features for social media targeting the youth of the community	<ul style="list-style-type: none"> <li>Takatak</li> <li>Moj</li> <li>Public</li> <li>Facebook</li> </ul>
	Use case based posters along with QR code with link to the bot, highlighting key features of WA bot	<ul style="list-style-type: none"> <li>Facebook</li> <li>Print</li> </ul>
Lower priority	<ul style="list-style-type: none"> <li>Print ad with influencers like Bihar Minister of Health or doctors introducing Vaccine Mitra</li> <li>Integrating “Vaccine Mitra” with existing and any new govt. communication materials</li> </ul>	<ul style="list-style-type: none"> <li>Newspaper print ad</li> </ul>
	Take home stickers about Vaccine Mitra	<ul style="list-style-type: none"> <li>Ration Shops</li> <li>Medical shops / pharmacies</li> <li>Vaccine camps</li> <li>Colleges / universities</li> <li>Markets</li> </ul>
	Promoting Vaccine Mitra through JEEViKA network and ASHAs/ANMs (in rural areas), through Municipal councillors (in urban areas)	<ul style="list-style-type: none"> <li>JEEViKA network (rural)</li> <li>ASHA/ANM (rural)</li> <li>Municipal councillors (urban)</li> </ul>



Building value proposition of Vaccine Mitra and forming suggestions for promoting Vaccine Mitra WA bot through multiple channels like newspaper ads, digital posters, takeaway stickers and local social media

# Digital material addressing the need for adolescent and precautionary doses has been shared to healthcare workers and the target audiences

- 2 Segment specific support
- 3 Healthcare system support



- FAQ posters **guiding adolescents** on how, when, and why to **take the vaccine** are being shared digitally, and if possible in-person through HCWs when they meet the community
- Endorsements from **influential stakeholders encouraging adolescents** to get fully vaccinated
- The videos will be shared through **digital channels like WA bot and social media channels**
- They can also be used as **communication tools** during in-person visits from teachers, HCWs, or SHG leaders.

# We analysed how Rapid Response Teams (RRTs) can be modified enables them to increase vaccine uptake

## 3 Healthcare system support

**Success factors:** RRTs' composition is relevant, and where active, they have been able to successfully 'break' refusals

**Challenges:** Lack of accountability, training, time availability, and cross-institution links, along with waning interest, limits the impact RRTs can have on vaccine uptake

Execution

Themes

Approach



### Involvement of doctors:

On-ground research shows a strong desire among all user segments to engage with doctors on doubts they have regarding vaccination



### Appropriate mapping to hesitancy:

Groups with vaccine hesitancies (e.g. PLW, individuals with co-morbidities or fears of side-effects) have medical concerns, which RRTs can tackle



### Link to other health programs:

Medical officers are not always known locally, so working with community mobilizers / ANMs is necessary. Involvement of agencies like UNICEF also drives on-ground momentum



### Lack of monitoring, accountability, and incentives

A lack of monitoring framework and targets, as well as performance-linked incentives, creates little incentive for RRTs to function regularly



### Insufficient training and on-the-job support

RRTs require medical professionals to conduct mobilization work, but do not provide training or job aids that would assist them in their interactions



### Increased burden on stretched workforce

Medical professionals, especially in the pandemic, are already stretched, and irregular RRT work further adds to that burden, leading to uneven delivery



### Ad-hoc connections with local influencers

Some RRTs work informally with PRI or JEEViKA leaders, but the lack of formal involvement of such locally known influencers limits their impact



### Unclear relevance in recent months

As vaccine coverage has risen and door-to-door efforts have started, RRTs are seen as less relevant, even as cases of refusal require deeper engagement

# We made suggestions on how RRTs can be reconstituted with enhanced supervision for adolescent, booster doses

## 3 Healthcare system support

With the launch of vaccination camps for adolescents and 'precautionary' vaccinations, there is an increased possibility of health-based refusals to vaccinations, which RRTs can help 'break'

### Potential tweaks to boost RRT impact:

**I** Sustain momentum via planning and monitoring

*(For challenges 1, 3)*

Create and **regularly update an agenda** for RRTs, on the basis of which **their performance is tracked (e.g., through indicators such as numbers of refusals they've engaged on, numbers of conversions, etc.)**, utilizing existing supervisory mechanisms to build RRT accountability

**II** Provide mobilization training and job aids

*(For challenge 2)*

Organize **training sessions on community mobilization** for RRT members, equipping them with **job aids (e.g., handbooks, posters, videos) they can take with them to the field**, as we've seen to be useful for ASHAs and ANMs when persuading PLW to get vaccinated

**III** Involve influencers formally

*(For challenge 4)*

Formally include **PRI, JEEViKA, and/or ICDS functionaries** in RRTs to strengthen mobilization efforts, given research has shown that community members look to such community leaders as exemplars to follow and emulate.

# Building resilience

# Our learnings from the vaccination phases of work have a broader resonance for healthcare oriented work in Bihar

We will continue to draw our learnings from phases 1 and 2 as we build out healthcare programs

Execution

## Demographic



Relevance of family as a health-seeking unit

## Behavioral



Use of digital for quick and mass outreach

## Systemic



Strengthening on-ground systems

Themes



Importance of community ties



Power of loss aversion messaging



Heightened support for healthcare workers

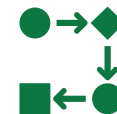
Approach



Demographics and social patterns driving hesitancy



Need for trust with perceived health restrictions



Gaps in information flow

# We continue to build on learnings from our vaccine work to design adaptive solutions that encourage diagnostic testing

Execution



## Segmented communications

*Targeted messaging to drive uptake and action*

- Leveraging on behavioural insights from vaccine work to drive campaigns
- Use of an array of appropriate channels and messaging to communicate

Creating *demand* for diagnostic testing

## Promote phygital delivery systems

*Optimises limited resources to ensure sufficient supply through:*

- Circumventing physical limitations and constraints
- Leveraging existing digital technology developed during COVID-19
- Enhances the utilisation and efficiency of existing facilities



Themes

## Capacity building

*Ensuring the most effective influencers are well equipped and trained*

- Training local women leaders, asha workers, etc with the necessary skills to advise
- Equipping them with tools to raise awareness and inculcate behavioural change
- Potential upskilling of health care workers in delivering diagnostic tests for chronic diseases



Fulfilling *supply* capability

Approach

# .... As we identify relevant problem statements in Bihar's healthcare ecosystem

We see the following use cases as potential ways to expand our learnings

ILLUSTRATIVE

## Adopting telemedicine on a Bihar-wide scale

- During the COVID-19 pandemic, primary health centres and district hospitals are **overburdened with patients who don't need critical care**
- Patients in Bihar are **reliant on private care**, with only ~18% of patients going to public hospitals<sup>2</sup>
- Post-pandemic **increased awareness of the importance of health** offers a unique opportunity to scale telemedicine
- **Digital channels** used to spread awareness and **job aides for ANMs** can be tapped into for telemedicine

## Encouraging diagnostic testing for other health issues and chronic diseases

- COVID-19 has **normalised testing** behaviour – 3% of India's population has suffered from COVID-19 but over half of the population has been tested
- **Diagnostic testing is crucial to early detection** of serious and chronic diseases, potentially saving lives and improving livelihoods
- The pandemic presents a unique opportunity to leverage both recent diagnostic behaviours and increased testing infrastructures to tackle major endemic health issues



# Annexe



# Table of contents

## 1 / Post-Delta apathy

- 1 Key drivers for not getting the vaccine (Cultural, behavioural, demographic)
- 2 Design principles for solutions ( across messages, channels, influencers)
- 3 Solution prioritization through partner workshop, hyperlocal data and digital scan
- 4 Actual solution designs (job aides for PLWs, 2nd dose tracker, suraksha chakra)
- 5 Using Quilt.AI and other meta data to develop hyper-local solutions

## 2 / Omicron crisis mode

- 1 Assessment and recommendations for Rapid Response Teams (RRTs)
- 2 Building momentum for precautionary doses
- 3 Improving uptake of adolescent vaccines
- 4 Enhancing HCW channels & digital activation
- 5 Increasing WhatsApp bot uptake and engagement

## 3 / Building resilience

- 1 Design and launch solutions to address new vaccine-related concerns (children's' vaccination, 18+ boosters)
- 2 Rapid ideation while providing ongoing implementation support
- 3 Implementation teams to parallelly support designed interventions as team manages multiple "sprints"

# Post-Delta apathy



Key drivers for not getting  
vaccinated

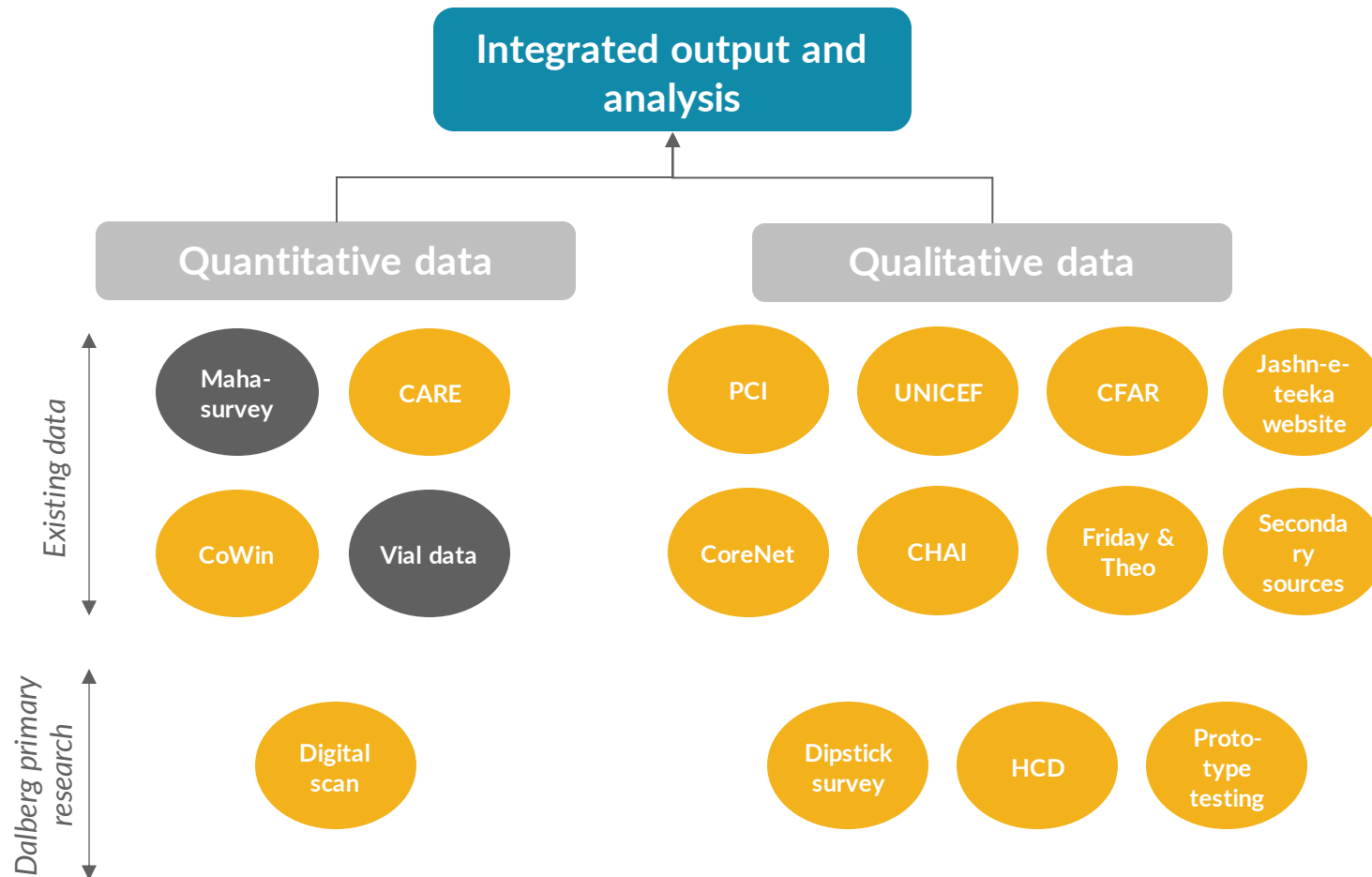


# Our work built on and synthesized existing data bases, along with primary research wherever applicable

Dalberg's Approach and Process  
Updated as of November 2021

● Data driving analysis

● Data yet to be included in analysis



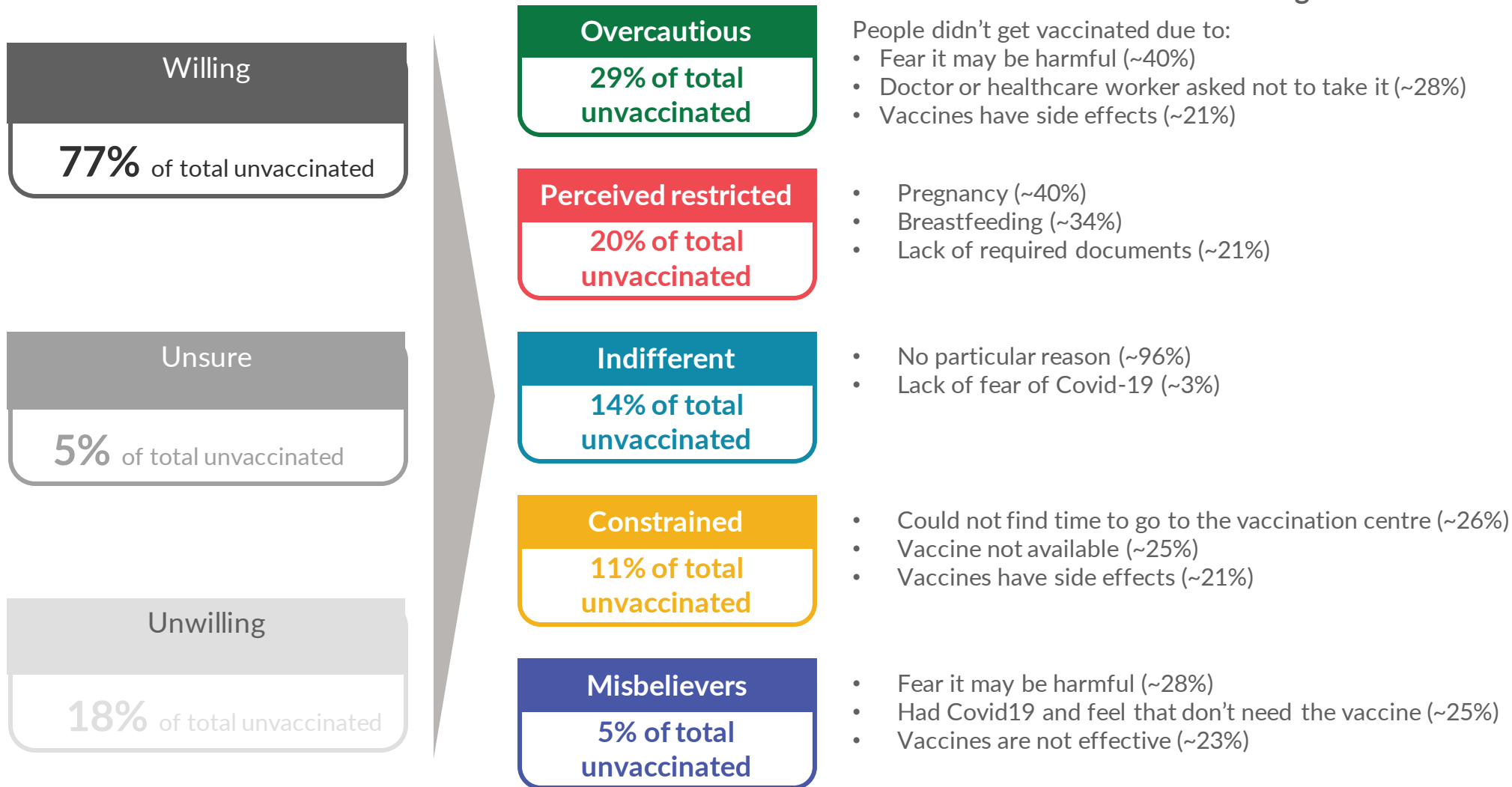
We took a **mixed-method approach**:

- **Existing:** data insights from various research partners in Bihar
- **Additional qualitative:** Leveraging quantitative survey data along with Human-Centred Design (HCD) research
- **Additional quantitative:** Data digital scan to investigate the reasons that affect vaccine hesitancy and resistance.

We intended for this approach to inform a dynamic and nuanced understanding of the **demographic, structural, psychometric and behavioral drivers** of low vaccine uptake.

# FULLY UNVACCINATED

We have identified 5 groups based on reasons for not taking the 1<sup>st</sup> dose; *overcautious* and *perceived restricted* contribute to ~50% of total



Note: Based on Care survey data conducted in 9 districts of Bihar in October 2021 – the 5 groups above are based on Dalberg segmentation of reasons specified in the survey for not taking the first dose of vaccine; given an individual could select multiple reasons, same reasons may appear across groups; 21% of those who are completely unvaccinated fall under the “Other” category for the reason for not getting the vaccine

# FULLY UNVACCINATED

## Groups have dominant demographics; for example, older men are more likely to be *overcautious*, women under 30 *perceived restricted*

### Top sub-groups of interest

Groups which show a higher incidence in these categories:

Second group is a sub-set

**Overcautious**  
29% of total unvaccinated



Over 60 years old  
• In sample: 20%



Over 60 years, with above 5th std education  
• In sample: 4%



Among <60, no group indicated higher incidence of overcautious with any statistical significance

**Perceived restricted**  
20% of total unvaccinated



All Women under 30 years old  
• In sample: 21%



Rural women under 30 with education below 5th std.  
• In sample: 8%



Among men, no group indicates higher incidence of perceived-restricted with statistical significance

**Indifferent**  
14% of total unvaccinated



Individuals from Muslim community in urban areas  
• In sample: 2%



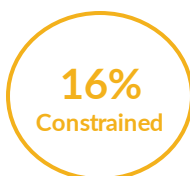
Individuals from Hindu community in urban areas with education above 5<sup>th</sup> std.  
• In sample: 3%



**Constrained**  
11% of total unvaccinated



Men between 30-44 years of age  
• In sample: 14%



Rural men between 45-59 years of age with below graduate level of education  
• In sample: 8%



**Misbelievers**  
5% of total unvaccinated



Individuals in pakka and semi-pakka homes from Muslim community  
• In sample: 16%



Individuals in pakka and semi-pakka homes from Muslim community in age group of 45 and 59:  
• In sample: 4%



Higher incidence of misbelievers could not be found in the non-muslim groups with sufficient statistical significance

Note: Based on Care survey data conducted in 9 districts of Bihar in October 2021 – the 5 groups above are based on Dalberg segmentation of reasons specified in the survey for not taking the vaccine; given an individual could select multiple reasons, same reasons may appear across groups; 21% of those who are completely unvaccinated fall under the “Other” category for the reason for not getting the vaccine; Due to small sample size, some of these are more directional

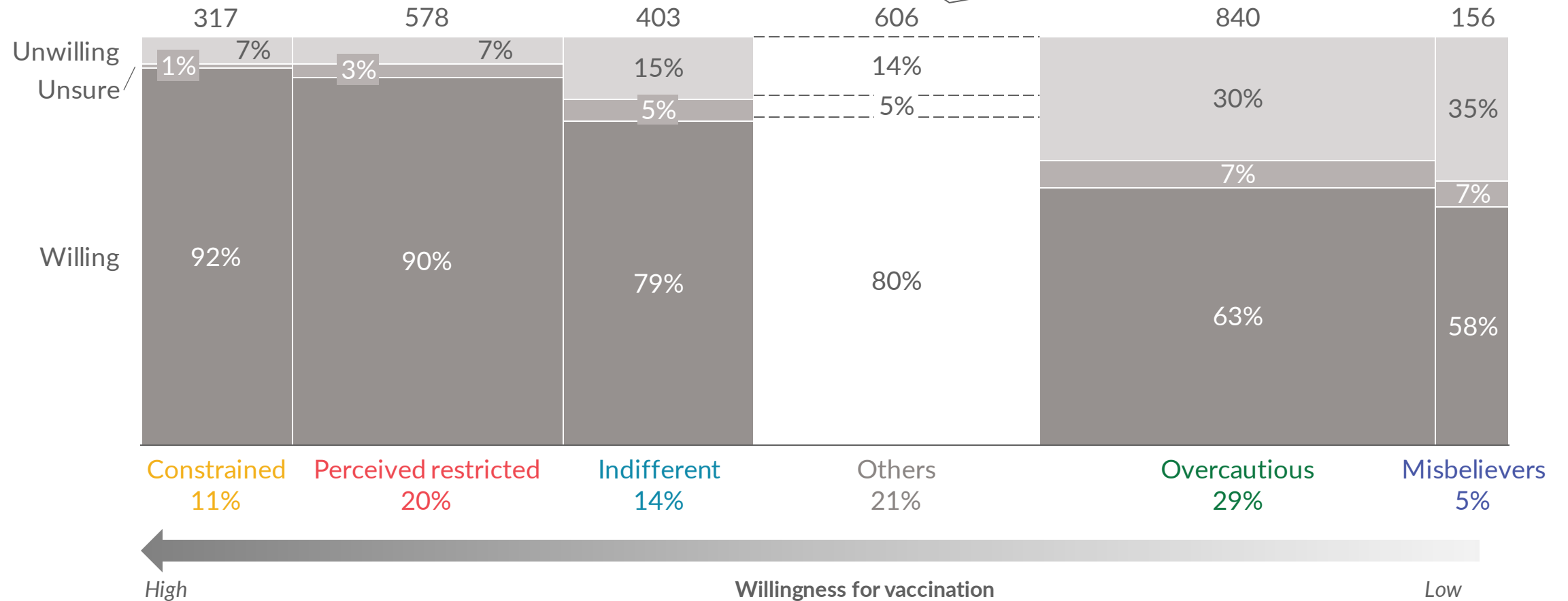
# FULLY UNVACCINATED

## The willingness of different groups varies: while *overcautious* are the largest group, they show lower willingness than *constrained*

Willingness to get the 1<sup>st</sup> Covid-19 vaccine dose, by group<sup>i</sup>

% of total eligible population who is fully unvaccinated, 9 districts, October 2021 (n = 2900)

Cite illness as the predominant reason for not getting vaccinated

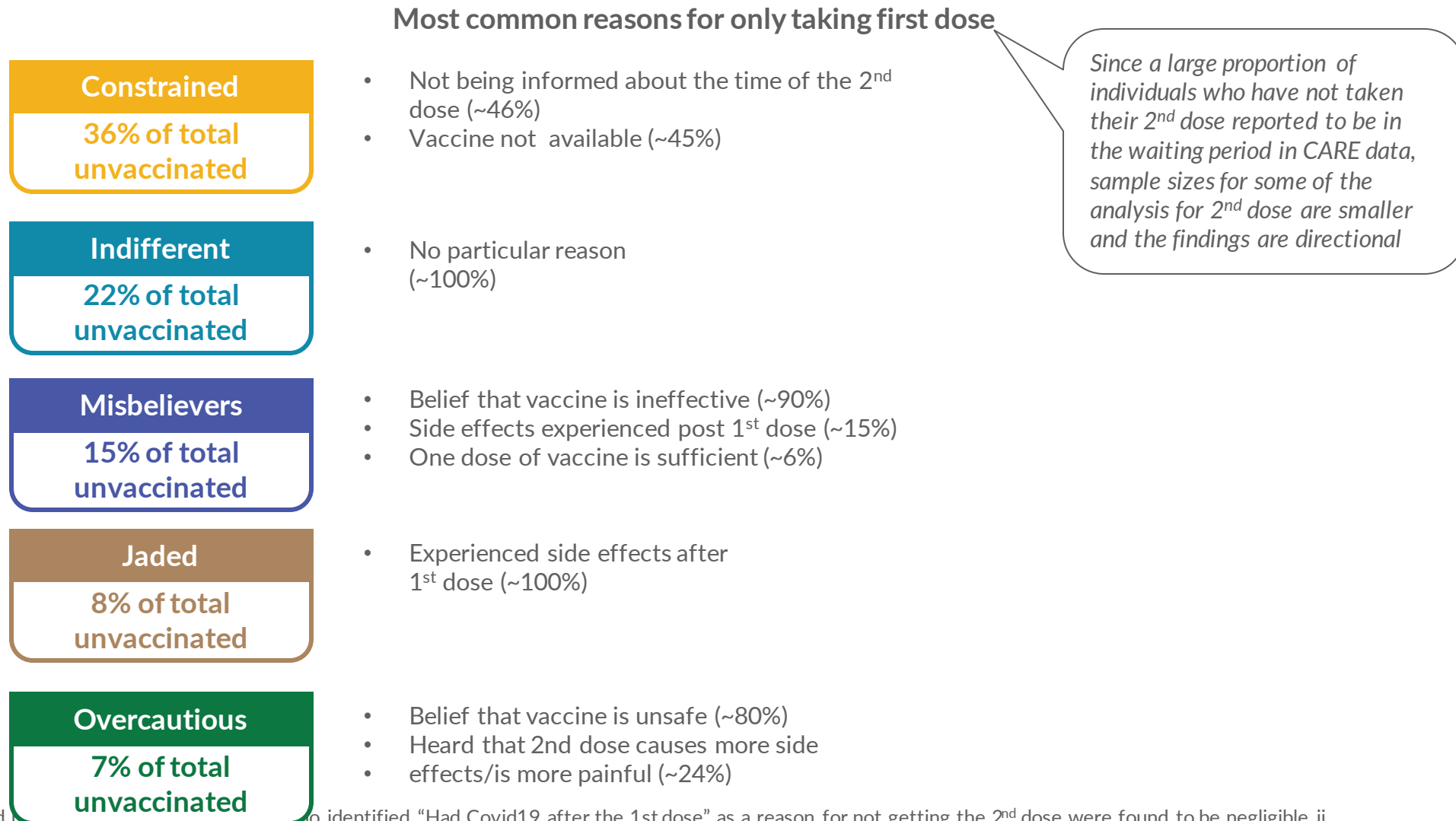


Note: i. Based on Care survey data conducted in 9 districts of Bihar in October 2021 - 22% of those who are completely unvaccinated fall under the "Other" category for the reason for not getting the vaccine



## PARTIALLY UNVACCINATED

~36% of those who have not received the second dose despite being eligible are *constrained* by availability of information or vaccines



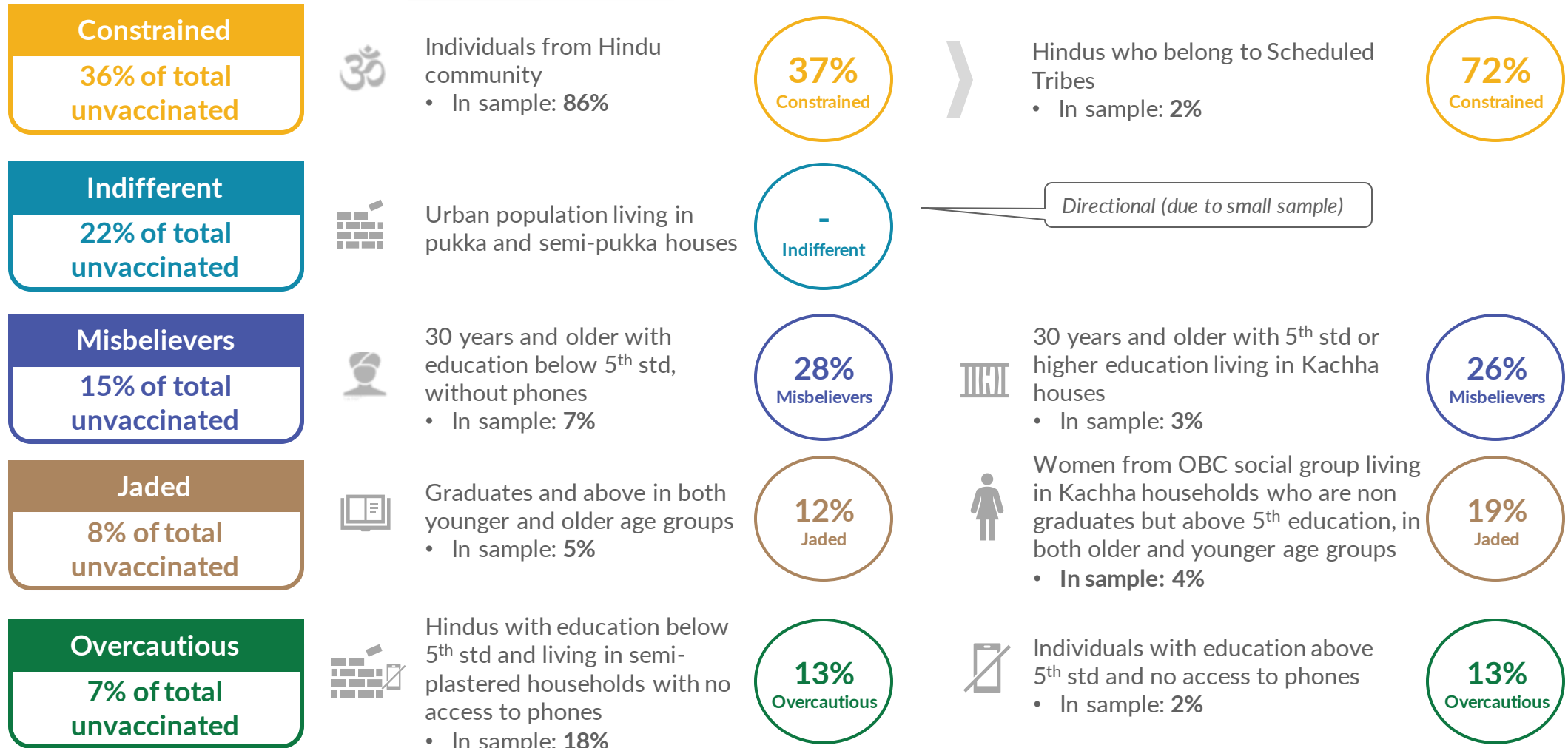
Note: Perceived reasons for not getting the 2<sup>nd</sup> dose were found to be negligible ii. The “overcautious” and “misbelievers” buckets are very small sample sizes (n = 24) and interpretations in those buckets should be considered directional. The question on willingness to get the 2<sup>nd</sup> dose was not asked in the Care survey. 12% of those who are partially unvaccinated and not in the waiting period fall under the “Other” category for the reason for not getting the vaccine

# Specific demographics indicate higher incidence for some of these groups

## Top sub-groups of interest

Groups which show a higher incidence in these categories:

Second group is a sub-set



Note: Based on Care survey data conducted in 9 districts of Bihar in October 2021 – the 5 groups above are based on Dalberg segmentation of reasons specified in the survey for not taking the vaccine; given an individual could select multiple reasons, same reasons may appear across groups; 12% of those who are completely unvaccinated fall under the “Other” category for the reason for not getting the vaccine; Groups for which sample size is not significant

# While there continue to be sub-trends, our research identified the following 5 major trends influencing vaccination in Bihar

## Persistent health-related fears



### PLW-specific hesitancy:

- Concerns around safety of vaccine by PLW and their families, but high willingness
- High trust in ASHAs who might not endorse vaccines due to perceived risks

**"Everyone is saying breastmilk will dry up and I will get weak."**

Female, 28, Housewife, West Champaran



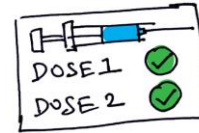
### Fears for co-morbidities:

- People with co-morbidities (cancer, diabetes, hypertension, heart disease) are concerned they are not allowed to get the vaccine

**"I have a sugar problem and that will never go away, so how will I take the vaccine"**

Female, 34, Community Mobilizer, Bhojpur

## Continued indifference among few



### Low 2<sup>nd</sup> dose motivation:

- Slow uptake for 2<sup>nd</sup> dose among eligible population, potentially due to Covid-19 fatigue
- Minority not aware of 2<sup>nd</sup> dose due date
- More prevalent in rural, low-income groups

**"I don't know when [my 2<sup>nd</sup> dose] is next scheduled."**

Female, 52, Farmer, West Champaran



### Indirect cost of vaccines:

- High perceived opportunity costs of getting vaccinated
- Felt by middle-aged men (who respond to "provider" identify based appeal for vaccinations) and in urban areas

**"People left after waiting for 1-2 hours because they had to go to work."**

Female, 41, Asha worker, Patna

## Hyper-local issues



### Hyper-local trends:

- Districts with certain characteristics (e.g., high % of hypertension, low health worker density, poor road connectivity) have lower uptake, showing how solutions can be made hyper-local

**"If something happens to me there should be sufficient preparations for my treatment from the government."**

Male, 19, Student, Arwal



# Design principles for solutions

(ACROSS MESSAGES, CHANNELS, INFLUENCERS)





# Four key design principles cut across our solutions

**1** *Present complex and abstract information in highly simplified, visualized formats that engage audiences*

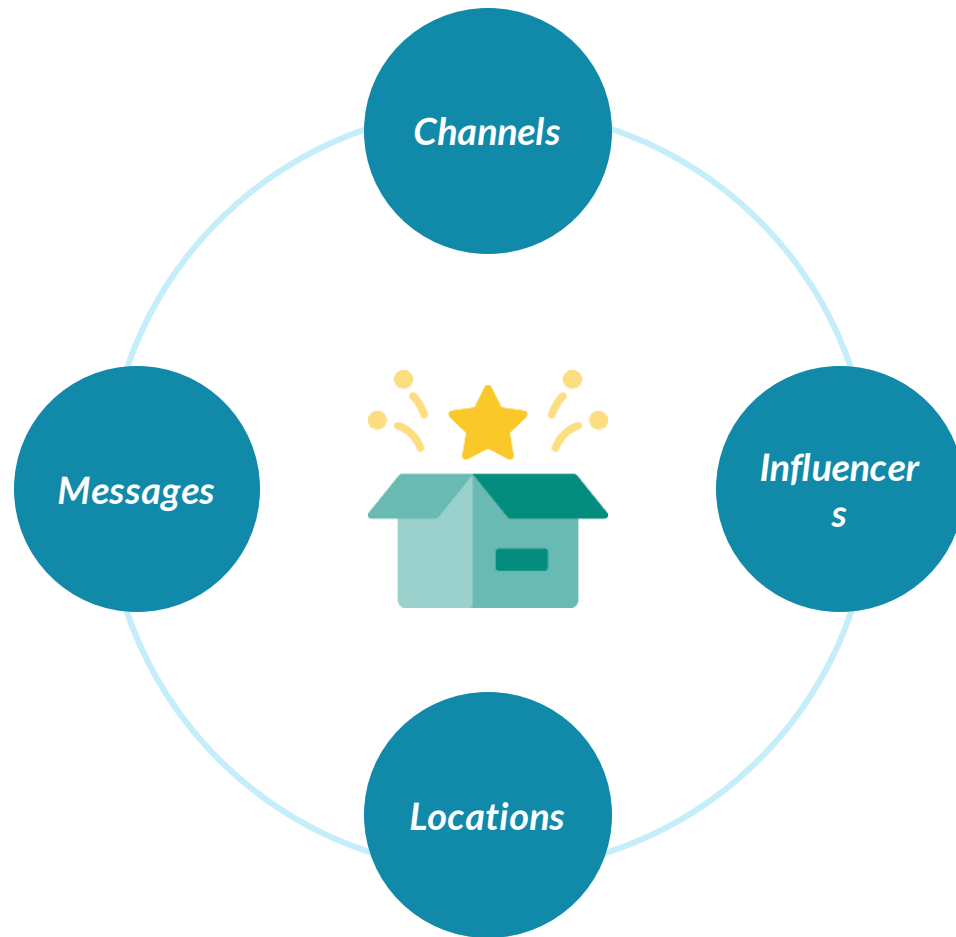
**2** *Use diverse and inclusive imagery across media and channels of communication*

**3** *Create interactive spaces to relay information, particularly protocols and guidelines*

**4** *Rely on trusted messengers to transmit vaccination-related messages, and recognize their efforts*



Solutions drew upon learnings around messaging, channel, influencer, and location, and can be either structural or behavioural



**Structural solutions** are supply-side solutions that focus on upgrading the system delivering vaccinations and related information to communities

**Behavioural solutions** are demand-side solutions that provide access to accurate information and build individuals' motivations to get vaccinated, thereby generating demand



# Community-based messaging has strong appeal; content focused on individual identities might also resonate with specific groups



## Community-based protection:

- Influencers felt it could inspire action
- Respondents showed **interest in comparing districts**, drawing on the desire to see their own districts do well



## Social proof:

- Individuals are motivated by seeing **those who resemble them getting vaccinated**



## Individual identity-based messaging:

- **Provider-focused messaging** resonated with unvaccinated older men
- **Appeals to take charge of one's future worked** for those who are self-reliant and those who aspire to become independent (e.g., young unmarried women)



## Fear-based messaging:

- Urban, literate individuals are more likely to respond immediately to **mention of the 2<sup>nd</sup> wave**, potentially due to higher exposure
- **Depiction of the health impacts of Covid-19** resonated with more rural, less literate audiences



## Call to action:

- Users need to see a **clear call to action they can adopt**
- They also want clarity on the **messenger providing the information and making the call to action** was – the most widely preferred such messenger is a doctor.



## Logistical details:

- Community members and influencers, including HCWs, report having insufficient information in advance **about vaccination camps and timings**



# There is a desire for a mix of mass-media (television, newspapers) and localized media (posters, loudspeakers) for vaccination communication

## Top priority



### Television:

- **Most preferred channel** for a range of content related to vaccination **by most groups**
- Viewers (including the less literate) have **high trust in news channels** such as *Aaj Tak* and *Zee News*.



### Posters:

- Widely held preference for placing at **highly visited sites** such as *darwazas* of influencers or *chaurahas* in the village
- Need to be **visual** to reach less literate audiences who might need someone else to explain them



### Loudspeakers:

- Highly localized channel **popular** among local residents **for information about camp timings and locations**
- Announcements can **reach those working in farms or at labour sites** as well

## Priority for targeted efforts



### Newspapers:

- Hindi dailies like *Dainik Prabhaat* are highly trusted, particularly for **state-wide announcements**, e.g., for **lucky draws or district-wise comparisons** of vaccination rates
- Reach is **limited by literacy**



### Face-to-face conversations:

- **PLW want information in person** (along with TV, phone calls)
- Community members like to see **user testimonials and host debates in local meetings**
- **In-person reminders for second dose** (along with digital channels) were also highlighted



### Radio:

- Less preferred than television or newspapers, always in combination with other channels



### Phone and social media:

- Rarely chosen as only option for information by community members, **even smartphone owners**
- **Healthcare workers use** the phone to get information (esp. WhatsApp, calls)





# Health workers and doctors, particularly those with pre-existing relationships with community members, are most influential



## Healthcare workers (HCW):

- **ASHAs are the most trusted messenger for PLW** and messaging around vaccine **guidelines**, followed by **ANMs**
- Community members also **want to see testimonials of ASHAs and AWWs** taking the vaccine

## Top priority



## Doctors:

- Community members, especially PLW and those with co-morbidities, want doctors at **camps to do check-ups before vaccination.**
- Community members also prefer seeing doctors **dispel myths and participate in debates**
- Local influencers are also keen to get **recognition from doctors**



## Community members:

- Community members want to **see how** their own community members **are doing after vaccination to determine if it's safe to get vaccinated**

## Priority for targeted efforts



## Community leaders:

- **Marginalised groups** like *dalit* or transgender communities trust and respect their own **community leaders' advocacy for the vaccination**, which might be the single most important factor in vaccination uptake in these communities



## Political leaders:

- There is interest in including political leaders at **local levels** (e.g., ward members, *jan pratinidhi*) and **state / national levels** (e.g., chief minister) in testimonials, posters.
- Local influencers also value **recognition from political figures**, but this might further alienate those unvaccinated people who mistrust government



# Public spaces are suitable for 24x7 vaccine camps; mornings are strongly preferred for door-to-door vaccination



## Vaccination camps



### Camp locations:

- Alongside **health centres, schools and Anganwadi centres**, community members suggested also holding **camp**s at **railway stations, and religious sites**
- Women are more likely to **attend such camps in groups**, possibly to ensure their safety

### Camp timings:

- **24x7 vaccination camps** give people the chance to attend at their convenience
- **Men** prefer attending on **Sundays** (potentially due to timings for work outside the home), which was also the preferred day for lucky draws
- **Some women**, largely housewives, were interested in attending camps during **weekdays**

### Camp services:

- **PLW and people with co-morbidities** want **health check-ups** to ensure vaccine safety, **medical supplies** such as a bed, masks, medicines, etc., and **WASH products and services** such as a clean toilet, water to drink, etc.

## Door-to-door visits



### Visit timings:

- **PLW prefer mornings and afternoons** for door-to-door vaccination, so they can address any post-vaccination issues during the rest of the day
- **Community members broadly prefer mornings**, (leaving the day free for other work); housewives are also open to afternoon visits

## Door-to-door visits



### SHG meetings:

- **PLW** and their mothers-in-law feel SHG meetings are a good avenue for sharing **information and hearing about campaigns related to Covid-19 vaccinations** for them



# Solution prioritization

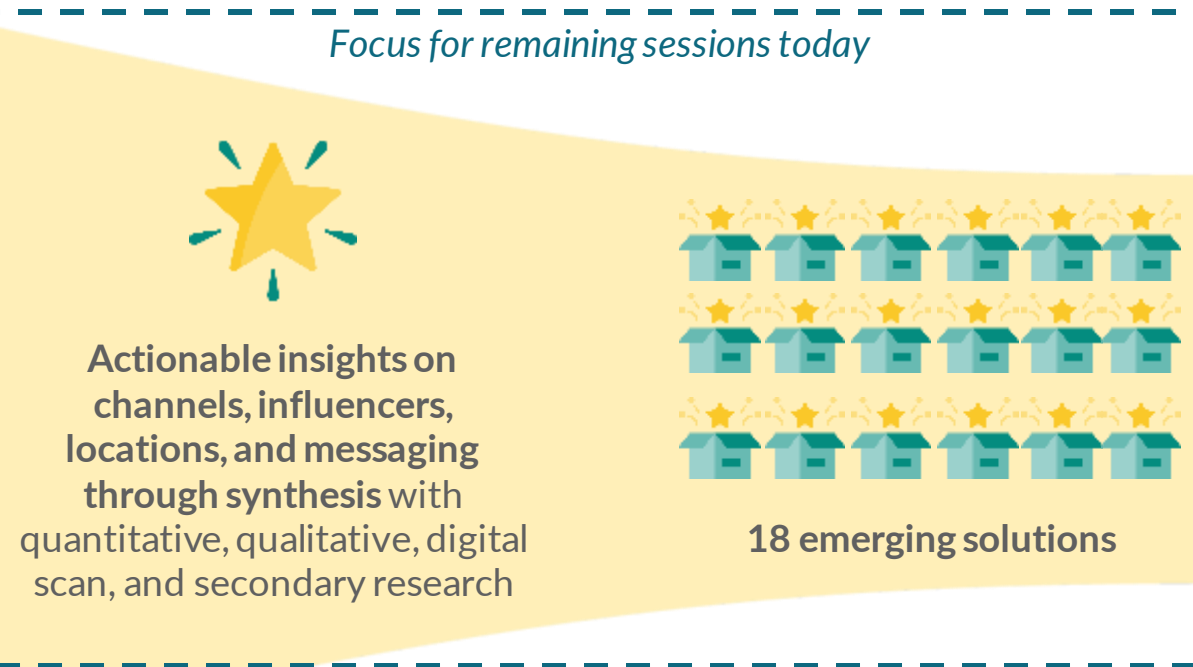
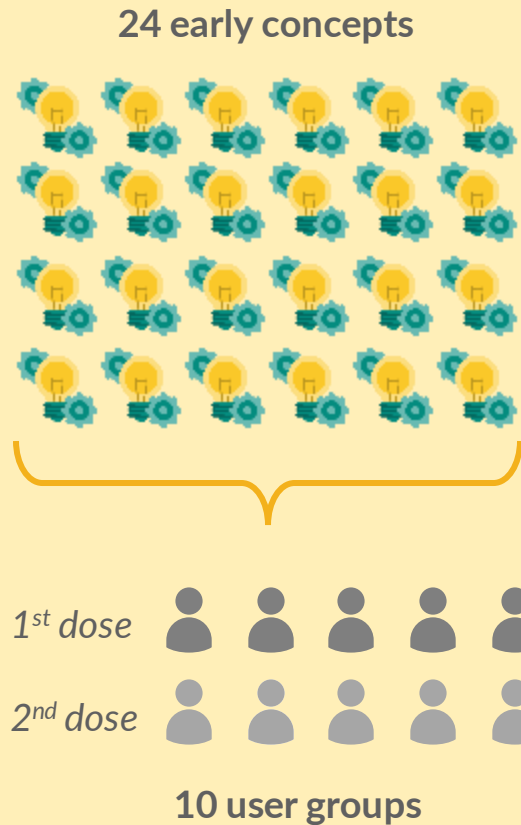
THROUGH PARTNER WORKSHOP, HYPERLOCAL DATA  
AND DIGITAL SCAN



# We tested our early concepts with 270+ respondents, combined findings to develop solutions spanning key channels, messages, and influencers

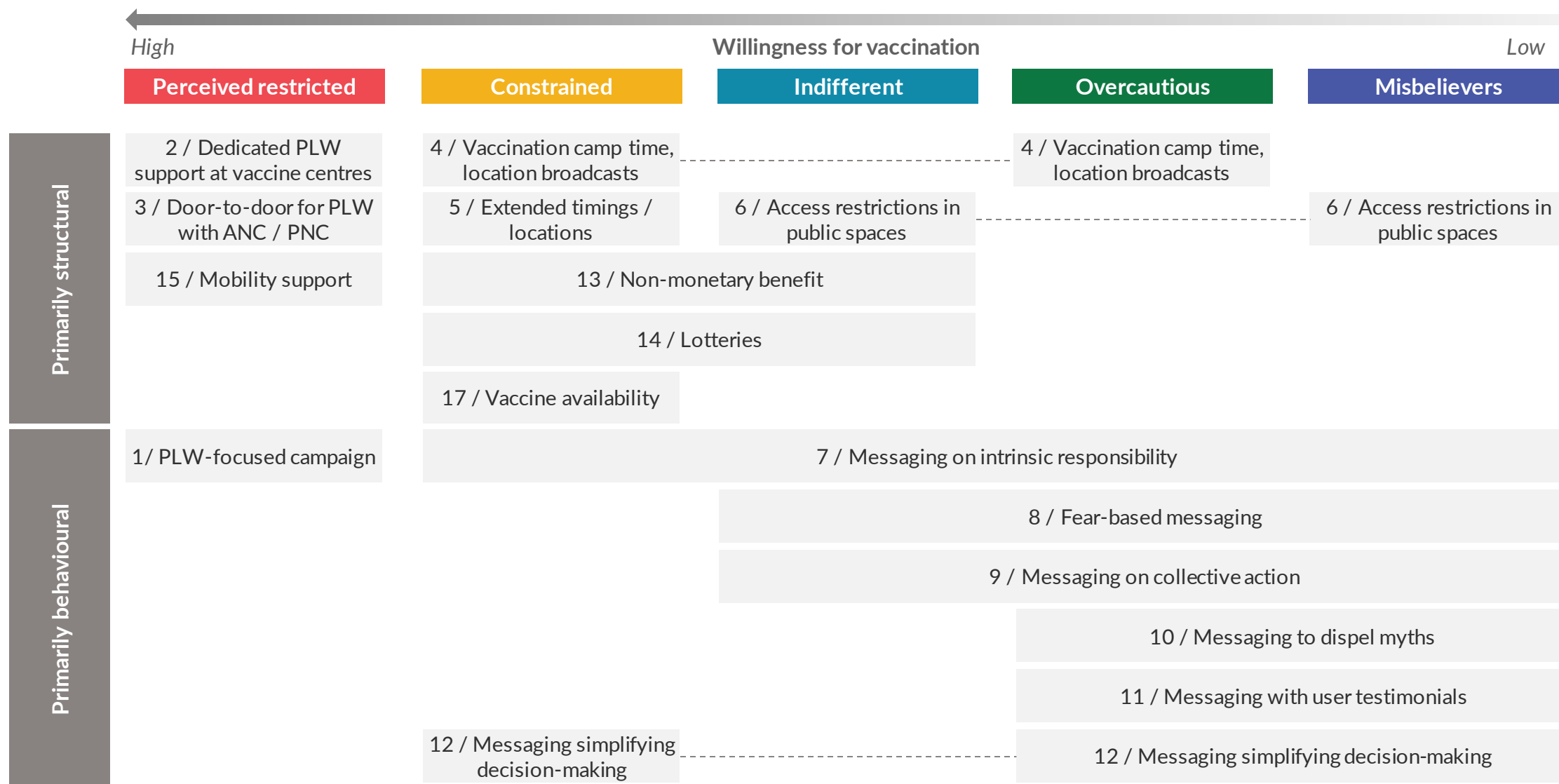
Early Concept

Solution



Early concepts were based on findings from human-centred design user research with 180+ participants across 8 districts and Care survey data covering ~45,000 people in 9 districts. Qualitative focused-group discussions with ~80 participants have also fed into our learnings and emerging solutions. Digital scans were conducted across publicly available social media posts accessed or created and search terms used over the past year in Bihar.

# Structural solutions can encourage *perceived restricted and constrained* individuals to get vaccinated; others require behavioural solutions



Note: Some solution ideas might use or span multiple levers; we have tagged each solution to the lever that is most prominent.



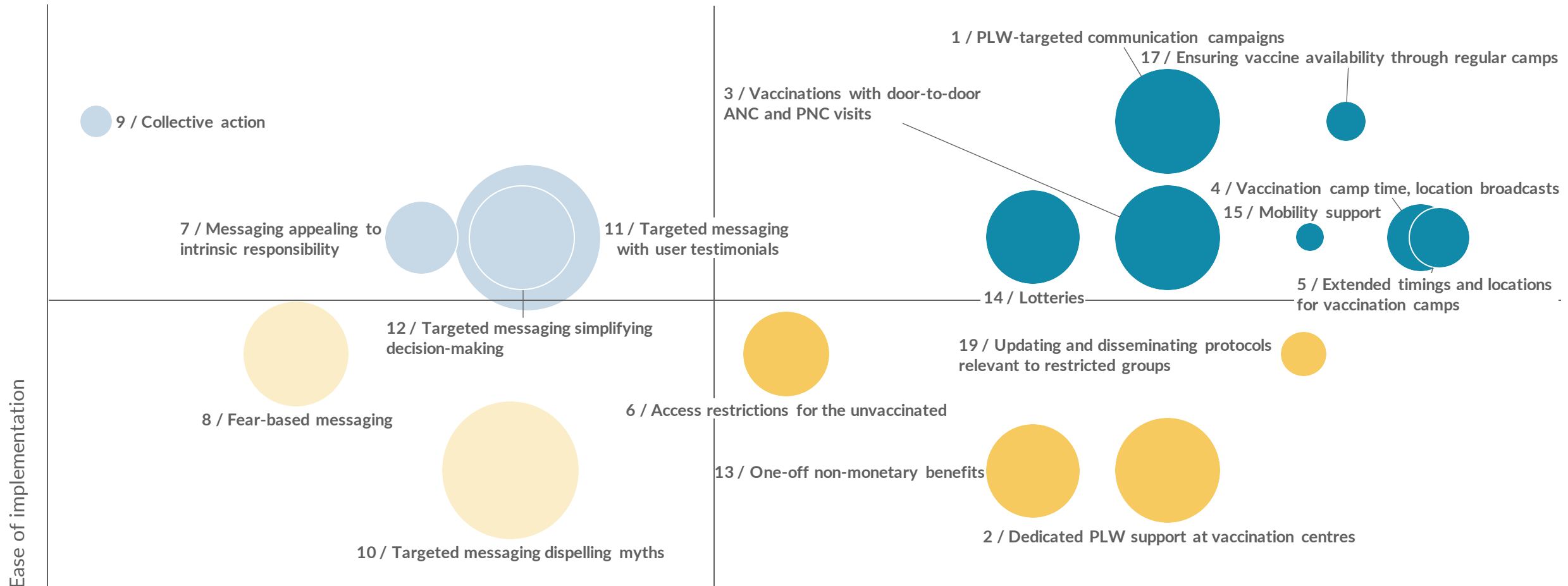
# FULLY UNVACCINATED

## Focusing on the 7 solutions with high impact and ease of implementation can further push the 1<sup>st</sup> dose coverage

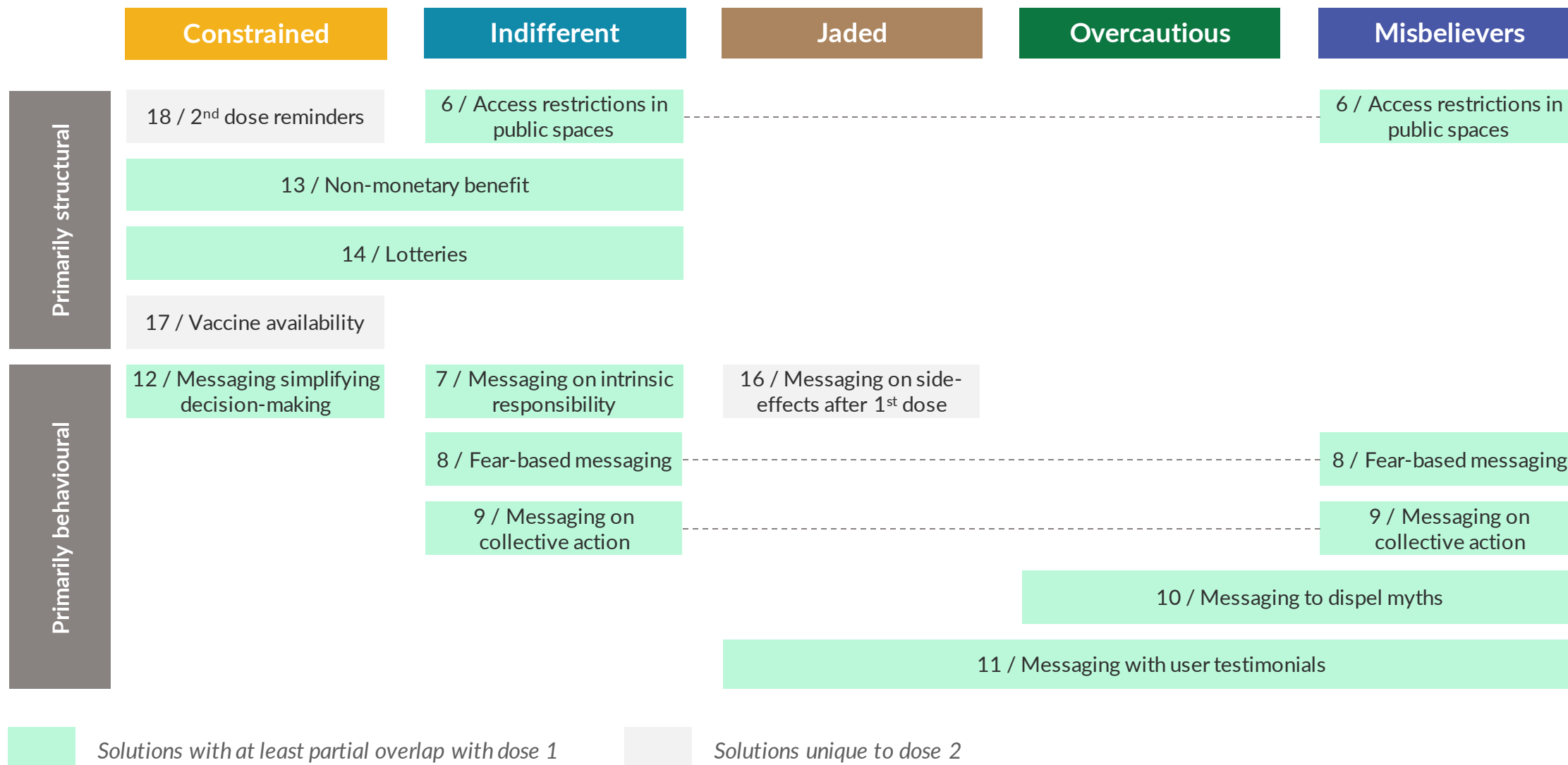
### Prioritization of Solutions

(Bubble Size = # of eligible citizens impacted, X Axis = Willingness quotient of eligible citizens, Y Axis = Ease of implementation)

● High Priority: Refine and Roll out at scale ● Wait and Watch: Launch if circumstances change ● Low Effort: Design Solutions to boost willingness ● Low Priority: Deprioritize



# Similarly, multiple solutions can drive uptake for the 2<sup>nd</sup> dose; some are unique to dose 2 while others overlap with dose 1



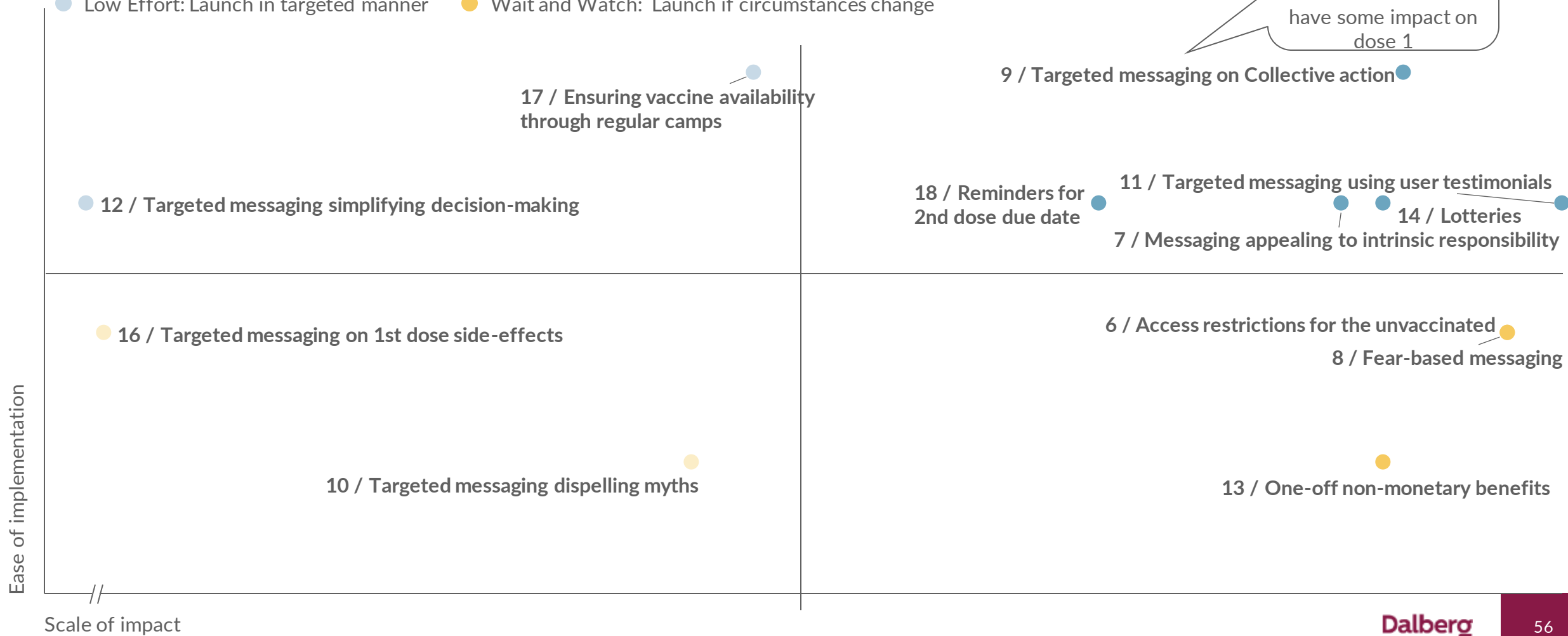
Note: Some solution ideas might use or span multiple levers; we have tagged each solution to the lever that is most prominent.

# 5 interventions (4 of which overlap with dose 1 solutions) can positively impact dose 2 uptake

## Prioritization of Solutions

(X Axis = # of eligible citizens impacted, Y Axis = Ease of implementation)

- High Priority: Refine and roll out at scale
- Low Priority: Deprioritize
- Low Effort: Launch in targeted manner
- Wait and Watch: Launch if circumstances change



Apart from "Reminders for 2nd dose", all other interventions also have some impact on dose 1



# We've refined these solution ideas, incorporating inputs from partner organizations

## Early solution ideas

- 1 / PLW-targeted communication campaigns
- 2 / Dedicated PLW support at vaccination centres
- 3 / Vaccinations with door-to-door ANC and PNC visits
- 4 / Vaccination camp time, location broadcasts
- 5 / Extended timings and locations for vaccination camps
- 7 / Messaging appealing to intrinsic responsibility
- 9 / Targeted messaging on collective action
- 11 / Targeted messaging using user testimonials
- 14 / Lotteries
- 15 / Mobility support
- 17 / Ensuring vaccine availability through regular camps
- 18 / Reminders for 2<sup>nd</sup> dose due date

## Refined solution ideas

- 1 / 'Mother safe., child safe' – shifting the narrative for PLW and their families
- 5 / Using private and digital healthcare to boost onsite medical support at vaccination camps
- 8 / Providing vaccinations during ANC/PNC home visits
- 6 / Improving local information flows to build awareness of camp timings and locations in advance
- 7 / Extending camp timings and locations in non-urban areas
- 3 / Mega-campaign inspiring vaccine uptake and Covid-appropriate behaviour through collective action
- 4 / Hyper-local user testimonials to drive vaccine confidence
- 9 / Lotteries or lucky draws to reduce opportunity cost and incentivise indifferent groups
- De-prioritized due to 'Har Ghar Dastak'*
- 2 / Reinforcing relevance and due date of 2nd dose

# We have identified 9 solutions aimed at increasing 2<sup>nd</sup> dose coverage and plugging any gaps in 1<sup>st</sup> dose coverage; 3 are discussed in detail

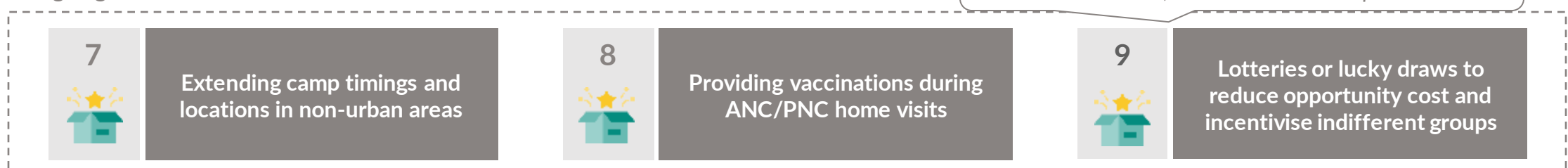
## First priority



## Second priority



## Ongoing solutions that should be scaled / standardized across the state



*While lotteries have the potential to alleviate concerns about lost income, evidence on their impact is mixed*

***These solutions, along with 'Har Ghar Dastak' can boost 2<sup>nd</sup> dose relevance, address PLW, co-morbidity, and hyper-local concerns, but will not be sufficient to counter concerns around lost income***

# These fed into solutions addressing ongoing challenges with PLW and 2<sup>nd</sup> dose uptake, of which the former are being scaled up

Prioritized for scale-up

## PLW-focused content



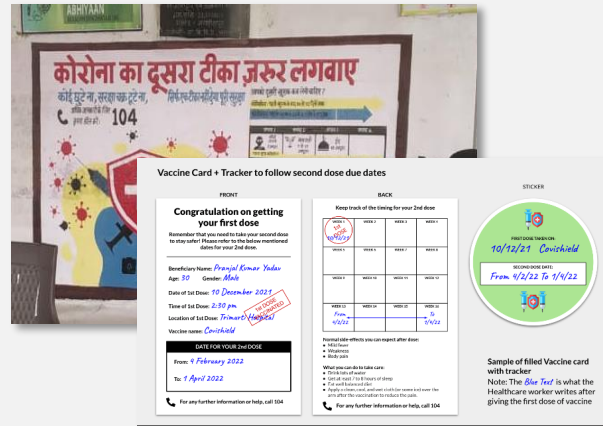
FAQ videos have been posted on social media and are being broadcast to all users in Bihar to spread awareness



Posters guiding HCWs on how to speak to PLW and their families are being distributed digitally to all ASHAs and ANMs in the state, after being piloted to very positive feedback

Paused due to change in priorities

## 2<sup>nd</sup> dose reinforcement mechanisms



Wall paintings were designed to reinforce the need for the 2<sup>nd</sup> dose and provide easy guidelines to calculate when it might be due. Similarly, take-away slips given after 1<sup>st</sup> doses were re-designed to provide a visual guide to the appropriate dosage interval.

After piloting, these were de-prioritized considering the 3<sup>rd</sup> wave and new priorities around adolescent and precaution vaccine doses

## Collective action campaign



Print campaigns anchoring on residents' collective responsibility were designed to drive 1<sup>st</sup> and 2<sup>nd</sup> dose uptake.

These were de-prioritized in light of the 3<sup>rd</sup> wave and new priorities around adolescent and precaution vaccine doses

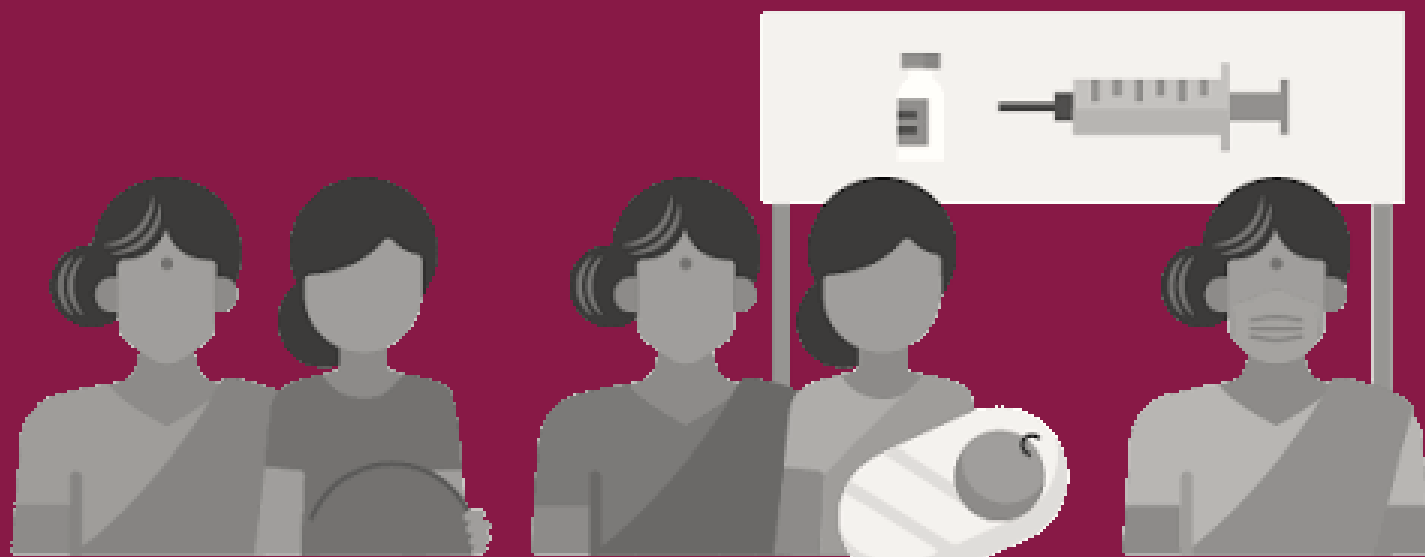
# Detailed Solution Outline

1

## ‘MOTHER SAFE, CHILD SAFE’ - SHIFTING THE NARRATIVE FOR PLW AND THEIR FAMILIES

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Multi-channel messaging targeting pregnant and lactating women (PLW) and their families, going beyond reassuring PLW of the Covid-19 vaccine’s safety to also emphasize its benefits for their own and their child’s health



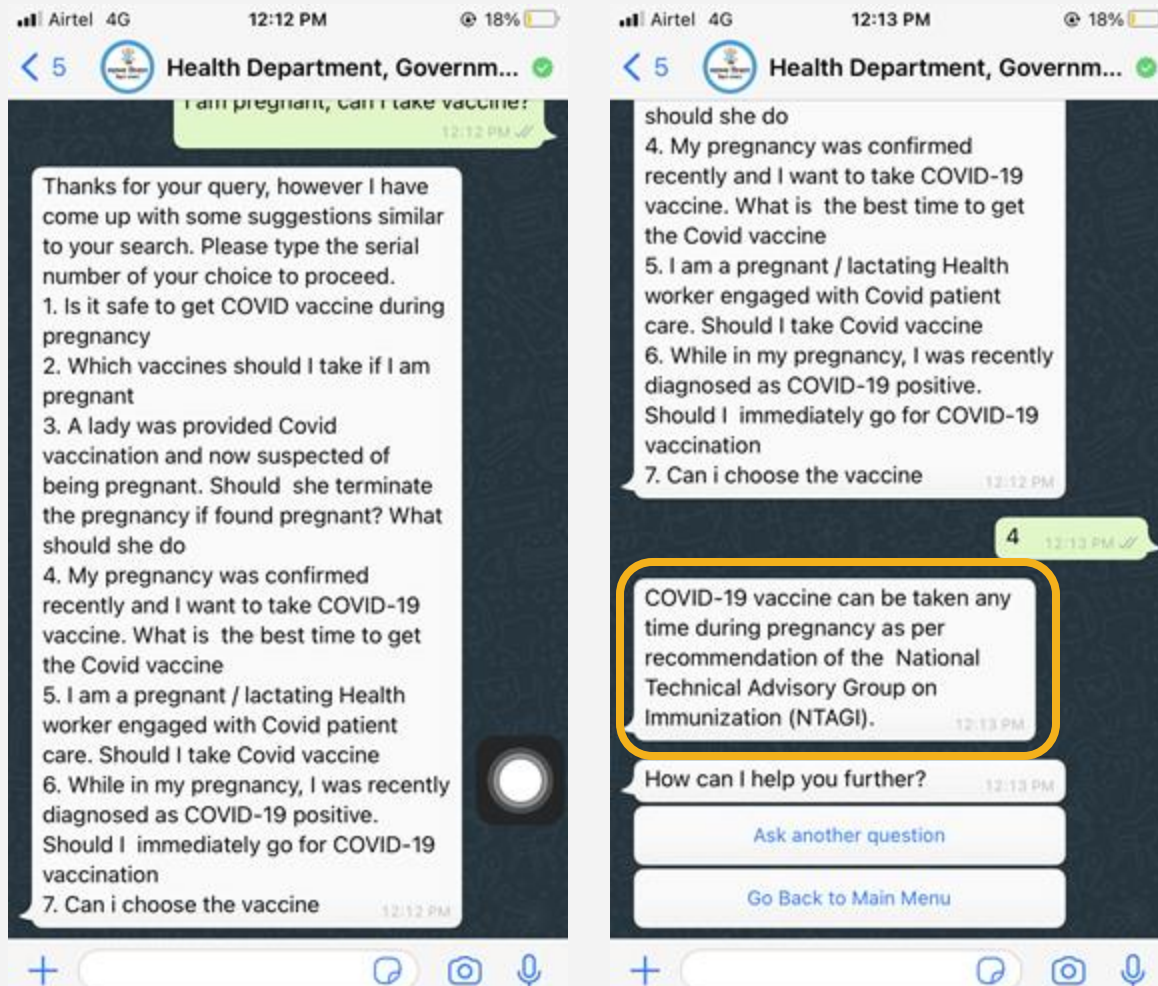


# 1. 'Mother safe, child safe' - Shifting the narrative for PLW and their families

**SUMMARY AND VALUE PROPOSITION:** Multi-channel messaging targeting pregnant and lactating women (PLW) and their families, going beyond reassuring PLW of the Covid-19 vaccine's safety to also emphasize its benefits for their own and their child's health

'PLW *could* get vaccinated if they wanted to'

'PLW *should* get vaccinated for themselves and their children's future'



# 1. 'Mother safe, child safe' - Shifting the narrative for PLW and their families

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## PRIORITY: High

Current focus	Shift in focus	Rationale
No campaign; focus on distribution of information on safety of vaccine through letter, 1:1 counselling, etc.	"Mother safe, child safe" narrative-focused campaign targeted at PLW, the mother-in-law, mother, and spouse, supplemented with training for ASHA/ANM	Health workers, PLW, families still lack confidence, necessitating a concerted push in the form of a larger campaign that changes the default to vaccination

### Scale of problem:

- 24% of fully unvaccinated report pregnancy / lactation as the reason for not getting vaccinated, of whom 87% are willing to get vaccinated

### Search trend (through digital scan - social listening):

- Steady increase in searches on general information (e.g. "vaccines during pregnancy", "lactating mother vaccine") and vaccine guidelines (e.g. "vaccine before pregnancy", "vaccine guidelines") till May '21, post which it has declined but remains above pre-Mar '21 scale



## TARGET POPULATION:

Current focus	Shift in focus	Rationale
Only PLW	PLW, along with close family members who participate in decision-making	Relatives like mothers (in-law) and spouses often make health-related decisions for PLW

### Target demography:

- PLW, particularly rural women under 30, educated up to 5th std
- Close relatives of PLW, who participate in decision-making around their pregnancy and children's upbringing



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### INFLUENCERS:

Current focus	Shift in focus	Rationale
ASHAs, AWWs, and ANMs counsel PLW 1:1	Expand messaging to MIL and family using mass media in addition to local influencers, with separate job aids and training for existing influencers	While PLW trust health workers, they do not have enough credibility or bandwidth to convince them alone of safety and benefits; they need to be supported by parallel messaging

#### Insights from HCD research:

- ASHAs are the most trusted messenger for PLW and messaging around vaccine guidelines, followed by ANMs
- Community members, especially PLW and those with comorbidities, want doctors at camps to do check-ups before vaccination

#### Learnings from ongoing interventions:

- Some ASHAs, AWWs, and ANMs are encouraging PLW to get vaccinated after guidelines changed, but some are hesitant or not aware of the updates

### CHANNELS: *Community-based reminders backed by media campaign*

Current focus	Shift in focus	Rationale
<ul style="list-style-type: none"> <li>• Whatsapp bot, FAQ poster</li> <li>• Face-to-face conversation</li> </ul>	Omni-channel	In-person conversations with health workers need to be supplemented with other media to reinforce key messages

#### Insights from HCD research:

- PLW want information in person (along with TV, phone calls)
- PLW and their mothers-in-law feel SHG meetings are a good avenue for sharing information and hearing about campaigns related to Covid-19 vaccinations for them

#### Insights from digital scan - social listening:

- 2 channels (news pages, government agencies) dominate digital discourse on vaccinations for PLW
- News pages have greater reach (7x) than government agencies across gender and age groups
- Those aged 45+ and women are even less likely to access information from government agencies than other groups (9x and 12x skew towards news sources, respectively)

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### MESSAGES AND VISUALS:

Current focus	Shift in focus	Rationale
"Vaccine is Safe"	Focus on safety and health of entire family, especially unborn child, delivered to PLW and those around her (husband, her mother, MIL)	While pregnant women are willing to get vaccinated if they're assured of its safety and benefits, those in their spheres of influence such as MIL need to step up and become enablers instead of gatekeepers

**Insights from HCD research:**

- Individuals are motivated by seeing those who resemble them getting vaccinated
- Users need to see a clear call to action they can adopt

### TONE:

Current focus	Shift in focus	Rationale
Informational (focus on safety)	Encouraging, with an appeal to sense of protector and nurturer	Repositioning vaccination as a positive step towards healthy pregnancy / motherhood might encourage those on the fence

### FREQUENCY:

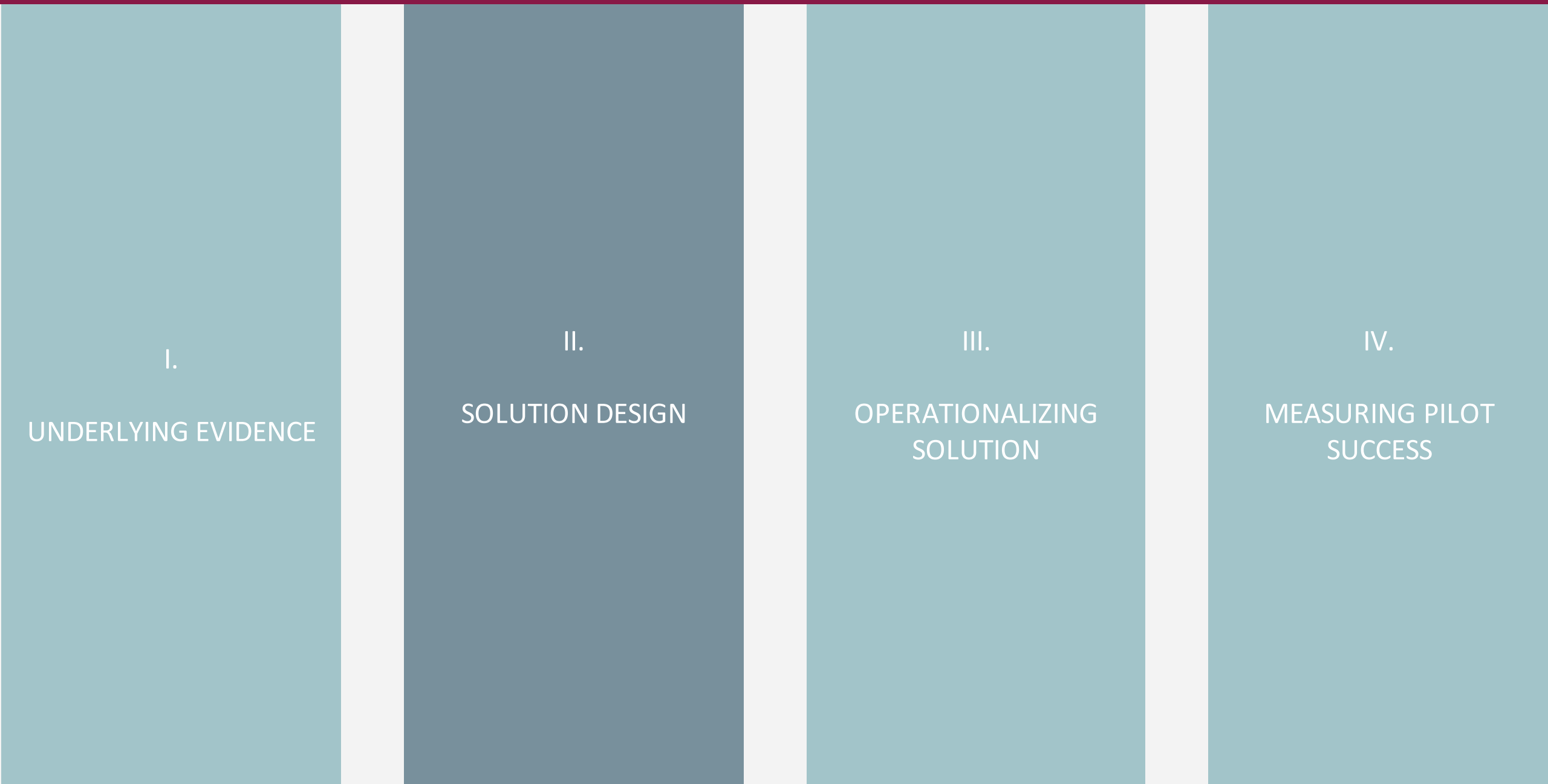
Current focus	Shift in focus	Rationale
Irregular, at times of ANC visits or on the 9th of every month (under PMSMA)	Increased frequency (multiple touch points every day / week) due to multiple channels	Increased frequency might build a sense of urgency and ensure saturation of messaging

**Insights from HCD research:**

- PLWs need constant reassurance to get accustomed to ever-changing information about COVID-19 and the vaccine
- PLWs do not always get updated information and as a result comply with outdated instructions

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## USER JOURNEY



### 1: ASHA trainings

Supervisors brief ASHAs about campaign focused on getting PLW vaccinated, emphasizing safety (except if there are contraindications) and training to counsel PLW and their families on the importance of the vaccine for the health of mother and child

They also identify local touchpoints such as *darwazas* of health workers' or CMs' houses, *chaurahas*, etc. where key messages can be amplified.

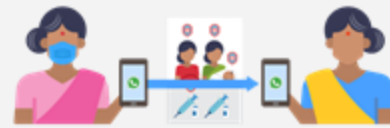


### 2: First-touch dialogues

ASHA attends SHG / VO meetings to discuss importance of vaccination.

Content focuses on 2-3 key messages: (a) targeted at PLW, on safer pregnancy with vaccination, which would mean safer and healthier child (b) targeted at older women, like mothers-in-law and mothers, to keep their family and future generation safe

ASHA shares locations and timings of upcoming vaccination camps, encouraging members to bring their PLW relatives.



### 3: Digital dialogues

ASHA shares posters on WhatsApp with SHG CM who forwards it to members in her SHGs to ensure the message circulates among all women in the village.



ASHA also puts up these posters in PHC and public spaces like Anganwadis and temples/mosques, where women often visit.



### 4: Household dialogues

SHG members are encouraged to start conversations at home with pregnant daughters-in-law about the vaccination.



Key messages of the campaign are reinforced through loudspeaker broadcasts, TV advertisements, and radio shows, which trigger household dialogue.



### 5: Community action

Groups of mothers and mothers-in-law, led by the ASHA and SHG CM, visit camps with their PLW daughters to get vaccinated.



ANM administers the vaccine to PLW after checking for contraindications and explains the necessary care protocols to the mother-daughter pairs

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सासु माँ देंगी ध्यान गर्भवती महिला को टीका लगावायें

नए मेहमान को सुरक्षित बिहार में लाएं

देर मत किजिये आज ही कोरोना का टीका लिजिये

104 अधिक जानकारी के लिए हेल्पलाइन पर संपर्क करें

जीवंत बिहार...सपना हो साकार

आशा बहन की सुनिए सभी गर्भवती महिलायें टीका लिजिये

घर घर जाएं गर्भवती महिलाओं को भरोसा दिलाएं टीका लगायें

देर मत किजिये आज ही कोरोना का टीका लिजिये

104 अधिक जानकारी के लिए हेल्पलाइन पर संपर्क करें

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सभी गर्भवती और दूध पिलाती माँ को कोरोना के दोनों टीके लगवाना है

नए मेहमान को सुरक्षित बिहार में लाना है

देर मत किजिये आज ही कोरोना का टीका लिजिये

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हमें आशा बहन पर गर्व है सुरक्षित प्रसव आपका कर्तव्य है

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देर मत किजिये आज ही कोरोना का टीका लिजिये

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स्वास्थ्य विभाग

# 1. 'Mother safe, child safe' - Shifting the narrative for PLW and their families

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	Intervention mapping			
	High priority		High priority	
<b>Key influencer and their appeal</b> Who is featured and why?	Mothers, mothers-in-law <i>(Direct influence)</i>	Husbands/ spouses <i>(Direct influence)</i>	ASHAs, AWW, ANM <i>(Trust)</i>	Doctors, Clinicians, scientists <i>(Credibility)</i>
<b>Channels</b> Where are they best featured? (note: highest priority in bold)	Face-to-face dialogues, <b>Print media (Posters, Newspapers), WhatsApp media (video, posters, audio)</b>	<b>Face-to-face dialogues</b> , Print media (Posters, Newspapers), WhatsApp media (video, posters, audio)	<b>Face-to face</b> , Phone	<b>Television shows and adverts</b> , Radio skits and segments on shows
<b>Messaging</b> What is the core narrative of the message?	Encouraging (PLW <i>should</i> get vaccinated)	Advisory (PLW <i>should</i> get vaccinated)	Assurance (PLW <i>could</i> get vaccinated - it is safe)	Informative (PLW <i>could and should</i> get vaccinated - it is safe)
<b>Message example</b>	<i>"Household matriarchs, ensure that your family and future generations are protected"</i>	<i>"Young fathers and mothers, let us band together to protect the safety of all our young families, today and in the future."</i>	<i>"It is now safe for both expectant and lactating mothers to seek out the vaccine for the safety of them and their children"</i>	<i>"The vaccine is medically and scientifically safe and for all to use, including expectant and lactating mothers."</i>
<b>Cross cutting design considerations</b>	<p><b>Call to action:</b> Ensure that there is a clear and easy call to action for SMS, dial in, WhatsApp bots and in-person messaging across all intervention material e.g <i>"Toll free call, SMS or Whatsapp 0821- 56487 for information on vaccines for pregnant and lactating women or speak to your local village Asha in order to book your next vaccination appointment."</i></p> <p><b>Visual media:</b> Ensure that visual material includes diverse and relatable imagery.</p> <p><b>Print and audio:</b> Incorporate local dialects and that messaging is entertaining and engaging.</p> <p><b>Credibility of information:</b> Ensure that all intervention media gives people information on credible sources of information e.g designated MoH numbers.</p>			



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## Key resources and dependencies

- **ASHAs and ANMs are persuaded** that PLW should get vaccinated, and are equipped to navigate conversations about risk involved
- **ASHAs have the time and are welcomed at SHG meetings** and other village spaces to discuss the new campaign
- **Access to smartphones and mobile network**, at the village level at least, is strong enough to ensure all relevant materials are circulated
- **SHG CMs and ASHAs cooperate** to circulate videos that help trigger household dialogue
- **Husbands of PLW do not feel left out** of the conversation and avoid lashing back against their wives or other family members

## Associated ideas (what other ideas can be rolled out in tandem?)

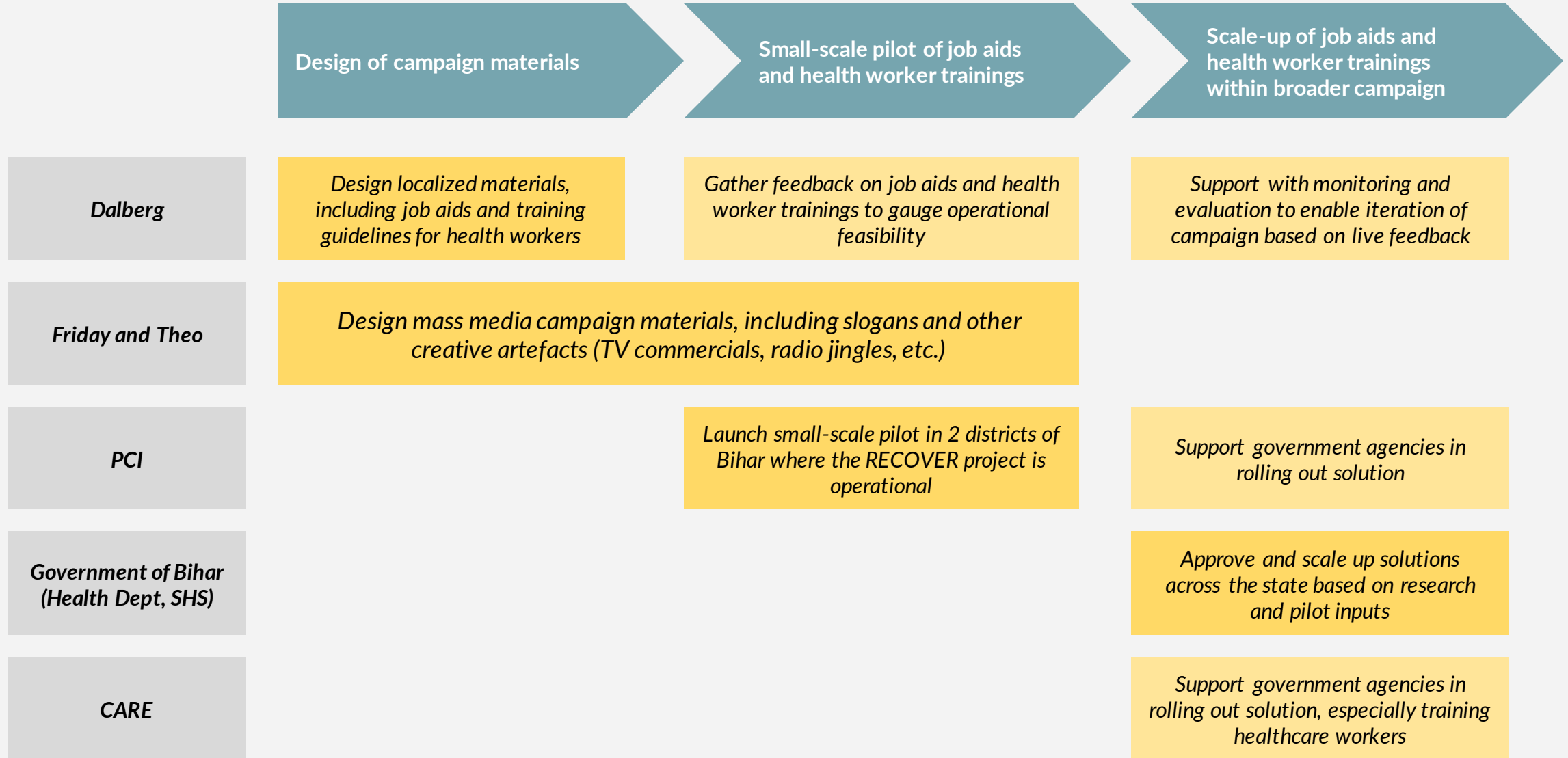
- **Dedicated PLW support at vaccination centres** for ensuring medical support if needed before or after vaccination (especially to check for contraindications), potentially through a helpline / hotline if a doctor is not readily available
- **Targeted messaging with user testimonials:** Using testimonials from PLW who have been vaccinated with both doses can help build PLW and their relatives' confidence in the vaccines' safety
- **Vaccinations with door-to-door ANC and PNC visits** to make sure that PLW who are willing receive both doses in time



**1. 'Mother safe, child safe' - Shifting the narrative for PLW and their families**

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**High-level implementation roadmap**



Note: Those boxes highlighted in darker yellow are the primary activity undertaken in the corresponding implementation stage. Those in a lighter shade of yellow are supporting activities.

# 1. 'Mother safe, child safe' - Shifting the narrative for PLW and their families

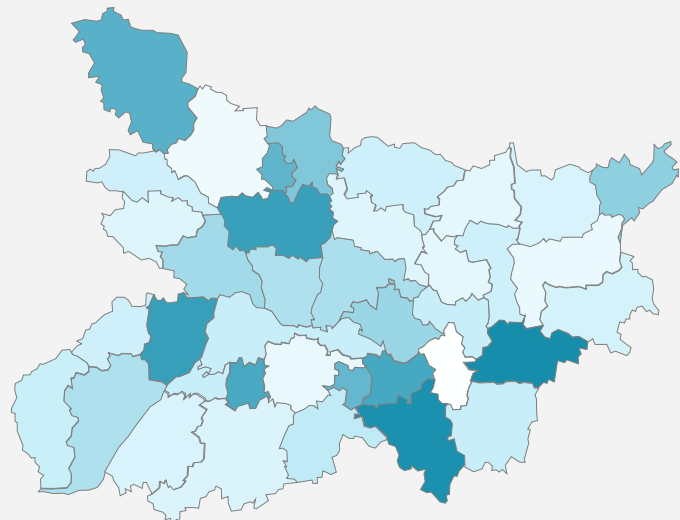
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## Priority districts:

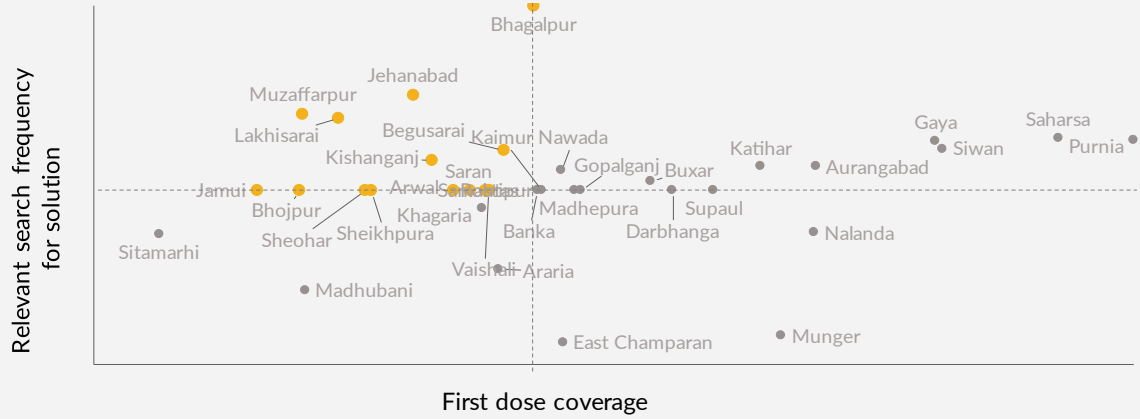
Based on vaccination coverage and frequency of relevant internet searches<sup>1</sup>

### Highest priority districts<sup>3</sup> -

- Bhagalpur (R)
- Jamui (R)
- Bhojpur (R)
- Muzaffarpur
- Lakhisarai
- Jehanabad
- West Champaran (R)



Low priority  High priority



## Sub-district markers for prioritizing blocks:

Based on district level correlations

1. Fewer ASHA workers
2. Lower routine immunization rates
3. Higher prevalence of chronic health conditions e.g.: (hypertension)
4. Higher prevalence of Covid-19

Based on correlations observed between **first dose coverage/searches related to vaccines and pregnancy** and over 130 variables spanning **demographics** (e.g.: education, sex ratio), **connectivity** (e.g.: access to banks, roads), **access to public services** (e.g. water, sanitation, electricity) and **health factors** (e.g. access to maternal care, immunization)

Notes: 1. Relevant internet searches are on COVID vaccination around pregnancy 2. Internet search data is available for 24 out of 38 Bihar districts; interpolated with average values for others 3. (R) Recover districts refers to those in which PCI is running a vaccine support program on the ground; 4. West Champaran and Patna excluded as outliers

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Learning agenda for pilot	Indicators	Testing methods
<p>[INPUT] What is the cost and time effort required to provide training to healthcare workers on vaccinations for pregnant and lactating women?</p>	<ul style="list-style-type: none"> <li>• Cost of providing 1 training</li> <li>• Time taken for galvanizing health workers for training</li> <li>• Time taken for 1 training session</li> <li>• Number of health workers attending 1 training session</li> </ul>	<p>Feedback from the implementation team (RECOVER on-ground staff, managers)</p>
<p>[INPUT] How much does it cost to create and distribute the paper-based job aids (leaflets)?</p>	<ul style="list-style-type: none"> <li>• Cost of printing 1 job aid</li> <li>• Number of job aids demanded by 1 health worker</li> </ul>	<p>Feedback from the implementation team (RECOVER on-ground staff, managers)</p> <p>Feedback from health workers</p>
<p>[OUTPUT] Is the job aid easy to understand? How do health workers react to the training?</p>	<ul style="list-style-type: none"> <li>• Health workers' reported ease or difficulty in understanding the job aid</li> </ul>	<p>Feedback from health workers</p>
<p>[OUTCOME] Is there an increase in health workers' perception of the need and benefit of getting pregnant and lactating women vaccinated with the Covid-19 vaccine?</p>	<ul style="list-style-type: none"> <li>• Reported change in perceived need for pregnant and lactating women to get the Covid-19 vaccine</li> <li>• Reported change in perceived benefit for pregnant and lactating women to get the Covid-19 vaccine</li> </ul>	<p>Feedback from health workers</p>
<p>[OUTCOME] Is there an increase in health workers' willingness to convince pregnant and lactating women about receiving the Covid-19 vaccine?</p>	<ul style="list-style-type: none"> <li>• Reported change in willingness to speak to pregnant and lactating women</li> </ul>	<p>Feedback from health workers</p>

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PLW-focused FAQ videos, have been posted on Facebook and will be boosted to increase coverage across Bihar on social media

 **Bihar Health Department** ✓  
16 January at 12:34 · 🌐

#मातृत्व\_सुख : गर्भावस्था में कोरोना का टीका बिल्कुल सुरक्षित है। इससे गर्भवती महिला व बच्चे का सुरक्षा चक्र और भी मजबूत होता है।

Mangal Pandey  
Ministry of Health and Family Welfare, Government of India  
#BiharHealthDept



 **Bihar Health Dept** @BiharHealthDept · Jan 16

#मातृत्व\_सुख : गर्भावस्था में कोरोना का टीका बिल्कुल सुरक्षित है। इससे गर्भवती महिला व बच्चे का सुरक्षा चक्र और भी मजबूत होता है।

@officecmbihar  
@mangalpandeybjp  
@MoHFW\_INDIA  
#BiharHealthDept



0:41 | 11.4K views

5 46 186



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**We conducted training with the PLW FAQs as job aids for ASHA workers and the material was very well received**



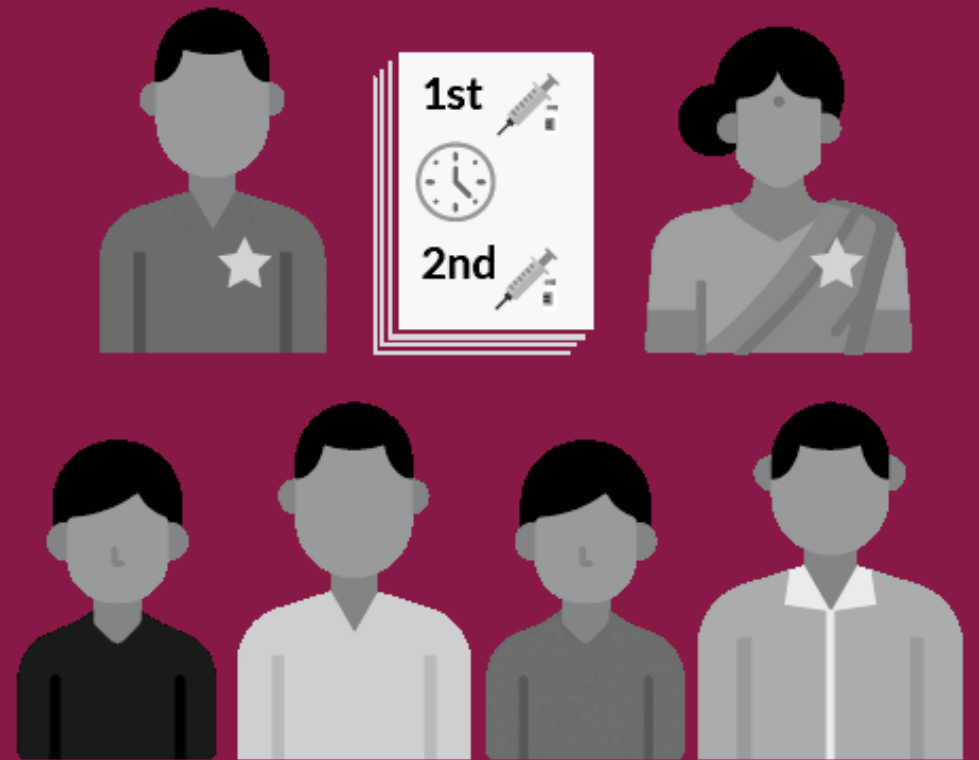
*Training conducted at CHC Jagdishpur (Bhagalpur) for ASHAs and ANMs, and providing them with job aids to use in conversations with PLW*



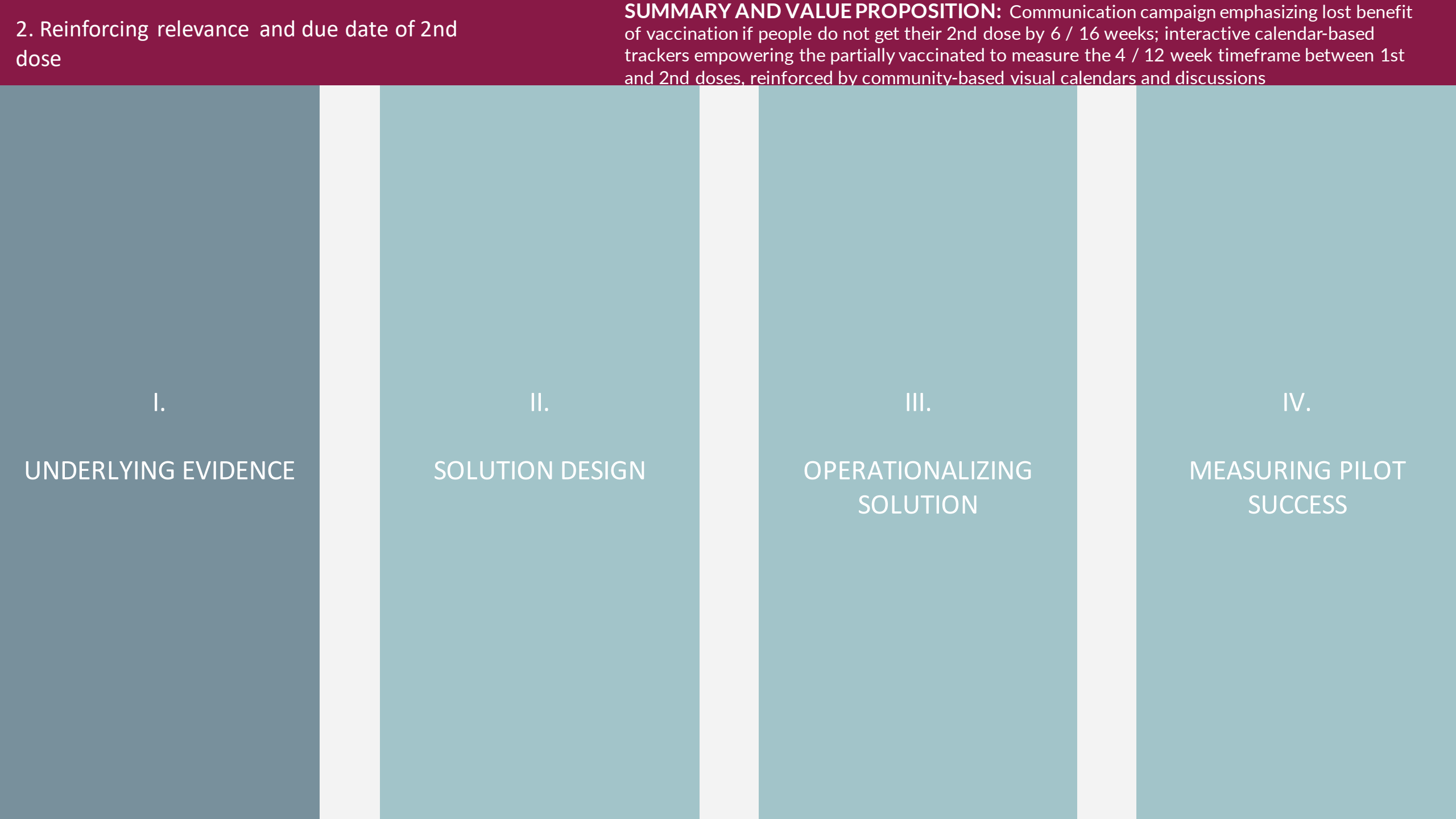
*ANM and ASHA distributing the communication materials among PLW and their families*

## REINFORCING RELEVANCE AND DUE DATE OF 2ND DOSE

Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions



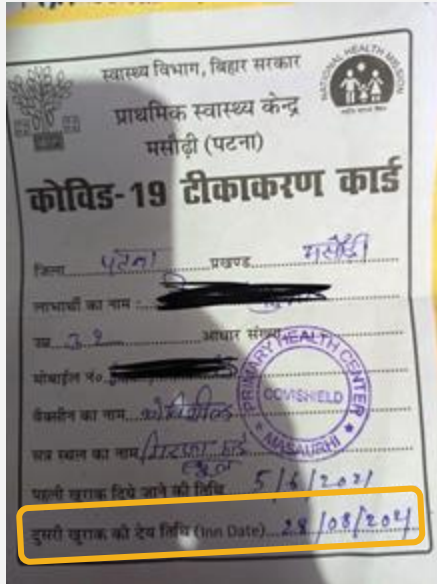




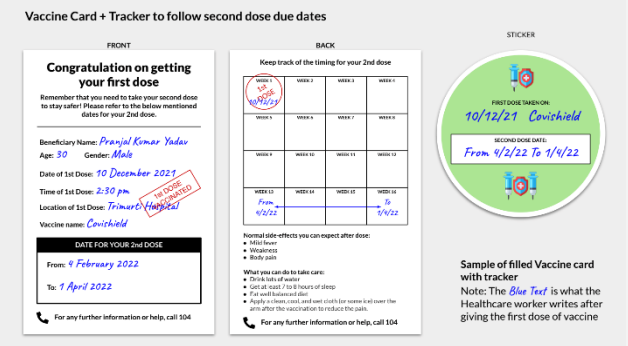
**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

2. Reinforcing relevance and due date of 2nd dose

**Text-heavy information** about 2nd dose due date



**Visual calendar** reminding the partially vaccinated of the appropriate dosage interval



**Gain-based framing,** focusing on 'full benefit' of 2 doses



**Loss-based framing,** focusing on lost/incomplete benefit of only 1 dose



**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

## 2. Reinforcing relevance and due date of 2nd dose

### PRIORITY: High

Current focus	Shift in focus	Rationale
Push form of communication - same for all user groups	Push-and-pull communication via locally contextualized reminders	Rising levels of 2nd dose non-compliance necessitates a boost in relevance and reminders

#### Scale of problem:

- 33% were in waiting period and 17% were eligible but hadn't received the 2nd dose (rising as of end-November)
- Most cited reason for those who are eligible not getting the 2nd dose (~46% of 36% identified as constrained due to a lack of information about their 2nd dose details or availability of vaccines)

#### Search trend (through digital scan - social listening):

- Build up in internet search for vaccine certificates online (e.g. "how to download vaccine certificate") till Sept '21, with slight decline in October
- Older age groups more likely to search for this online, potentially due to lower levels of digital literacy or ease



### TARGET POPULATION:

Current focus	Shift in focus	Rationale
All eligible individuals	Additional efforts for those reporting a lack of information about 2nd dose	Supplementary interventions can address specific barriers for high-priority groups

#### Target demography:

- Primarily Hindus (86% of sample, 37% of whom are constrained vs 36% in full sample), particularly those from scheduled tribes (2% of sample, 72% of whom are constrained)

## 2. Reinforcing relevance and due date of 2nd dose

### INFLUENCERS: Multiple local actors

Current focus	Shift in focus	Rationale
<ul style="list-style-type: none"> <li>• Camp organizers</li> <li>• CoWin</li> </ul>	<p>Involvement of PRI, SHGs and employers alongside existing influencers to provide reminders to those waiting for the 2nd dose</p>	<p>Reminders from local authorities and members of the same social circles can reinforce when individuals need to get their 2nd dose</p>

#### Insights from HCD research:

- ASHAs are the most trusted messengers for information on vaccine guidelines, followed by ANMs
- Competing priorities and restrictive working hours limit some people in certain occupations from participating in vaccine camps
- Some people rely largely on their families and relatives as their primary source of information when it comes to vaccine information and reminders
- After the 1st dose, some people have an inflated sense of immunity and a diminished sense of need to get their 2nd vaccine dose.

### CHANNELS: Community-based reminders backed by media campaign

Current focus	Shift in focus	Rationale
<ul style="list-style-type: none"> <li>• SMS and phone call at end of 4 / 12-week period</li> <li>• Paper slip with interval details given sometimes after 1st dose</li> </ul>	<ul style="list-style-type: none"> <li>• Mass media campaign on 2nd dose relevance</li> <li>• Multiple SMS and phone calls during and after end of 4 / 12 week period</li> <li>• Wall art in public spaces to reinforce message of 4 / 12 weeks</li> </ul>	<p>Channels like wall paintings have been used successfully by FMCG companies; user research showed a desire for digital and in-person reminders, and the space to ask questions; current digital reminders might not reach everyone</p>

#### Insights from HCD research:

- Face-to-face conversations - In-person reminders for second dose (along with digital channels) were highlighted
- Posters - Widely held preference for placement at highly visited sites ( *darwazas* of influencers, *chaurahas* in village)

#### Learnings from ongoing interventions:

- In some cases, people did not receive the paper-based reminder due to limited supply
- Individuals receive automated text message reminders on registered phone numbers when 2nd dose is due - this phone might belong to family members (due to shared use) or might not be seen due to a high volume of incoming messages

**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

## 2. Reinforcing relevance and due date of 2nd dose

### MESSAGES AND VISUALS:

Current focus	Shift in focus	Rationale
28 or 84 day-period, conveyed through text / digitally	<ul style="list-style-type: none"> <li>For those who're already waiting, wall art and loss aversion-focused messaging ensuring people know why and when to get their 2nd dose</li> <li>For minority yet to get 1st dose, interactive calendar tracking 4 / 12 weeks, reminding people to actively track due date</li> </ul>	Less literate individuals might not calculate when 28 / 84 days end, and can rely on dates of local significance to track their 2nd dose date

#### Insights from HCD research:

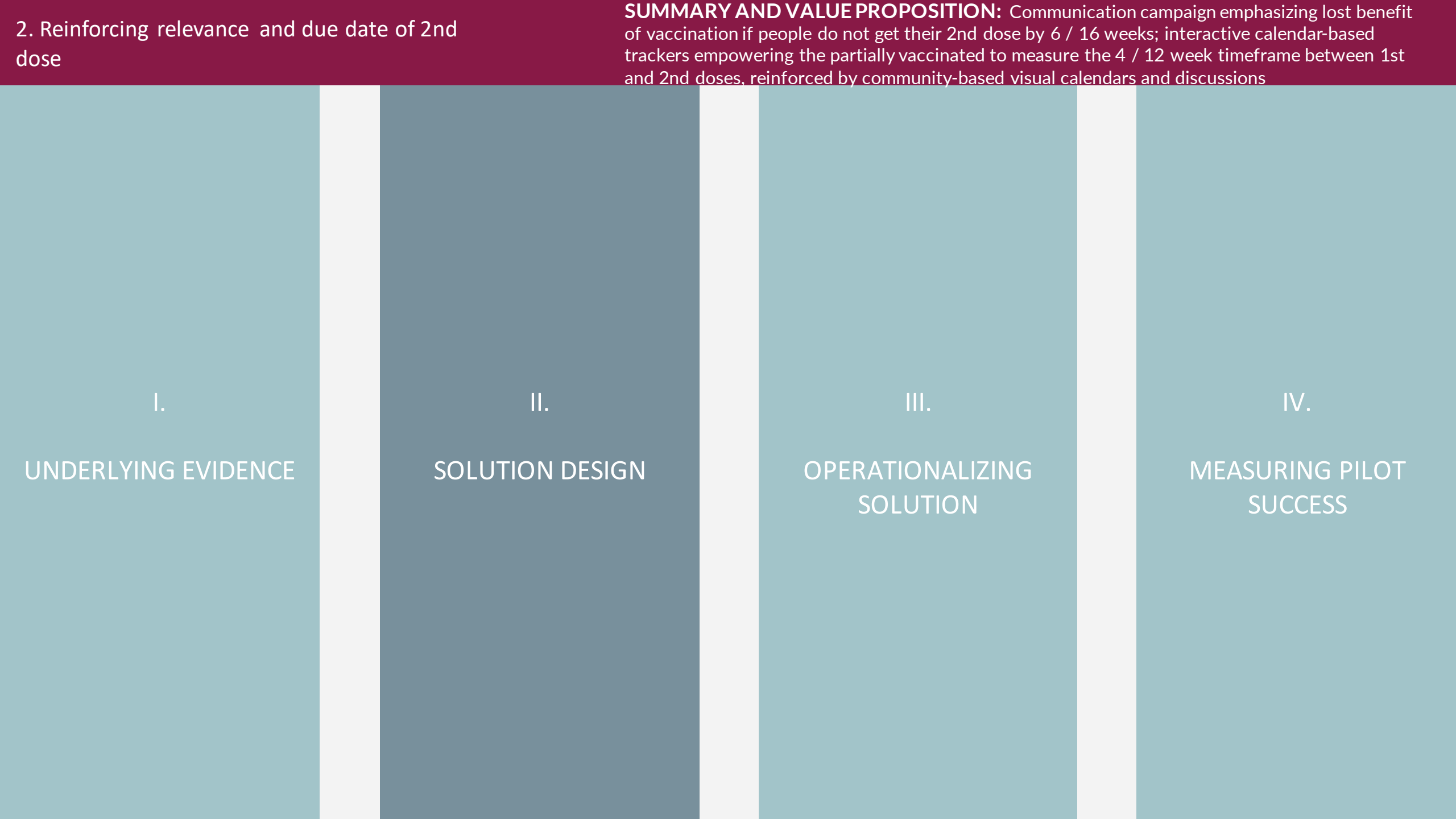
- Users need to see a clear call to action they can adopt
- Reminders need to be salient and specific

### TONE:

Current focus	Shift in focus	Rationale
Informational	Aspirational and empowering, providing a sense of 'completion' at individual (for those yet to get 1st dose) and community levels (for those currently waiting for 2nd dose)	Shared memory and responsibility helps those unable/unwilling to track due date themselves

### FREQUENCY:

Current focus	Shift in focus	Rationale
One-off (at end of 4 / 12 week period)	Reminders repeated up to 3 times once 4 / 12 week period ends, combined with regular community-based reminders during that duration	Repetition can instill a sense of urgency missing for many who are unvaccinated despite becoming eligible, in line with broader message of proposed campaign



**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

**2. Reinforcing relevance and due date of 2nd dose**

USER JOURNEY - For those who have taken the first dose of the vaccine



**1: Socialization of intervals with focus on importance of 2nd dose**

SHG CMs hand out pamphlets and circulate WhatsApp messages on behalf of Bihar government about required duration between 1st and 2nd dose.



Panchayati Raj members provide pamphlets to local employers (e.g., landowning farmers), MGNREGS administrators, and local vendors to reinforce messaging about when 2nd dose is due and how first dose is rendered useless without the 2nd.

**2: Campaign on loss aversion to inspire taking the 2nd dose**

Focus on the loss of value of the 1st dose when 2nd dose is not taken, highlighting the completeness of protection only through both doses. This building on momentum from the [‘Ek Adhoora, Do Se Poora’](#) campaign on need for 2 doses

Using all forms of media including digital, local meetings etc to broadcast the crucial message to “not make the 1st dose invalid” by pro-actively taking the 2nd dose

**3: Audio / visual / digital reinforcement**

Local influencers paint calendar image on a centrally located wall (e.g., SHG CM’s house). Calendar is organized by weeks instead of days, uses colour to link 1st and 2nd dose dates, and refers to local festivals or events to trigger users’ memory.

All reinforcements include a number that allows users access to a WhatsApp chatbot /SMS contact from registered phone numbers to learn 2nd dose date.

Once the 4 / 12-week period ends, individuals get automated IVRS calls 3 times for the next 2-4 weeks, reminding users to get their 2nd dose at the earliest.

**4: Periodic community reminders**

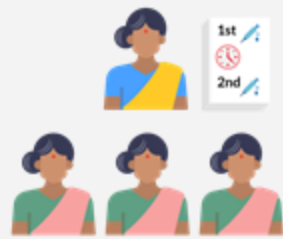
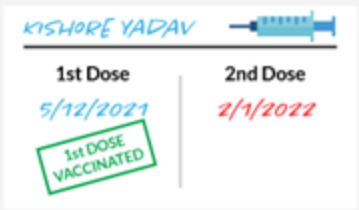
Health workers organize a fortnightly meeting with the help of PRI members on a Sunday to talk about importance of getting 2nd dose on time and reiterate recommended intervals of 12 weeks for Covishield and 4 weeks for Covaxin

When visiting people’s homes for door-to-door vaccinations, health workers show those present a video explaining the 4 / 12 week interval

**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

2. Reinforcing relevance and due date of 2nd dose

USER JOURNEY - For those who have not yet taken the vaccine



**1: Take-home reminders and trackers after 1st dose**

Camp organizers provide a templated paper certificate with 2nd dose details when administering 1st dose.



They provide an interactive take-home tracker resembling a calendar with space for the user to put stickers every week up to 4/12 weeks. They are eligible for the 2nd dose when they complete the calendar.

Frontline workers/data operators return to provide tracker to those without them due to shortages

**2: Socialization of recommended intervals**

SHG CMs hand out pamphlets on behalf of Bihar government about required duration between doses. They also circulate these among SHG members through WhatsApp groups.



Panchayati Raj members provide pamphlets to local employers (e.g., landowning farmers), MGNREGS administrators, local vendors to reinforce messaging on 2nd dose due date

**3: Campaign on loss aversion to inspire taking the 2nd dose**

Focus on the loss of value of the 1st dose when 2nd dose is not taken, highlighting the completeness of protection only through both doses. This building on momentum from the 'Ek Adhoora, Do Se Poora' campaign on need for 2 doses

Using all forms of media including digital, local meetings etc to broadcast the crucial message to "not make the 1st dose invalid" by proactively taking the 2nd dose

**4: Audio / visual / digital reinforcement of intervals**

Local influencers paint calendar image on a centrally located wall (e.g., SHG CM's house). Calendar is organized by weeks instead of days, uses colour to link 1st and 2nd dose dates, and refers to local festivals or events to trigger users' memory.

WhatsApp chatbot / SMS allow users to message from registered phone numbers to learn 2nd dose due date.

Once the 4 / 12-week period ends, individuals get automated IVRS calls 3x for the next 2-4 weeks, reminding them to get their 2nd dose at the earliest.

**5: Periodic community reminders**

Health workers organize a fortnightly meeting with the help of PRI members on a Sunday to talk about importance of getting 2nd dose on time and reiterate recommended intervals of 12 weeks for Covishield and 4 weeks for Covaxin

When visiting people's homes for door-to-door vaccinations, health workers show those present a video explaining the 4 / 12 week interval



## 2. Reinforcing relevance and due date of 2nd dose

**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

### Example of TV commercial script



अक्कड़ बक्कड़ बम्बे बो  
अस्सी नब्बे पूरे सौ  
अक्कड़ बक्कड़ बम्बे बो  
अस्सी नब्बे पूरे सौ

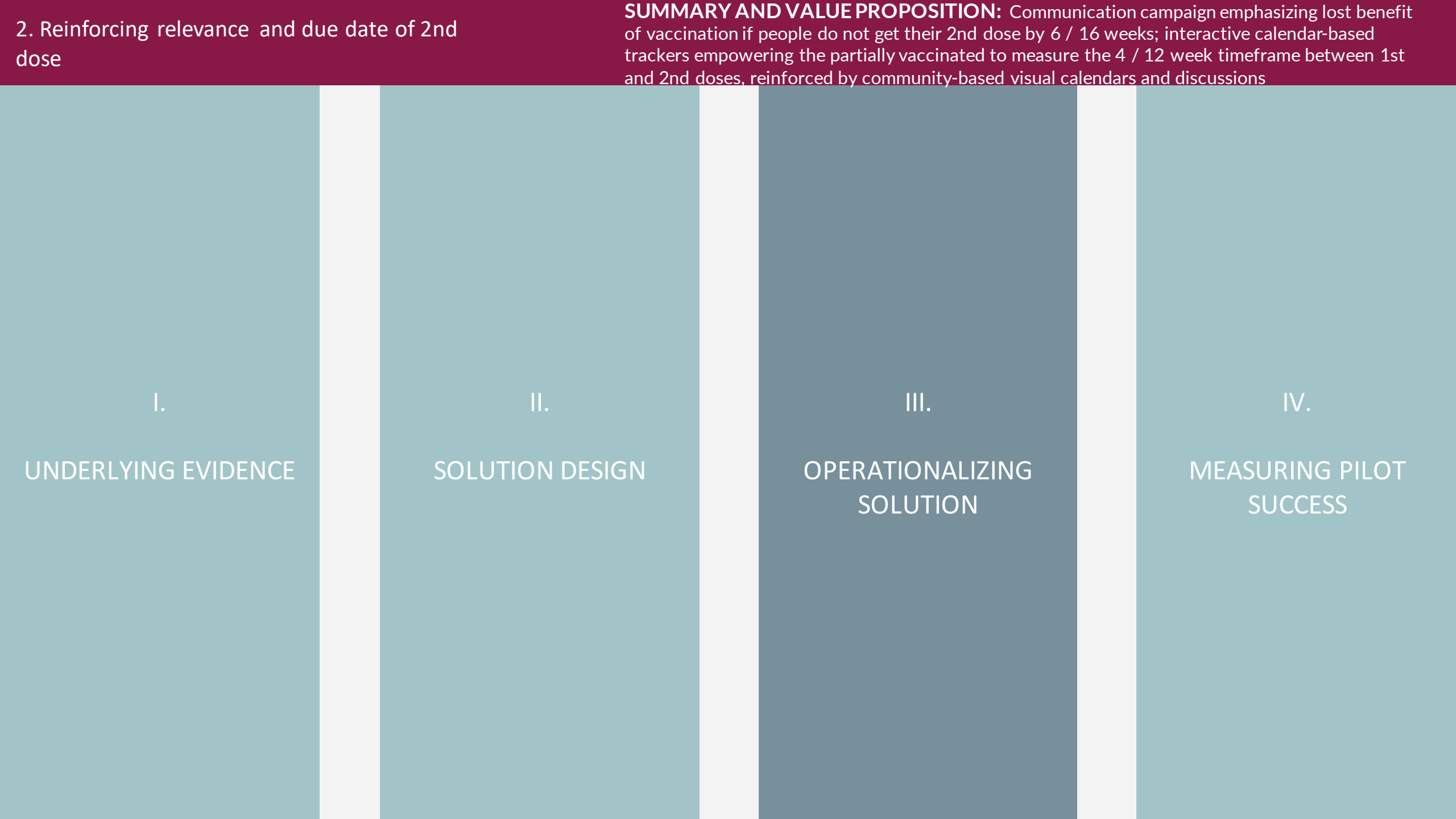
क्या आप को मालूम है की कोरोना के पहले टीके के बाद ८४ से ११० दिन के बीच ही दूसरा टीका लगवाना जरूरी है  
अगर ऐसा नहीं किया तो सुरक्षा चक्र टूट जायेगा और पहला टीका भी बेकार जायेगा , तो पता कीजिये आप को दूसरा टीका किस दिन लगवाना है और उस दिन सब काम छोड़ कर अपना कोरोना का दूसरा टीका लगवाएं  
अस्सी नब्बे पूरे सौ

**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

2. Reinforcing relevance and due date of 2nd dose

Intervention mapping

<p><b>Channels</b> What is the best featured channel?</p>	<p>Community reminders (calendar paintings on local walls, discussions)</p>	<p>Pamphlets, Posters</p>	<p>Mass media such as radio and TV adverts</p>	<p>Physical take-home reminders</p>	<p>Digital media and IVR</p>
<p><b>Appeal</b> What about this reminder channel is likely to affect uptake?</p>	<p><b>Habit, convenience (for those waiting)</b> Using existing community convenings can ensure that reminders are frequent, while visuals on frequently visited walls or doorways remind individuals to use their trackers</p>	<p><b>Reinforcement (for everyone)</b> Pamphlets and posters targeted towards local employers take a tone that reinforces clear guidelines and accommodates employees with the time to get the vaccination</p>	<p><b>Reach, entertainment (for everyone)</b> This can cross literacy bounds and can encourage group discussions and follow-through.</p>	<p><b>Engagement (for those yet to take 1st dose)</b> Interactive trackers reinforce the same message each week and can also become a source of pride for users. It might also be used for other household purposes.</p>	<p><b>Convenience, Interactive</b> Using digital and social media channels that people regularly interact with may ensure that reminder messaging is salient and retrievable.</p>
<p><b>Key influencer</b> Who is best placed to spread this information?</p>	<p>SHG members, Peers, community members</p>	<p>Panchayati Raj (PRI) members, HSG members, Local employers</p>	<p>Healthcare workers, Local employers</p>	<p>Camp organizers</p>	<p>ASHA workers, Peers, community members</p>
<p><b>Messaging</b> What is the core narrative of the message?</p>	<p><b>Reinforcement and dialogues</b></p>	<p><b>Reinforcement and guidelines</b></p>	<p><b>Prominence, salience, engagement</b></p>	<p><b>Interaction, engagement</b></p>	<p><b>Interaction, engagement</b></p>
<p><b>Message example</b></p>	<p>1) "Don't forget to take your 2nd Covishield dose after 12 weeks!" 2) "Use local SHG meetings and ASHA home visits to ask all the questions and find out all the details about when you should go for your 2nd vaccine dose."</p>	<p>1) "To prepare for the upcoming 2nd vaccinations, ensure you can take a day off from work and do xyz." 2) "For the success of your business, employees need to be healthy prepare by giving off days on week xyz"</p>	<p>"Join our local influencers as we collectively create community murals to protect Bihar!"</p>	<p>"Place a sticker on the calendar every week that you wait until your next vaccine date. After the vaccine, tear off the top page of the tracker to use this calendar to keep track for the rest of the year."</p>	<p>"Click here to play this video/audio and share widely with your friends and networks"</p>
<p><b>Cross cutting design considerations</b></p>	<p><b>Call to action:</b> Ensure that there is a clear and easy call to action for SMS, dial in, WhatsApp bots and in-person messaging across all intervention material e.g "Toll free call, SMS or Whatsapp 0821- 56487 for information on vaccines' due dates or speak to your local ASHA in order to book your next vaccination appointment." <b>Visual media:</b> Ensure that visual material includes diverse and relatable imagery. <b>Print and audio:</b> Incorporate local dialects and that messaging is entertaining and engaging. <b>Credibility of information:</b> Ensure that all intervention media gives people information on credible sources of information e.g designated MoH numbers.</p>				



## 2. Reinforcing relevance and due date of 2nd dose

**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

### Key resources and dependencies

- **Training** of all involved stakeholders at the local level
- Sufficient **availability of time** for health workers, PRI members, and SHG officers, without risk of derailing their other, ongoing work
- **Coordination** between health workers, PRI, and JEEViKA / SHG network to ensure individuals receive the right information through all proposed channels
- Sufficient **last-mile coverage to ensure tools / job aids / artefacts being provided** cover every partially unvaccinated person

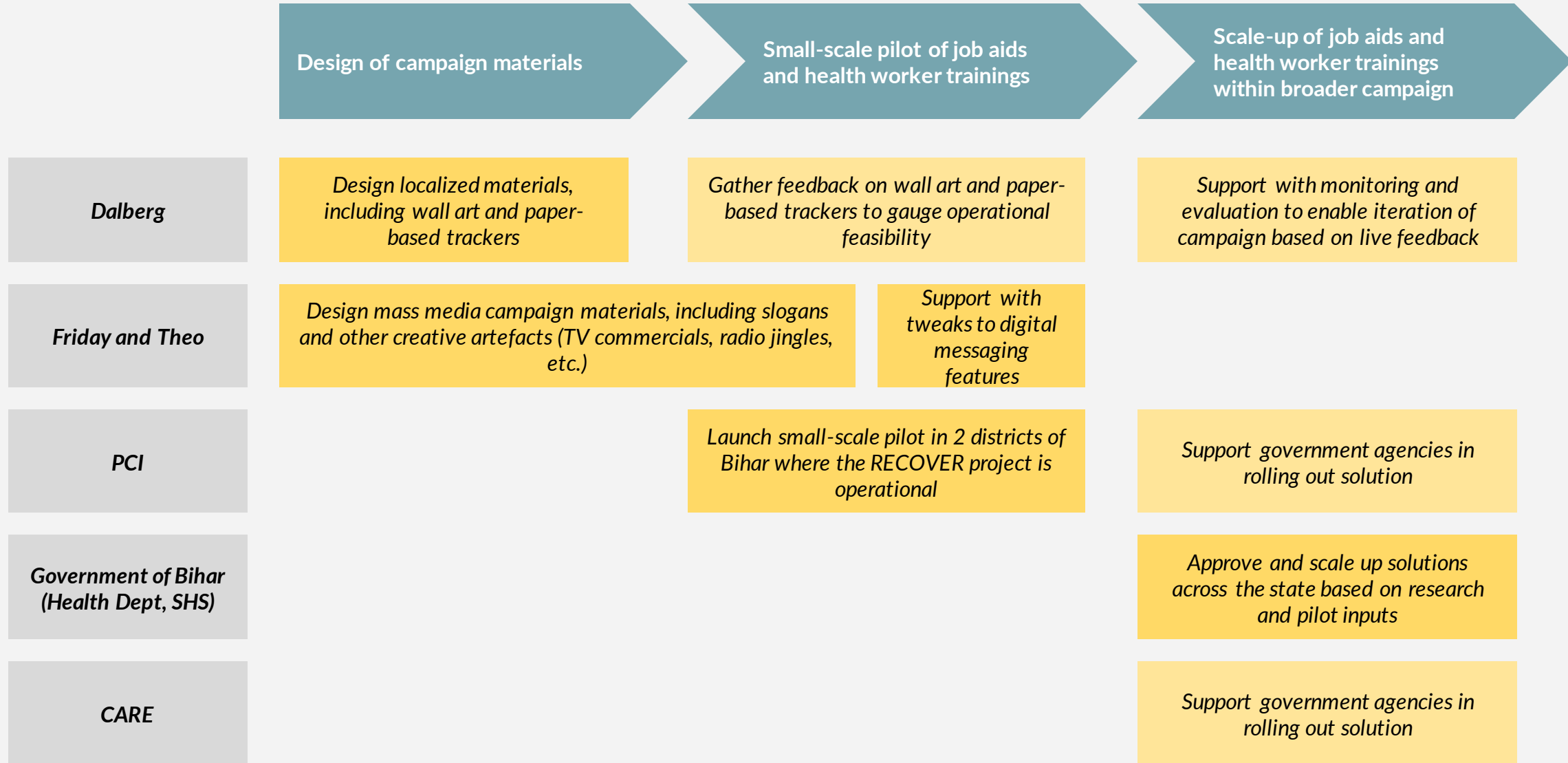
### Associated ideas (what other ideas can be rolled out in tandem?)

- **Ensuring vaccine availability through regularly held camps**, such that individuals who know when to get their second dose are able to access it at the right time

**2. Reinforcing relevance and due date of 2nd dose**

**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

**High-level implementation roadmap**



Note: Those boxes highlighted in darker yellow are the primary activity undertaken in the corresponding implementation stage. Those in a lighter shade of yellow are supporting activities.

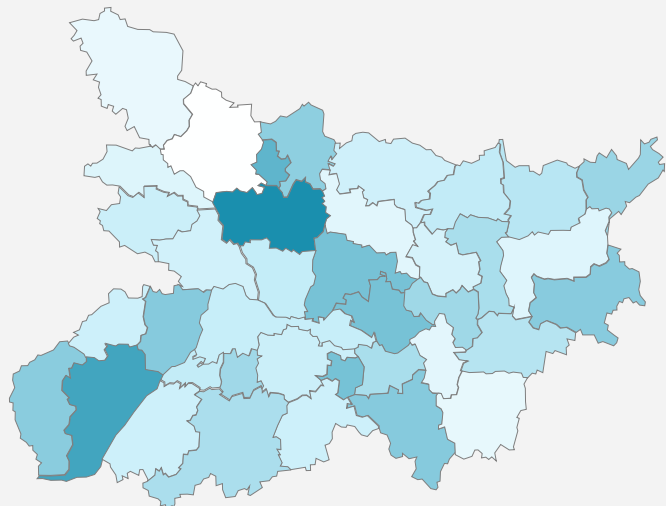
2. Reinforcing relevance and due date of 2nd dose

**Priority districts:**

Based on vaccination coverage and frequency of relevant internet searches<sup>1</sup>

**Highest priority districts<sup>3</sup> -**

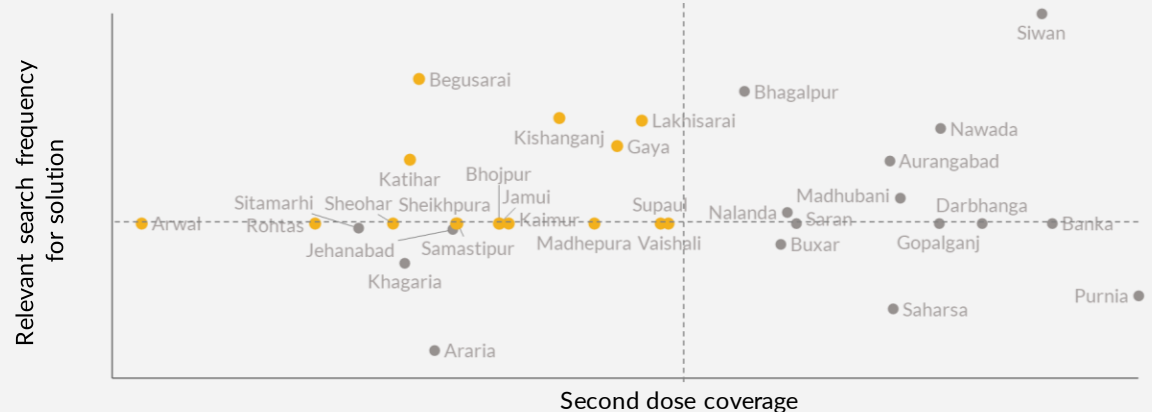
- Muzaffarpur
- Rohtas
- Sheohar
- Sheikhpura
- Samastipur
- Begusarai
- Bhojpur (R)



**Sub-district markers** for prioritizing blocks:

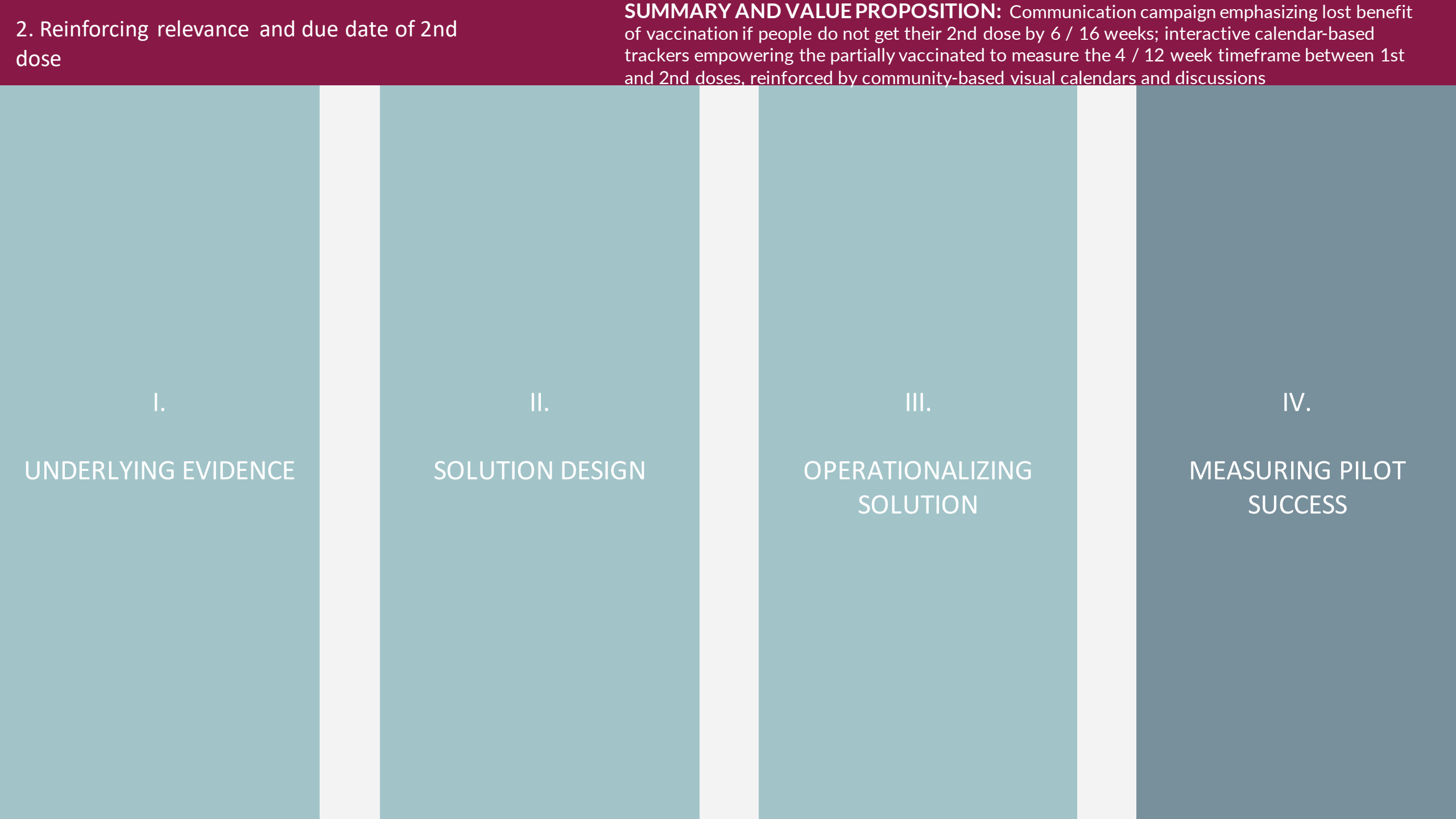
Based on district level correlations

1. Lower access to public services such as drinking water, sanitation, and electricity
2. Remote and poor road connectivity
3. Greater ANM coverage
4. Higher prevalence of Covid-19
5. Higher levels of anemia
6. Higher purchase and consumption of alcohol



Based on correlations observed between **second dose coverage/searches related to vaccines and pregnancy** and over 130 variables spanning **demographics** (e.g.: education, sex ratio), **connectivity** (e.g.: access to banks, roads), **access to public services** ( e.g. water, sanitation, electricity) and **health factors** (e.g. access to maternal care, immunization)

Notes: 1. Relevant internet searches are on COVID vaccination around vaccine certificate; 2. Internet search data is available for 24 out of 38 Bihar districts; interpolated with average values for others 3. Recover (R) districts refers to those in which PCI is running a vaccine support program on the ground ; 4. Muzaffarpur, East Champaran, West Champaran, Munger and Patna excluded as outliers



**SUMMARY AND VALUE PROPOSITION:** Communication campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

## 2. Reinforcing relevance and due date of 2nd dose

Learning agenda for pilot	Indicators	Testing methods
<p>[INPUT] What is the cost and time effort required in putting up the wall-based calendar murals? What is the ideal location to do this?</p>	<ul style="list-style-type: none"> <li>• Cost of painting 1 mural</li> <li>• Time taken to identify ideal location for mural</li> <li>• Time taken to paint 1 mural</li> <li>• List of locations chosen for mural</li> </ul>	<p>Feedback from the implementation team (RECOVER on-ground staff, managers)</p>
<p>[INPUT] How much does it cost to create and distribute the paper-based interactive trackers?</p>	<ul style="list-style-type: none"> <li>• Cost of printing 1 tracker</li> <li>• Time taken to procure and distribute trackers, including explaining them</li> </ul>	<p>Feedback from the implementation team (RECOVER on-ground staff, managers)</p>
<p>[OUTPUT] Is the wall-based calendar mural easy to understand? How do people react to the mural?</p>	<ul style="list-style-type: none"> <li>• Community members' reported ease or difficulty in understanding the mural</li> </ul>	<p>Feedback from community members</p>
<p>[OUTCOME] Is there an increase in people's understanding of the need to take the 2nd dose, as a result of the mural and/or tracker?</p>	<ul style="list-style-type: none"> <li>• Reported change in perceived need of getting 2nd dose after seeing mural or tracker</li> </ul>	<p>Feedback from community members</p>
<p>[OUTCOME] Is there an increase in people's awareness of when to take the 2nd dose, as a result of the mural and/or tracker?</p>	<ul style="list-style-type: none"> <li>• Reported change in awareness of when to take 2nd dose after seeing mural or tracker</li> </ul>	<p>Feedback from community members</p>



**SUMMARY AND PROPOSITION:** Community-based campaign emphasizing lost benefit of vaccination if people do not get their 2nd dose by 6 / 16 weeks; interactive calendar-based trackers empowering the partially vaccinated to measure the 4 / 12 week timeframe between 1st and 2nd doses, reinforced by community-based visual calendars and discussions

2. Reinforcing relevance and due date of 2nd dose



Wall painting at CHC, Jagdishpur (Bhagalpur)

**Vaccine Card + Tracker to follow second dose due dates**

**FRONT**

**Congratulation on getting your first dose**

Remember that you need to take your second dose to stay safer! Please refer to the below mentioned dates for your 2nd dose.

Beneficiary Name: *Pranjal Kumar Yadav*  
 Age: *30* Gender: *Male*  
 Date of 1st Dose: *10 December 2021*  
 Time of 1st Dose: *2:30 pm*  
 Location of 1st Dose: *Trimurci Hospital*  
 Vaccine name: *Covishield*

**DATE FOR YOUR 2nd DOSE**

From: *4 February 2022*  
 To: *1 April 2022*

For any further information or help, call 104

**BACK**

Keep track of the timing for your 2nd dose

WEEK 1	WEEK 2	WEEK 3	WEEK 4
<i>10/12/21</i>			

Normal side effects you can expect after dose:

- Mild fever
- Weakness
- Body pain

What you can do to take care:

- Drink lots of water
- Get at least 7 to 8 hours of sleep
- Eat well balanced diet
- Apply a clean, cool, and wet cloth for redness over the arm after the vaccination to reduce the pain

For any further information or help, call 104

**STICKER**

Sample of filled Vaccine card with tracker  
 Note: The *Blue Text* is what the Healthcare worker writes after giving the first dose of vaccine

Visual calendar reminding the partially vaccinated of the appropriate dosage interval

## MEGA-CAMPAIGN INSPIRING VACCINE UPTAKE AND COVID-APPROPRIATE BEHAVIOUR THROUGH COLLECTIVE ACTION

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A multi-channel campaign encouraging indifferent and constrained individuals to get both vaccine doses, anchoring on provocative messages appealing to their intrinsic sense of responsibility to the broader collective



### 3. Mega-campaign inspiring vaccine uptake through collective action

**SUMMARY AND VALUE PROPOSITION:** A multi-channel campaign encouraging indifferent and constrained individuals to get both vaccine doses, anchoring on provocative messages appealing to their intrinsic sense of responsibility to the broader collective

कोई छूटे ना  
सुरक्षा चक्र टूटे ना

स्वास्थ्य विभाग  
बिहार सरकार

क्या हम में कोई ऐसा भी है जो सुरक्षा चक्र को तोड़ रहा है, क्या आपके आस-पास और परिवार में सबने दोनों टीके ले लिए हैं ?

COVID-19 VACCINE  
दूसरा टीका केन्द्र

104 अधिक जानकारी के लिए हेल्पलाइन पर संपर्क करें

जीवंत बिहार... सपना हो साकार



A visually- focused campaign media that calls out the consequences of non-vaccination on collective community health and safety, appealing to intrinsic social responsibility. It includes a call to action at the bottom, encouraging residents to get vaccinated for a better-protected Bihar.

### 3. Mega-campaign inspiring vaccine uptake through collective action

**SUMMARY AND VALUE PROPOSITION:** A multi-channel campaign encouraging indifferent and constrained individuals to get both vaccine doses, anchoring on provocative messages appealing to their intrinsic sense of responsibility to the broader collective

**PRIORITY: High**

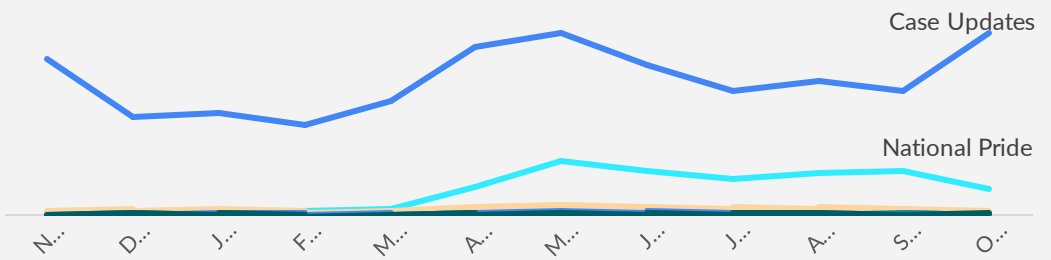
Current focus	Shift in focus	Rationale
General reminders and communications, targeting individuals to take up the vaccine for their own benefit	Communication focusing on importance of second dose for full protection, targeting the community to take the collective responsibility to ensure full vaccination	There is potential for leveraging high intrinsic motivation for collective action amongst community members to drive vaccine uptake

**Scale of problem:**

- 12% of fully unvaccinated can be targeted by this stream of action, of which 62% are willing to get vaccinated

**Search trend (through digital scan - social listening):**

- Decline and then increase in searches on case updates (e.g. “live map”, “live count views”) and national pride (e.g. “covaxin vaccine, “vaccine nationalism”) till May ‘21, post which it has declined and increased again, but remains above pre-Feb ‘21 scale



**TARGET POPULATION:**

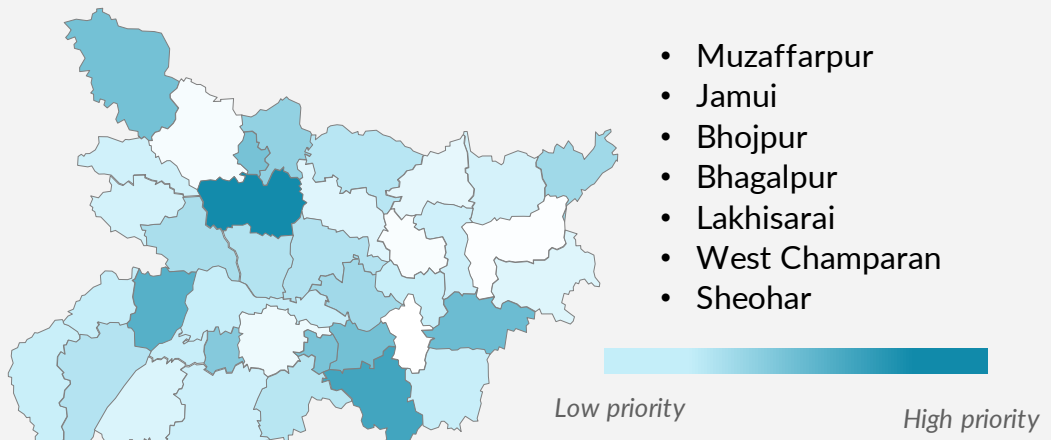
Current focus	Shift in focus	Rationale
General public	Broad-based campaigns across Bihar, focusing on elderly, women, etc.	Identified segments have greater proportion of those with awareness/misinformation issues or have community-based inclination (e.g. to allow others the access to vaccines first)

**Target demography:**

- Elderly (60+) living in plastered households, with either access to a smart phone or those without phones
- Women in age group 45-59 in rural areas belonging to non-general social categories

**Geographical focus (through digital scan and Co-Win data analysis):**

- Priority districts -



### 3. Mega-campaign inspiring vaccine uptake through collective action

**SUMMARY AND VALUE PROPOSITION:** A multi-channel campaign encouraging indifferent and constrained individuals to get both vaccine doses, anchoring on provocative messages appealing to their intrinsic sense of responsibility to the broader collective

**INFLUENCERS:**

Current focus	Shift in focus	Rationale
Broad-based, involving a range of influencers including doctors and health workers, politicians and local leaders, etc.	No change	Given that the campaign is a mass-media campaign looking to shift the narrative around vaccination, it can continue to work with a range of influencers as needed

**Insights from HCD research:**

- People are keen to see media images of relatable and familiar people

**CHANNELS: Community-based reminders backed by media campaign**

Current focus	Shift in focus	Rationale
Omni-channel	Omni-channel	Using an omni-channel approach will ensure that balance in tone between humour and responsibility are adequately captured.

**Insights from HCD research:**

- TV, newspapers, and radio were widely preferred by residents in both rural and urban areas alongside in-person communication
- Using different channels is an effective way of reinforcing messaging

**Insights from digital scan - social listening:**

- Those 55+ are 3x more likely to be searching for anti-vaxxer content than the average content search for their age group
- Those 18-24 are much less likely (0.2x) to search for nationalist content as compared to other content, while those 55+ are much more likely to search for this content as compared to other forms of content (up to 6x more)

### 3. Mega-campaign inspiring vaccine uptake through collective action

**SUMMARY AND VALUE PROPOSITION:** A multi-channel campaign encouraging indifferent and constrained individuals to get both vaccine doses, anchoring on provocative messages appealing to their intrinsic sense of responsibility to the broader collective

**MESSAGES AND VISUALS:**

Current focus	Shift in focus	Rationale
Messages highlighting govt efforts and encouraging individuals to get vaccinated	<p>“[After what COVID-19 has affected us] <b>What are you waiting for?</b>”</p> <p>Using the power of community feeling to to prioritize vaccination.</p> <p>Clear call to action to get vaccinated for the collective good.</p>	Redirecting the messaging to question individual decision making and its consequences on collective health outcomes can help encourage those who are indifferent or have an exaggerated sense of protection

**Insights from HCD research:**

- Some people have an inflated sense of immunity from the 1st dose vaccination, driving low uptake of the 2nd dose
- Isolated and marginalized groups may experience some sense of apathy and disengagement from any community oriented conversations or activities
- People from marginalized or isolated groups are more likely to community leaders that they know and engage with more than general celebrities or political leaders
- Individuals are motivated by seeing those who resemble them getting vaccinated
- Users need to see a clear call to action they can adopt

**TONE:**


Current focus	Shift in focus	Rationale
Projecting confidence, focused on highlighting preparedness to vaccinate everyone	Challenging tone, provoking discussion about why someone might still choose to not get vaccinated	A questioning tone can help inspire action among those whom current campaigns have not been able to influence sufficiently

**FREQUENCY:**

Current focus	Shift in focus	Rationale
Multiple touchpoints across radio, TV, etc.	None	Increased frequency of messaging through different channels may reinforce the messaging across different mediums



Using Quilt.AI and other meta data  
to develop hyper-local solutions

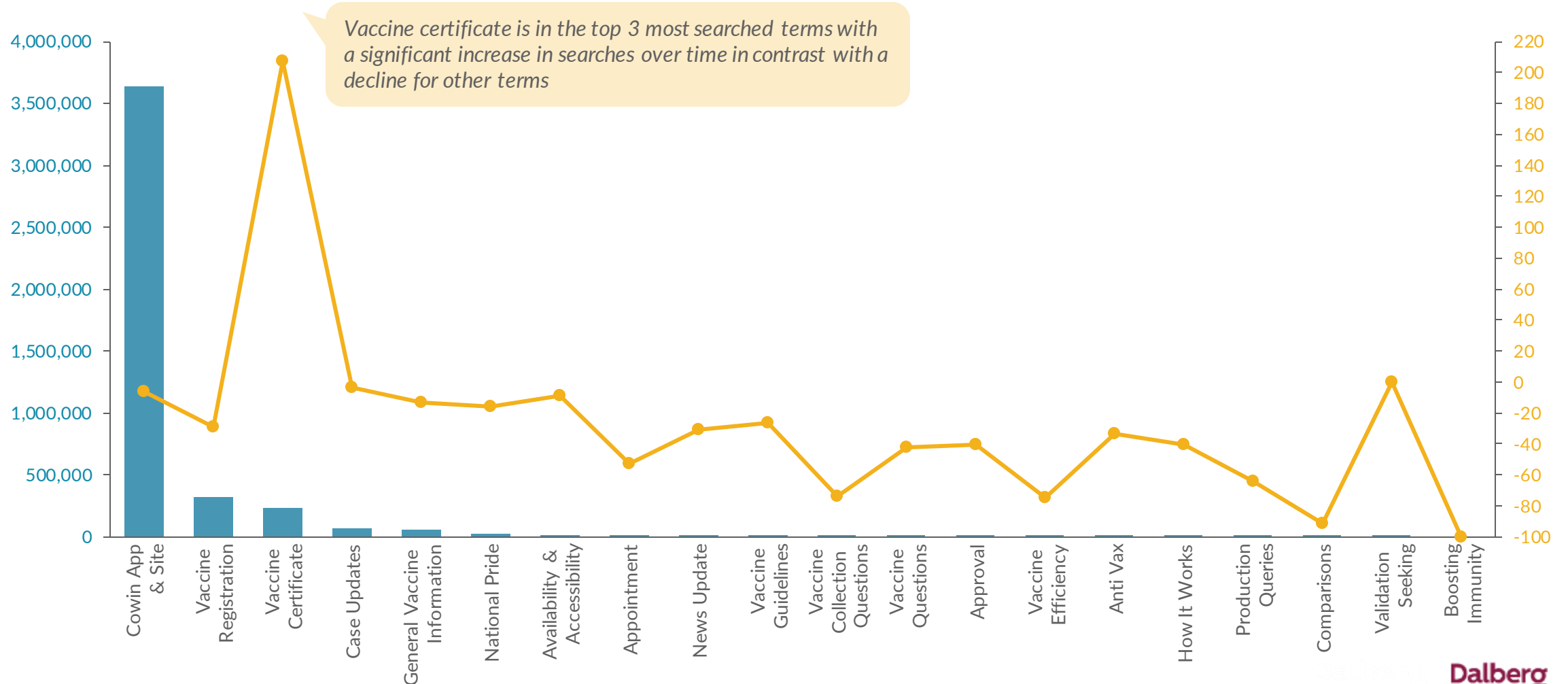


# We used comprehensive search data to understand demand for various vaccine related information and their evolution over the last 6 months

## Covid vaccination related search terms

LHS Number of searches, RHS - % change in searches over previous 3 months

# Searches 3 months % growth rate





# We mapped our solutions to various search terms...

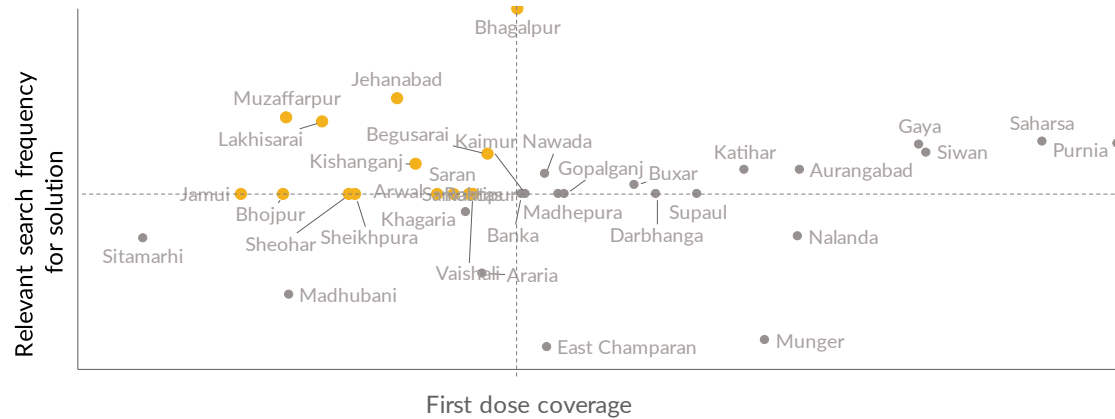
Solution	Matching searches category
1 'Mother safe, child safe' – shifting the narrative for PLW and their families	Pregnancy/lactating ("pregnant vaccine", "lactating mother vaccine")
2 Reinforcing relevance and due date of 2nd dose	Vaccine certificate ("how to download vaccine certificate", "cowin certificate")
3 Mega-campaign inspiring vaccine uptake through collective action	Case updates ("cases", "vaccine update", "live dashboard") News update ("vaccine news", "vaccine news india") How it works ("how vaccine works", "how vaccine works animation", "how vaccine work class 8") Anti vax ("anti vaccine") National pride ("covaccine company name", "covaccine or covishield", "vaccine nationalism")
4 Hyper-local user testimonials to drive vaccine confidence	General vaccine information ("vaccine tracker", "vaccine meaning", "vaccine side effects") National pride ("covaccine company name", "covaccine or covishield", "vaccine nationalism") Vaccine guidelines ("vaccine for under 18," "vaccine price", "vaccine beneficiary id")
5 Using private and digital healthcare to boost onsite medical support at vaccination camps	General vaccine information ("vaccine side effects", "vaccine tracker", "vaccine meaning")
6 Providing vaccinations during ANC/PNC home visits	Pregnancy/lactating ("pregnant vaccine", "lactating mother vaccine") Vaccine guidelines ("vaccine for under 18," "vaccine price", "vaccine beneficiary id") Vaccine questions ("how many vaccine available in India," "how much vaccine done in India")
7 Extending camp timings and locations in non-urban areas	Vaccine collection questions ("when vaccine slots open", "where vaccine available")
8 Improving local information flows to build awareness of camp timings and locations in advance	Vaccine collection questions ("when vaccine slots open", "where vaccine available")
9 Lotteries or lucky draws to reduce opportunity cost and incentivize indifferent groups	News update ("vaccine news", "vaccine news india") Vaccine questions ("how many vaccine available in india," "how much vaccine done in india")

# ... and applied this mapping alongside relevant vaccination coverage to understand district focus for different solutions

## Prioritization Matrix:

Based on vaccination coverage and frequency of relevant internet searches<sup>1,2</sup>

**Solution 1: 'Mother safe, child safe' – shifting the narrative for PLW and their families**

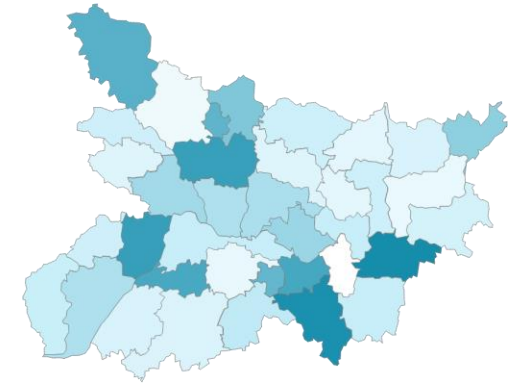


## Highest priority districts:

Based on standardised averages of search frequency and vaccine coverage

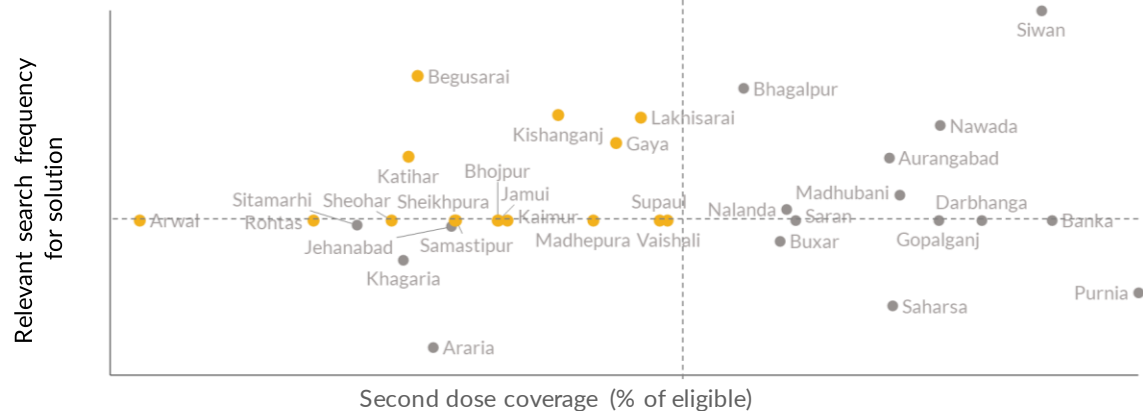
### Highest priority districts<sup>3</sup> -

- Bhagalpur (R)
- Jamui (R)
- Bhojpur (R)
- Muzaffarpur
- Lakhisarai
- Jehanabad
- West Champaran (R)



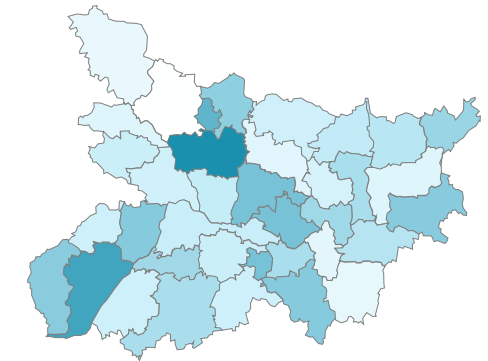
Based on an index score calculated using standardised values of "access to dosage" and "relevant searches". Darker shades indicate higher priority due to greater number of searches and lower vaccination coverage

## Solution 2: Reinforcing relevance and due date of 2nd dose



### Highest priority districts<sup>3</sup> -

- Muzaffarpur
- Rohtas
- Sheohar
- Sheikhpura
- Samastipur
- Begusarai
- Bhojpur (R)



Notes: 1. Relevant internet searches are on COVID vaccination around pregnancy and COVID certificates 2. Internet search data is available for 24 out of 38 Bihar districts; interpolated with average values for others 3. Recover (R) districts refers to those in which PCI is running a vaccine support program on the ground;

# To identify sub-district markers, we used district-level correlations observed between ~130 variables and vaccine coverage/ searches

The following variables were tested for correlations...

## Vaccine status and searches

- Took first dose
- Took second dose
- Eligible for second dose
- Missing after being eligible for second dose
- Search frequency for solution 1, 2

## Health factors

- Health issues: Anemia, Blood pressure, hypertension, cancer screening
- Tobacco and alcohol consumption
- Child feeding practices
- Child access to healthcare and vaccination
- HH with health insurance coverage
- Women and children's nutritional status
- Maternal and delivery care

## Demographics:

- Marriage, fertility, family planning
- Birth rates
- Women and children's education
- Use of clean cooking fuel

## Connectivity and access to public services:

- ASHAs, ANMs per 1000 people
- Population density
- Road length per sq. km
- Access to electricity, water, sanitation

... to identify potential hyperlocal markers as those showing high correlation with an underlying rationale

	% first dose	% Eligible	% Second dose	Missing	Missing / Eligible	Search per 100 people relevant for soln 1	Search per 100 people relevant for soln 1B
Banks per 100,000	11%	17%	4%	19%	9%	40%	29%
% who had 4 or more ANC visits	-30%	11%	-11%	29%	25%	-26%	3%
% with an ANC visit in the 1st trimester of pregnancy	-29%	-4%	-16%	15%	18%	-13%	8%
% who received two or more TT injections during pregnancy	-26%	6%	7%	-1%	-5%	-9%	12%
% whose last live birth was protected against neonatal tetanus	-19%	13%	4%	12%	6%	9%	28%
% who were given or bought IFA	27%	5%	6%	-2%	-5%	32%	19%
% who took IFA for atleast 100 days	13%	29%	16%	18%	7%	19%	-10%
% who took IFA for atleast 180 days	-2%	20%	3%	23%	17%	17%	-10%
% who took an intestinal parasite drug	-4%	-4%	-9%	7%	7%	13%	8%
Per Capita Gross District Domestic Product (2004-05) Price (2011-12)	19%	8%	13%	-7%	-10%	15%	1%
CAGR paved road rural	10%	-1%	-1%	0%	1%	9%	-13%
NH per 100 msq	-3%	35%	8%	38%	18%	-2%	36%
SH per 100 msq	23%	28%	16%	17%	4%	14%	10%
DR per 100 msq	6%	10%	20%	-13%	-21%	33%	30%
Rural per 100 msq	2%	10%	21%	-15%	-21%	6%	37%
Vehicle per 1000 people	11%	-24%	-9%	-21%	-10%	11%	40%
81. Children age 6-59 months who are anaemic (<11.0 g/dl) (%)	-3%	10%	-17%	37%	38%	21%	12%
82. Non-pregnant women age 15-49 years who are anaemic (<12.0 g/dl)(%)	14%	12%	-13%	34%	31%	41%	8%
83. Pregnant women age 15-49 years who are anaemic (<11.0 g/dl)(%)	0%	-4%	-15%	14%	17%	-10%	-23%

# We observed a wide range of block level markers including number of ASHA workers, routine immunization, and prevalence of COVID-19

The following markers emerged as directional indicators for sub-district prioritization:

## 'Mother safe, child safe' – shifting the narrative for PLW and their families

1. Fewer ASHA workers
2. Lower routine immunization rates
3. Higher prevalence of Covid-19
4. Higher prevalence of chronic health conditions  
e.g.: (hypertension)

## Reinforcing relevance and due date of 2nd dose

1. Lower access to public services such as drinking water, sanitation, and electricity
2. Remote and poor road connectivity
3. Greater ANM coverage
4. Higher prevalence of Covid-19
5. Higher levels of anaemia
6. Higher purchase and consumption of alcohol

*Based on correlations observed between vaccine coverage/searches related to vaccines and pregnancy and over 130 variables spanning demographics, connectivity and access to public services, as well as health factors*

# We also used regression-trees to identify prominent demographic drivers for unvaccinated personas and focus segments for prioritized solutions

The following demographic data points were tested as significant indicators to personas and solutions<sup>1</sup>

## Demographic Indicators:

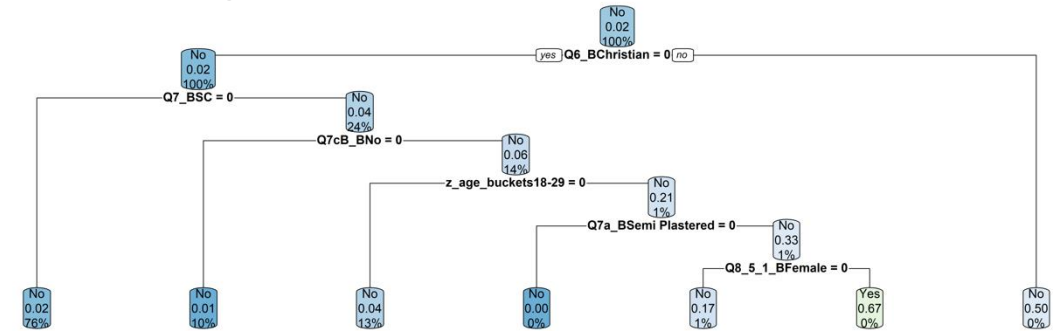
- Gender (male, female)
- Age groups (18-44, 45-60, 60+)
- Location (urban or rural)
- Religion and caste
- Education (below 5<sup>th</sup> standard, up to 12<sup>th</sup> standard, graduate and above)
- Type of residence (plastered, semi plastered, kaccha)
- Internet and connectivity (use of apps such as Facebook, owning a smart or basic phone)

## Test variables:

- *Personas* (misbelievers, indifferent, perceived restricted, constrained, overcautious for the two dosage)
- *Solutions* (mega campaign, PLWs, 2<sup>nd</sup> dose reminders)

... and those with meaningful and interesting relationships acted as indicators for the subgroup

## Illustrative regression tree:



## Illustrative output:

The overcautious account for **29% of entire sample**

However, the algorithm helps identify that among those over 60 years old, the overcautious account for **44% of the sub-sample<sup>a</sup>**

Similarly, among those over 60 years old and with above 5<sup>th</sup> standard education, the overcautious account for **51% of the sub-sample<sup>b</sup>**

Note: a. 20% of the entire sample; b. 4% of the entire sample  
Sources: 1. Care survey conducted in October 2021

Omicron crisis mode


# Summary of findings and recommendations (1/2)

Focus area	Key findings	Recommendations	
A	<b>Strengthening Refusal Response Teams (RRTs)</b>	<ul style="list-style-type: none"> <li>RRTs' <b>composition is relevant</b>, and where active, they have been <b>able to successfully 'break' refusals</b></li> <li><b>Lack of accountability, training, time availability, and cross-institution links</b>, along with <b>waning interest</b>, limits the impact RRTs can have on vaccine uptake</li> </ul>	<ol style="list-style-type: none"> <li>Create and <b>regularly update an agenda</b> for RRTs, based on which <b>their performance is tracked</b>, utilizing existing supervisory mechanisms to build RRT accountability</li> <li>Organize <b>training sessions on community mobilization</b> for RRT members, equipping them with <b>job aids they can take with them to the field</b>, as we've seen to be useful for ASHAs and ANMs when persuading PLW to get vaccinated</li> <li>Formally include <b>PRI, JEEViKA, and/or ICDS functionaries</b> in RRTs to strengthen mobilization efforts, given research has shown community members look to such leaders as exemplars to follow and emulate</li> </ol>
B	<b>Building momentum for precautionary doses</b>	<ul style="list-style-type: none"> <li>Within the target segment, ~33% are now eligible and ~15% have taken the 3<sup>rd</sup> dose, putting <b>Bihar among the higher-performing states</b> in the country but with a <b>large eligible population who remains un-boosted</b></li> <li>Outreach is being <b>led by govt</b> (e.g., through PHC call centres) with <b>little activity among NGO partners</b> on the ground, and has <b>prioritized health workers</b>, recently moving to also cover the 60+ population with co-morbidities</li> <li>There's <b>potential for apathy</b> to set in as the 3<sup>rd</sup> wave subsides in Bihar, while <b>concerns around lost income</b> might limit uptake as well</li> </ul>	<ol style="list-style-type: none"> <li>Mass media campaigns positioning <b>3<sup>rd</sup> dose vaccination as a means to fulfil duties of being a 'provider / protector'</b> can increase uptake among older men</li> <li>Mass media campaigns providing a <b>scientific rationale</b> for why residents should get the 3<sup>rd</sup> dose can help boost uptake</li> <li>Increasing <b>tele-medicine uptake using ANMs' tablets</b> can help assuage concerns among those with co-morbidities</li> <li>Strengthening <b>ongoing outreach from PHCs</b> can shift outgoing communications from informational to persuasive</li> </ol> <p><i>Other potential solutions include job aids and training for HCWs, hosting sessions at SHG meetings building on parallels between savings and vaccinations, and creating dedicated camp timings for precautionary doses</i></p>


## Summary of findings and recommendations (2/2)

Focus area	Key findings	Recommendations
<b>C</b> Improving uptake of adolescent vaccines	<ul style="list-style-type: none"> <li>• ~45% of adolescents have taken the first dose but Bihar remains among the lowest-performing states in the country</li> <li>• Schools and teachers are leading outreach and vaccination drives; there are pockets of hesitancy (e.g. those with unvaccinated parents or concerns about infertility, eligibility, or need)</li> <li>• Adolescents are active users of social media such as YouTube, Moj, Public, and Takatak</li> </ul>	<ol style="list-style-type: none"> <li>1. <b>Hyper-local user testimonial videos</b> will be circulated across social media platforms used by adolescents, e.g., Moj, Takatak, and Public</li> <li>2. <b>FAQ-style guidelines for health workers and teachers</b> will help them address questions around need and eligibility for the vaccines</li> <li>3. <b>Endorsement videos</b> featuring teachers, parents, and doctors will build a diverse set of influential voices encouraging young Biharis to get vaccinated</li> </ol> <p><i>Other solutions could include setting up a refer-a-friend system that tap into adolescents' strong and important social networks to drive uptake</i></p>
<b>D</b> Increasing WhatsApp bot uptake and engagement	<ul style="list-style-type: none"> <li>• The Vaccine Mitra is a convenient one-stop shop for Covid-related information, but is under-utilized in Bihar today due to low awareness</li> </ul>	<ol style="list-style-type: none"> <li>1. Modifying <b>digital communications through the bot and on social media</b> will spread awareness about the WhatsApp bot every time the Health Dept puts out public-facing communications</li> <li>2. Spreading <b>awareness about the bot at commonly accessed physical spaces</b> such as colleges, shops, etc. can increase usage</li> </ol>





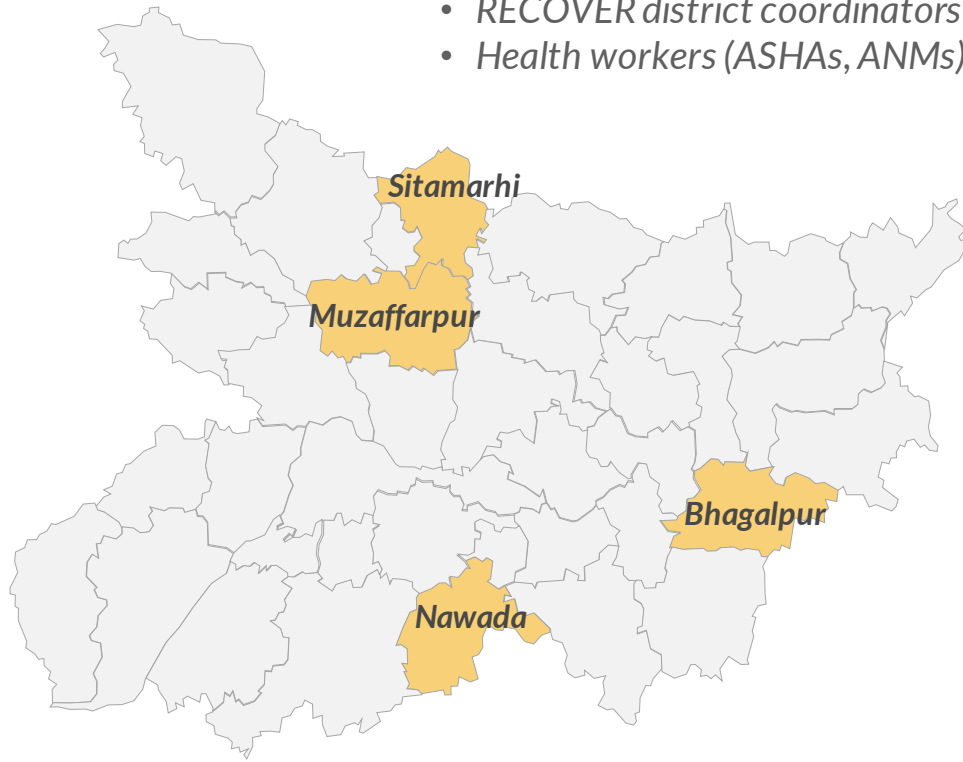
# Strengthening Refusal Response Teams (RRTs)



# Through rapid on-ground research, the Vaccine Support Group has synthesized findings on three key questions on **Refusal Response Teams**

Consultations across 4 districts with:

- RECOVER program manager
- RECOVER district coordinators
- Health workers (ASHAs, ANMs)



*Key questions*

What is the mandate and scope of work for Refusal Response Teams (RRTs)?

What has (success factors) and what has not worked well (challenges) for RRTs in Bihar?

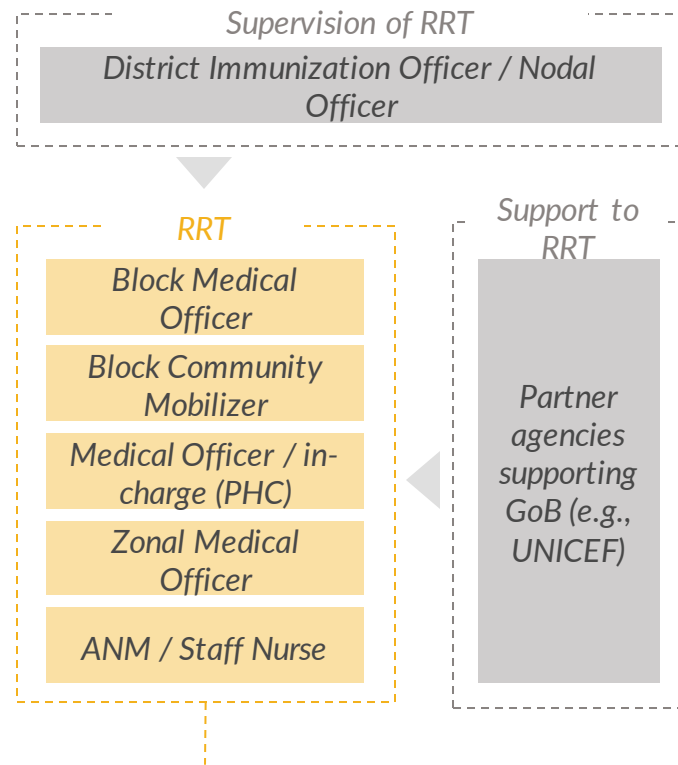
How can RRTs be leveraged better in the future?

Note: The RECOVER project is a Packard Foundation-funded project being run by PCI in 10 districts of Bihar, in collaboration with the health system at a local level

# Refusal Response Teams (RRTs) were formed after the 2<sup>nd</sup> wave to triage and convert cases of vaccine refusal into success stories

## Mandate and scope of RRTs

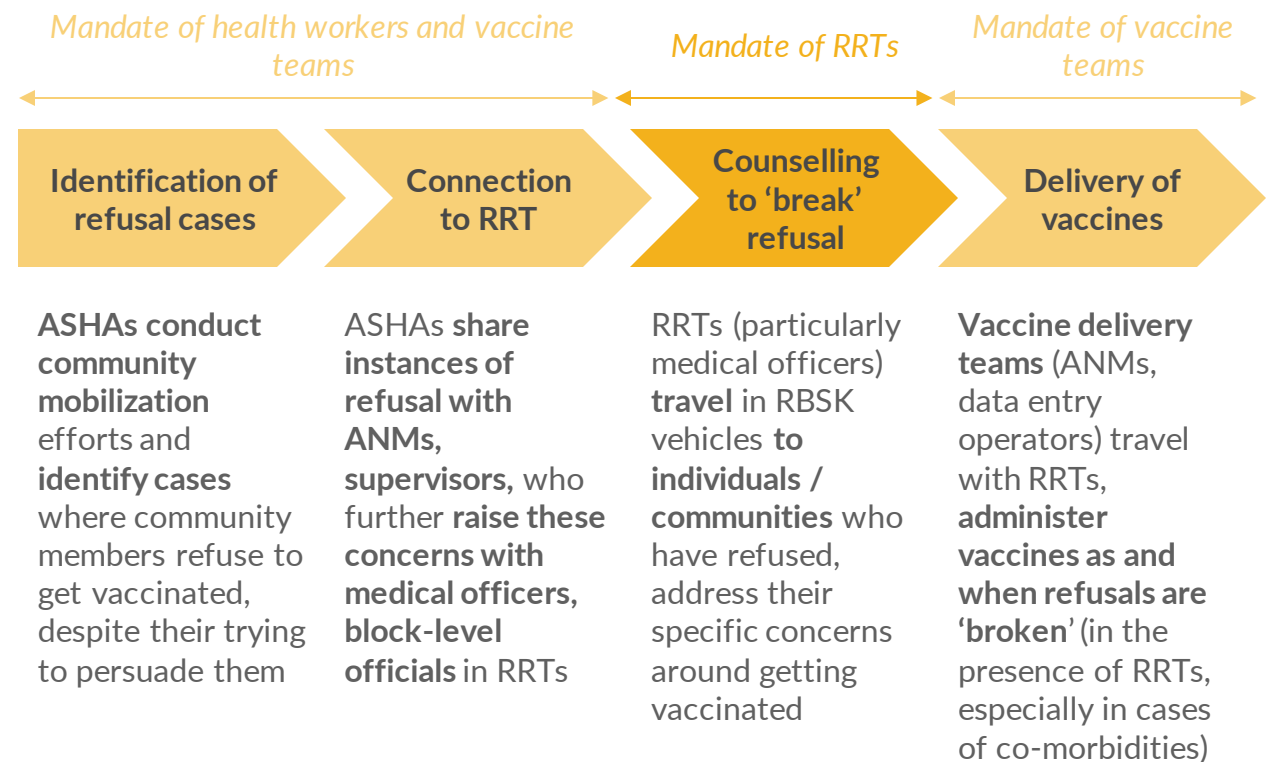
RRTs comprise doctors, nurses, and community mobilizers, and operate at the block level in each district



Formed at the block level (each block has at least one RRT)

## Success factors and challenges

They are called in by frontline health workers to 'break' instances of vaccine refusal and deliver vaccines through individual / household / community-level counselling



Note: RBSK refers to the Rashtriya Bal Swasthya Karyakram  
 Source: Stakeholder interviews, Dalberg analysis.

# RRTs: While their composition enables them to address key hesitancies, the lack of structure and support limits their ability to increase uptake

## Mandate and scope of RRTs

**Success factors:** RRTs' composition is relevant, and where active, they have been able to successfully 'break' refusals

- 1 Involvement of doctors:**  
On-ground research shows a strong desire among all user segments to engage with doctors on doubts they have regarding vaccination
- 2 Appropriate mapping to hesitancy:**  
Groups with vaccine hesitancies (e.g. PLW, individuals with co-morbidities or fears of side-effects) have medical concerns, which RRTs can tackle
- 3 Link to other health programs:**  
Medical officers are not always known locally, so working with community mobilizers / ANMs is necessary. Involvement of agencies like UNICEF also drives on-ground momentum

## Success factors and challenges

**Challenges:** Lack of accountability, training, time availability, and cross-institution links, along with waning interest, limits the impact RRTs can have on vaccine uptake

- 1 Lack of monitoring, accountability, and incentives**  
A lack of monitoring framework and targets, as well as performance-linked incentives, creates little incentive for RRTs to function regularly
- 2 Insufficient training and on-the-job support**  
RRTs require medical professionals to conduct mobilization work, but do not provide training or job aids that would assist them in their interactions
- 3 Increased burden on stretched workforce**  
Medical professionals, especially in the pandemic, are already stretched, and irregular RRT work further adds to that burden, leading to uneven delivery
- 4 Ad-hoc connections with local influencers**  
Some RRTs work informally with PRI or JEEViKA leaders, but the lack of formal involvement of such locally known influencers limits their impact
- 5 Unclear relevance in recent months**  
As vaccine coverage has risen and door-to-door efforts have started, RRTs are seen as less relevant, even as cases of refusal require deeper engagement

## Future potential for RRTs

# RRTs: With adolescent and 'precautionary' vaccinations rolling out, RRTs can be reconstituted with enhanced support and supervision

Mandate and scope of RRTs

Success factors and challenges

Future potential for RRTs

*With the launch of vaccination camps for adolescents and 'precautionary' vaccinations, there is an increased possibility of health-based refusals to vaccinations, which RRTs can help 'break'*

## Potential tweaks to boost RRT impact:

I

**Sustain momentum via planning and monitoring**

*(For challenges 1, 3)*

Create and **regularly update an agenda** for RRTs, on the basis of which **their performance is tracked (e.g., through indicators such as numbers of refusals they've engaged on, numbers of conversions, etc.)**, utilizing existing supervisory mechanisms to build RRT accountability

II

**Provide mobilization training and job aids**

*(For challenge 2)*

Organize **training sessions on community mobilization** for RRT members, equipping them with **job aids (e.g., handbooks, posters, videos) they can take with them to the field**, as we've seen to be useful for ASHAs and ANMs when persuading PLW to get vaccinated

III

**Involve influencers formally**

*(For challenge 4)*

Formally include **PRI, JEEViKA, and/or ICDS functionaries** in RRTs to strengthen mobilization efforts, given research has shown that community members look to such community leaders as exemplars to follow and emulate.



# Building momentum for precautionary doses



# Precautionary vaccinations have now covered ~15% of Bihar's entire 60+ with co-morbidities and HCW population

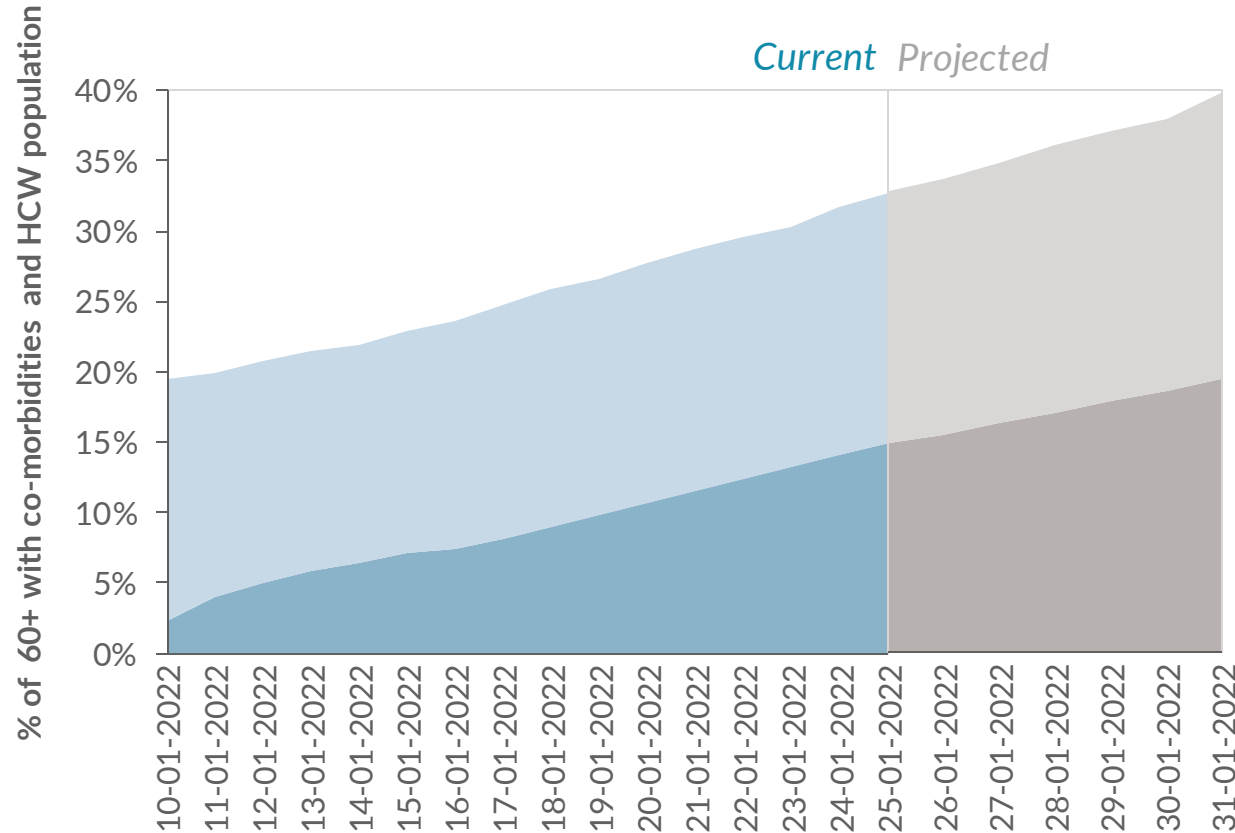
Where are we?

Why are we here?

How do we move forward?

Covid-19 precautionary vaccine dose uptake in Bihar over time  
% of 60+ with co-morbidities and HCW population, January 25<sup>th</sup> 2022

Eligible Taken precautionary dose



- As per govt announcements, 18.9 lakh of an estimated 94.6 lakh 60+ population has co-morbidities and is thus eligible for a 3<sup>rd</sup> dose
- Most of the elderly (with co-morbidities) and HCW population remain ineligible for the 3<sup>rd</sup> dose because of the 9-month requirement
- Uptake and eligibility have shown consistent growth over the past two weeks, after vaccinations began
- GoB is confident about vaccinating HCWs with the 3<sup>rd</sup> dose, suggesting that the focus of future efforts should be on the elderly with co-morbidities

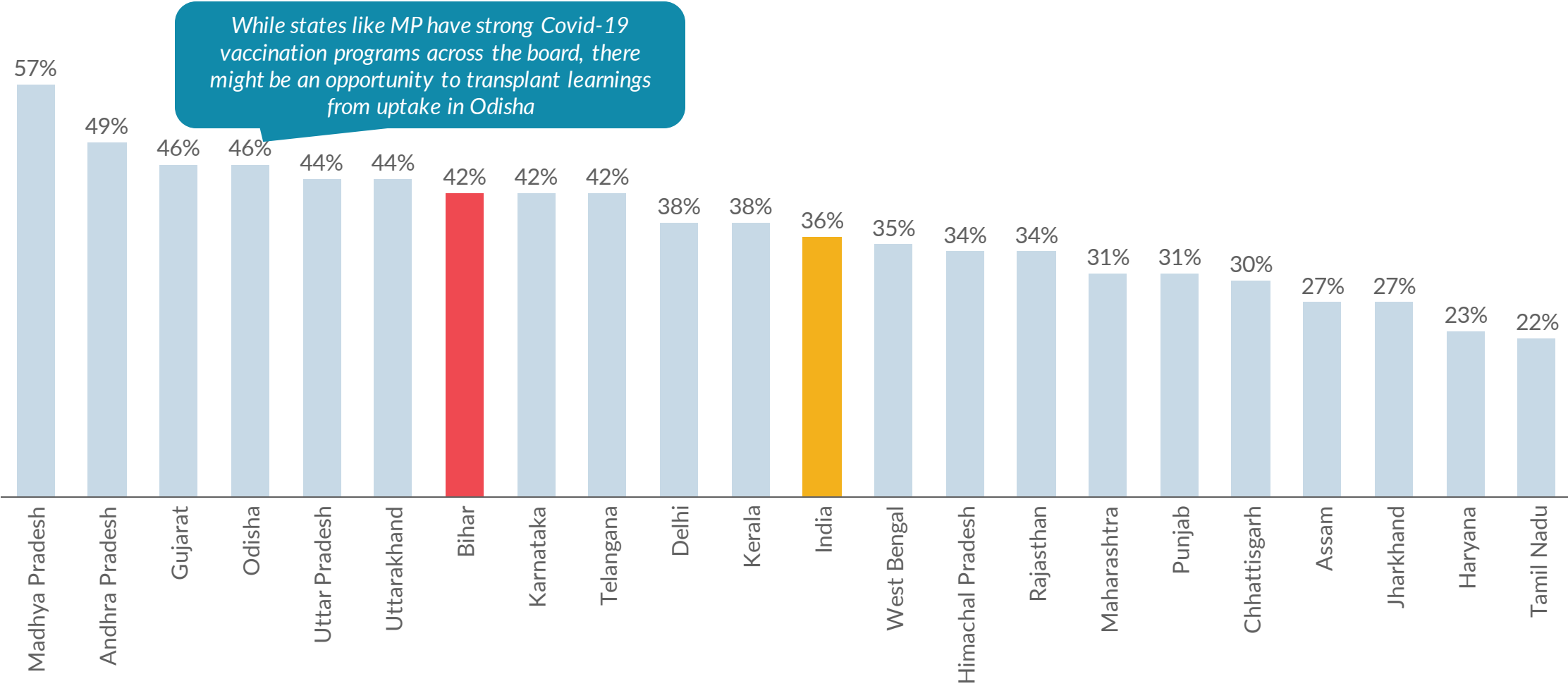
Note: The total 60+ (with co-morbidities) and HCW population has been estimated based on government announcements. It is assumed that there is minimal, if any, overlap between these two target groups. Within this population, the eligible population has been recorded as those who received their 2<sup>nd</sup> dose at least 39 weeks prior. Given that vaccinations for 60+ and 45-60 yo with co-morbidities began on March 1, 2021, 9 months have also elapsed for those 45-60 yo who took Covaxin in early March 2021. Given that the vast majority of vaccinations in Bihar (90%+) were Covishield, we have assumed that this proportion of the population is negligible, for the sake of estimation.

Source: Times of India, [Day 1: 64k people get booster dose in Bihar](#), 2022; NHM, CoWin, Dalberg analysis.

# Bihar's 3<sup>rd</sup> dose coverage (42%) is outperforming India's average (36%)

Where are we? Why are we here? How do we move forward?

Covid-19 vaccine uptake among 60+ and HCWs, by state  
% of eligible who have received their 3<sup>rd</sup> dose, January 25<sup>h</sup> 2022



Note: The population eligible for boosters is calculated based on the number of people who had taken their second dose nine months earlier.  
Source: CoWin, Dalberg analysis



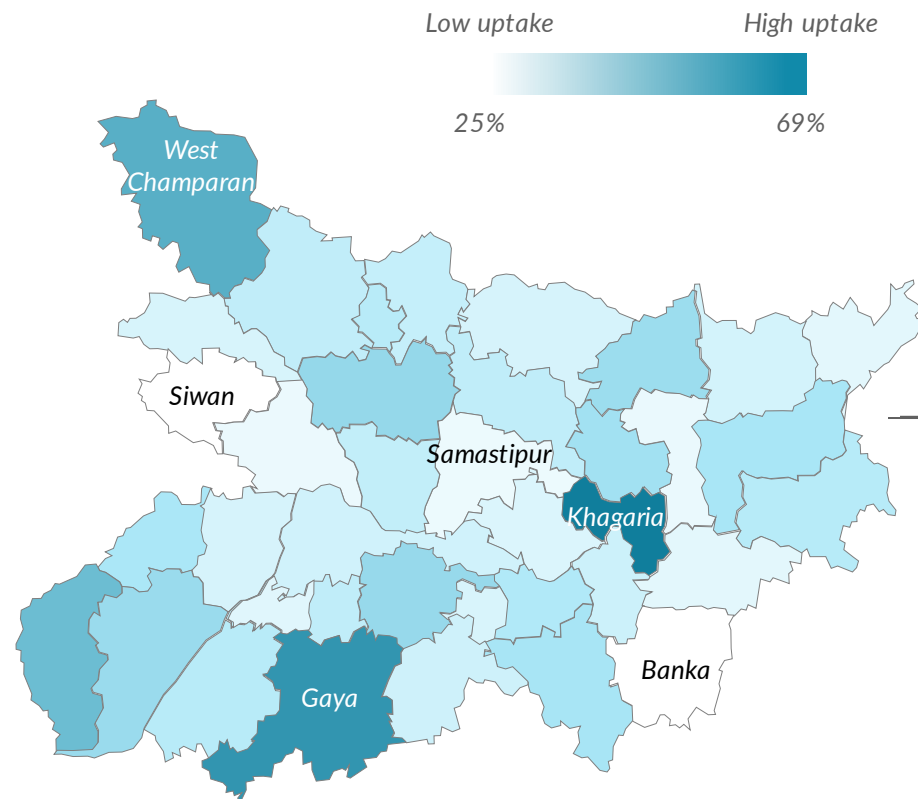
# However, there is disparity among districts; Khagaria (69%) and Gaya (64%) lead, while Siwan (25%), Banka (28%), and Samastipur (32%) lag

Where are we?

Why are we here?

How do we move forward?

Covid-19 vaccine uptake of booster shots in Bihar, by district  
% of eligible who have received their 3<sup>rd</sup> dose, January 25<sup>th</sup> 2022



## High performing districts:

**Khagaria and Gaya** continue to have higher Covid-19 precautionary dose uptake

**West Champaran** continues to observe relatively low 1<sup>st</sup> / 2<sup>nd</sup> dose uptake but high precautionary dose coverage (as observed last week)

## Low performing districts:

**Siwan** continues to lag in Covid-19 precautionary dose uptake as observed last week, even as 2<sup>nd</sup> dose coverage in the district remains high

Additionally, **Samastipur and Banka** have low precautionary dose uptake

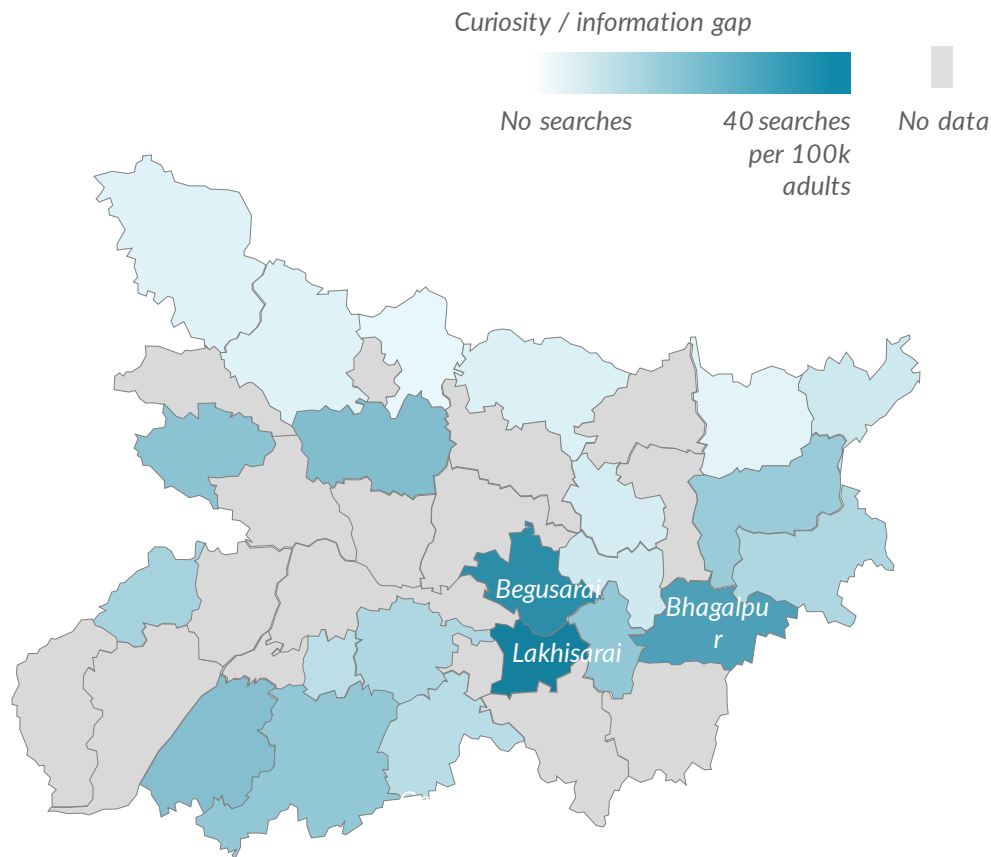
# Searches indicate significant increase in interest in booster doses in Dec, with most searches in Lakhisarai, Begusarai, and Bhagalpur

Where are we?

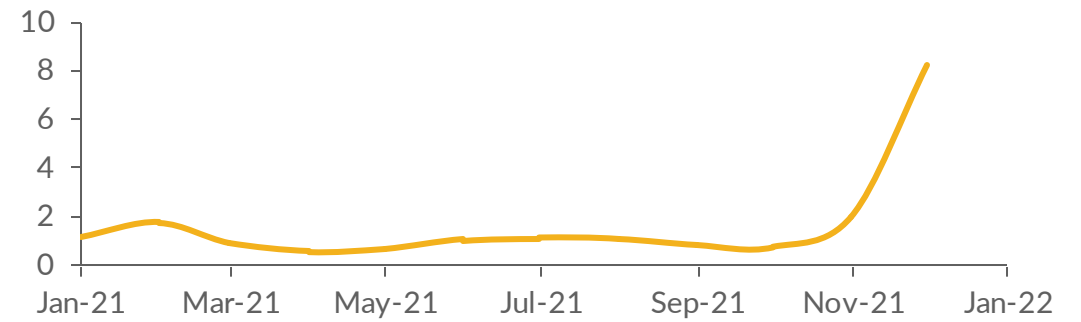
Why are we here?

How do we move forward?

Searches on booster vaccination (normalised for population)  
Oct 2021 - Dec 2021



Searches on booster doses (per 1,000 Covid related searches)  
Jan 2021 - Dec 2021



Searches related to boosters have increased 4-5 folds in recent months as a share of all Covid related searches, indicating a relatively high demand for booster related information

- Additional search data indicates that this may have increased further in January '22

Most of these searches are related to:

- Meaning of booster doses
- (Applicability of) Covaxin, AstraZeneca, and Pfizer as booster
- Price of booster doses

# Digital engagement is limited; past research points to possibly reduced fears of side-effects driving uptake with risk of apathy creeping in

Where are we?

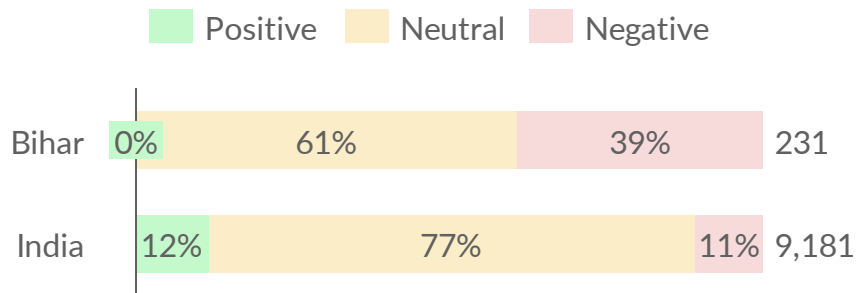
Why are we here?

How do we move forward?

Preliminary

## Sentiment analysis reveals little digital conversation about precautionary doses in Bihar

Breakdown of recent social media activity in Bihar and across India on booster / precautionary dose, by sentiment  
% of posts tagged to each sentiment, January 11<sup>th</sup> – 20<sup>th</sup> 2022



- In both Bihar and India, social media activity on 'booster dose' exceeded that on 'precautionary dose'
- While Bihar appears to have a higher negative sentiment, the overall level of activity is very low and most of the negative sentiment is driven by a single post (suggesting the govt should feed poison to the unemployed in lieu of a booster dose) that has been reshared
- At an India level, influencers with maximum engagement were primarily news outlets (e.g., ANI on Twitter, Lokmat on YouTube) and politicians like Ravi Shankar Prasad

## Prior user research in Bihar points to possible enablers like reduced fear of side-effects and barriers like apathy and loss of income

Observation from phase 1 research

Implication for precautionary doses

ENABLERS

Multiple first-hand and second-hand (observed) experiences with the Covid-19 vaccination reduces the fear of side-effects

Individuals might be more willing to get the 3<sup>rd</sup> dose of the vaccine as they've got 2 doses previously and managed any side-effects accordingly

Responsibility to society is a lever to drive vaccine uptake among residents

Given interest in CAB in light of Omicron, there's an opportunity to use responsibility to drive 3<sup>rd</sup> dose uptake

BARRIERS

Apathy towards vaccines rises as Covid-19 becomes less salient in people's minds

Some residents might choose to not get the 3<sup>rd</sup> dose unless mandated in some way

Lost income during vaccination or while managing side-effects might disincentivize some

Advance notice must be provided and camps planned for days when most residents are likely to be at home

Some ANMs are unable to open vials because of insufficient demand (<10 people)

Similar issues could arise for 3<sup>rd</sup> doses; residents can be encouraged to come in groups, directives for ANMs can be reconsidered

# Solutions must provide a clear rationale for the 3<sup>rd</sup> dose, while engaging whole families and medical professionals to reach 3<sup>rd</sup> dose-eligible groups

Where are we?



## Motivations and knowledge

- **Scientific reasoning** has been an effective tool in promoting **second dose uptake** (e.g., volunteers explaining the value of antibodies); this can be extended to the booster
- **Parallels** can also be established with **children's vaccination**, where multiple doses are administered to children
- Observations of *Har Ghar Dastak* might have created **expectations of home visits** for vaccinations, thereby disincentivizing individuals from attending camps to get vaccinated
- Fears of getting **infected at vaccination sites** and **pre-existing (Omicron) infections** might hold some back from getting their 3<sup>rd</sup> dose

Why are we here?



## Key Influencers

- The first set of workers eligible for boosters are **associated with government machinery**; departments are **reminding and pushing people to get their boosters**
- For the elderly who have lower levels of digital access and inclusion, **younger family members are a key source of information and guidance**
- **Doctors in particular are seen as trusted sources of information**, especially for elderly groups with co-morbidities who prefer having the doctor's go-ahead before getting vaccinated

How do we move forward?



## Channels of Influence

- **Local health care systems and organizations** have built strong networks to contact those eligible for the booster on the date and time - PHC workers and volunteers use **PHC call centers to contact those eligible for boosters** and remind them of when and where to take their vaccine
- **News** - through both newspapers and the TV - is seen as a **credible source of updated information**
- Certain **local spots are points of congregation** for the elderly in certain blocks - elderly men can be found sitting together at **chaurahas and chaupals** in the evenings; flyers, posters, and information can be shared **at the ward mukhiya's home**

Preliminary

*We will develop solutions building on these themes, to be discussed in the week of 24<sup>th</sup> January*

# Precautionary doses: Proposed solutions combine print and digital communications and system tweaks for boosters

Where are we?

Why are we here?

How do we move forward?

## Communications-focused solutions

Preliminary

**A** *Booster for providers campaign* ★

- **Content:** Positioning boosted 60+ adult as the ideal provider / protector for their family
- **Content Type:** Poster (print)
- **Audience:** Elderly men (60+ with co-morbidities)
- **Channel:** Newspaper, in-person at gathering spots (e.g., mukhya's house)

**B** *Science-based motivational campaign* ★

- **Content:** Explaining the scientific rationale for a 'precautionary dose' through analogies (fertilizer for soil, children's vaccinations)
- **Content Type:** Poster (print)
- **Audience:** 60+, their families
- **Channel:** Newspaper, in-person at gathering spots

**C** *Capacity-building for HCWs*

- **Content:** Job aids for HCW to explain eligibility and need for 3<sup>rd</sup> dose to elderly with co-morbidities
- **Content Type:** Poster (digital, print)
- **Audience:** HCWs
- **Channel:** WhatsApp, in-person trainings

★ Proposed priority solutions

## In-person / systemic solutions

**D** *Tele-medicine for co-morbidity concerns* ★

- **Focus:** Tele-medicine to respond to concerns related to co-morbidities
- **Audience:** 60+ with co-morbidities
- **Channel:** Tablets already used by ASHAs for tele-medicine through PHCs

**E** *Strengthening PHC outreach* ★

- **Focus:** Utilizing PHC-based outreach to go from informing to convincing 60+ with co-morbidities
- **Audience:** 60+ with co-morbidities and their families
- **Channel:** Talking points for operators working at call-centre setup at PHCs

**F** *Dedicated 3<sup>rd</sup> dose camps*


- **Focus:** Creating dedicated camps on pre-specified days for 3<sup>rd</sup> doses for 60+ with co-morbidities
- **Audience:** 60+ with co-morbidities with other competing concerns, mobility needs, etc.
- **Channel:** Health system

**G** *Save-for-a-rainy-day sessions*

- **Focus:** Building motivation for 3<sup>rd</sup> dose through comparison with 'saving for a rainy day' already done by women through SHGs
- **Audience:** Women (SHG members, 60+ and/or women in their families)
- **Channel:** In-person discussions at JEEViKA (SHGs) meetings



# Improving uptake of adolescent vaccines



# Bihar's adolescent vaccination program is progressing strongly compared to other age groups

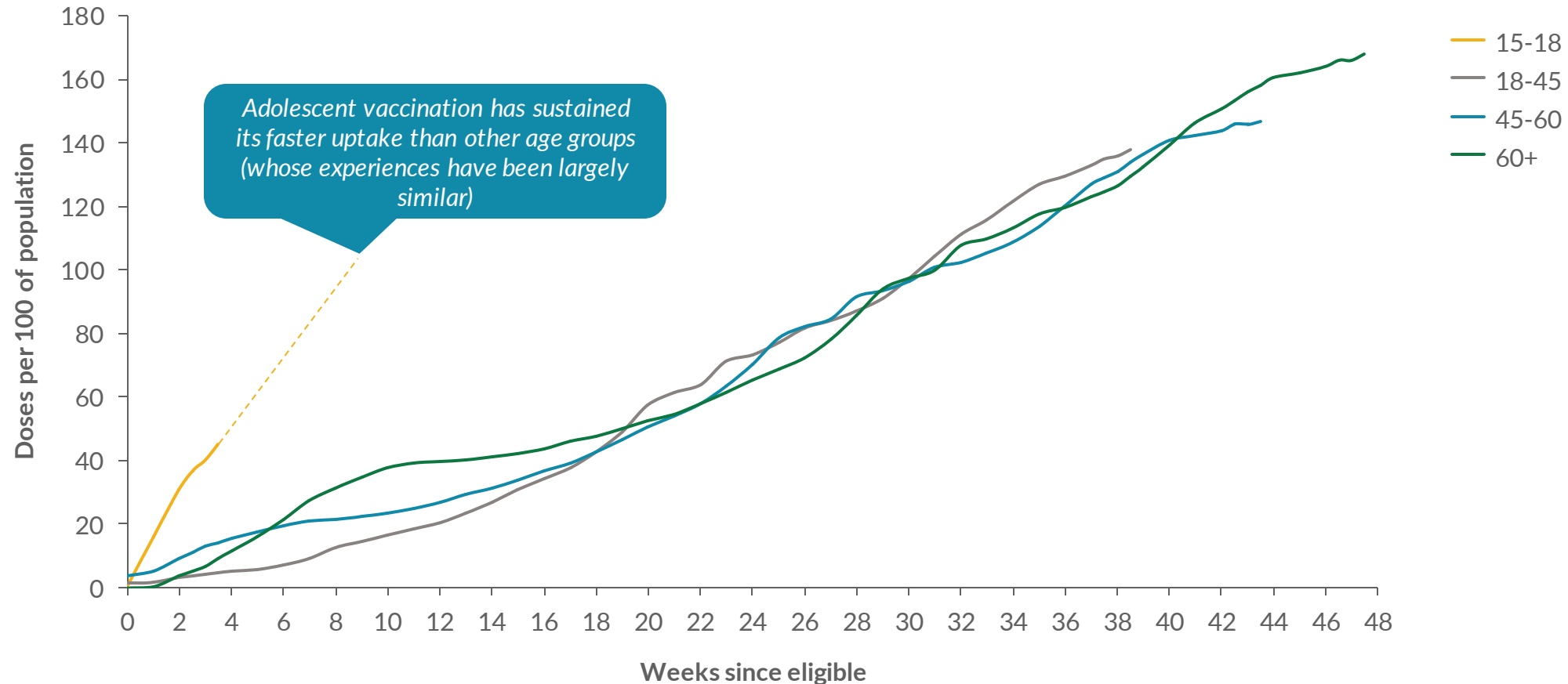
Where are we?

Why are we here?

How do we move forward?

## Covid-19 vaccine uptake in Bihar over time, by age group

Cumulative doses administered per 100 of population in each age group, January 27<sup>th</sup> 2022



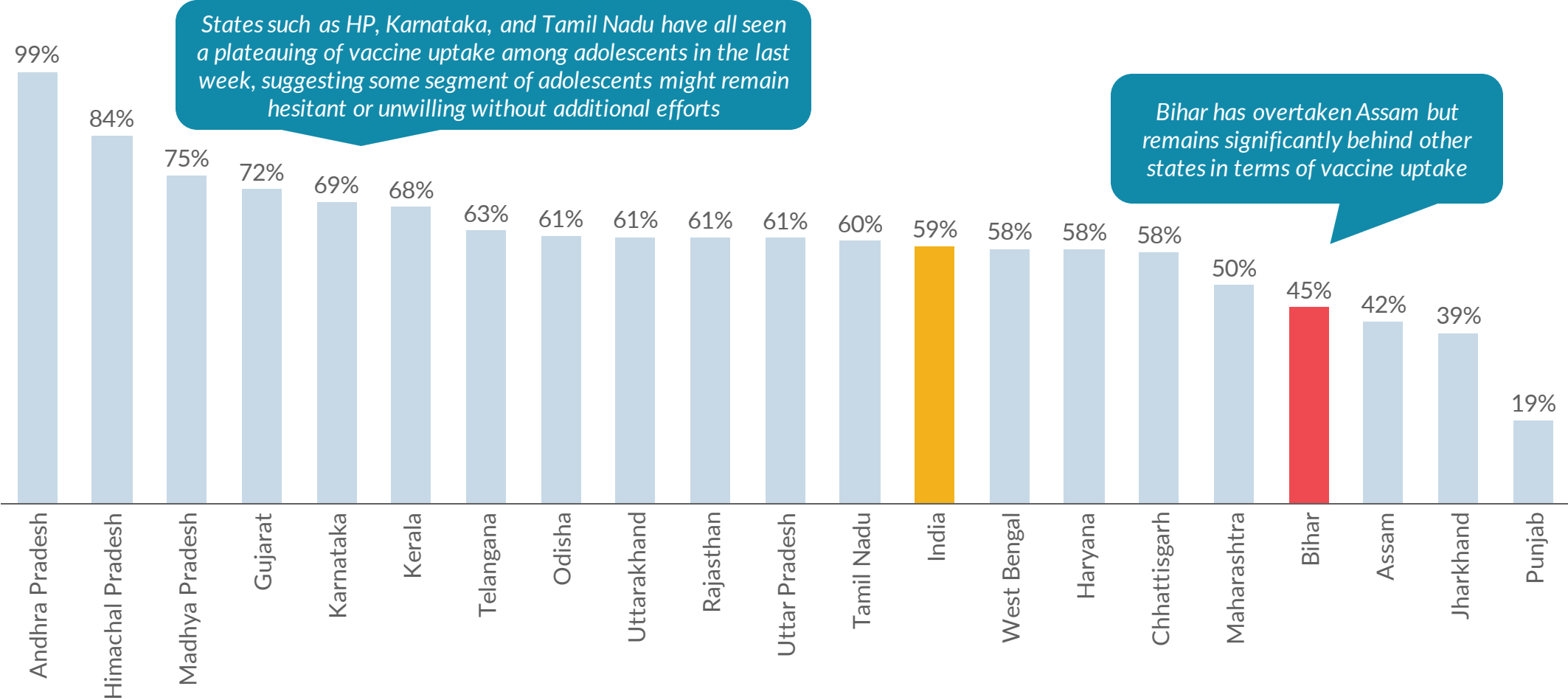
Note: For 60+, week 1 was taken to be the week of March 1<sup>st</sup>, when all 60+ individuals could get their first dose of the vaccine. Similarly, week 1 for 45-60 yo was the week of April 1<sup>st</sup> and for 18-45 yo was the week of May 1<sup>st</sup>. Some individuals in each of these age groups had already received their first doses before these dates, on account of being healthcare or frontline workers, or having co-morbidities (particularly for 45-60 yo)

Source: CoWin, Dalberg analysis.

# However, it trails coverage of most other large states

Where are we? | Why are we here? | How do we move forward?

**Covid-19 vaccine uptake among adolescents (15-18 yo), by state**  
 % of eligible who have received their 1<sup>st</sup> dose, January 27<sup>th</sup> 2022



Note: The total projected population for 15-18 y.o. in Bihar is 83.4 lakh, as per NHM projections for 2021.  
 Source: CoWin, Dalberg analysis



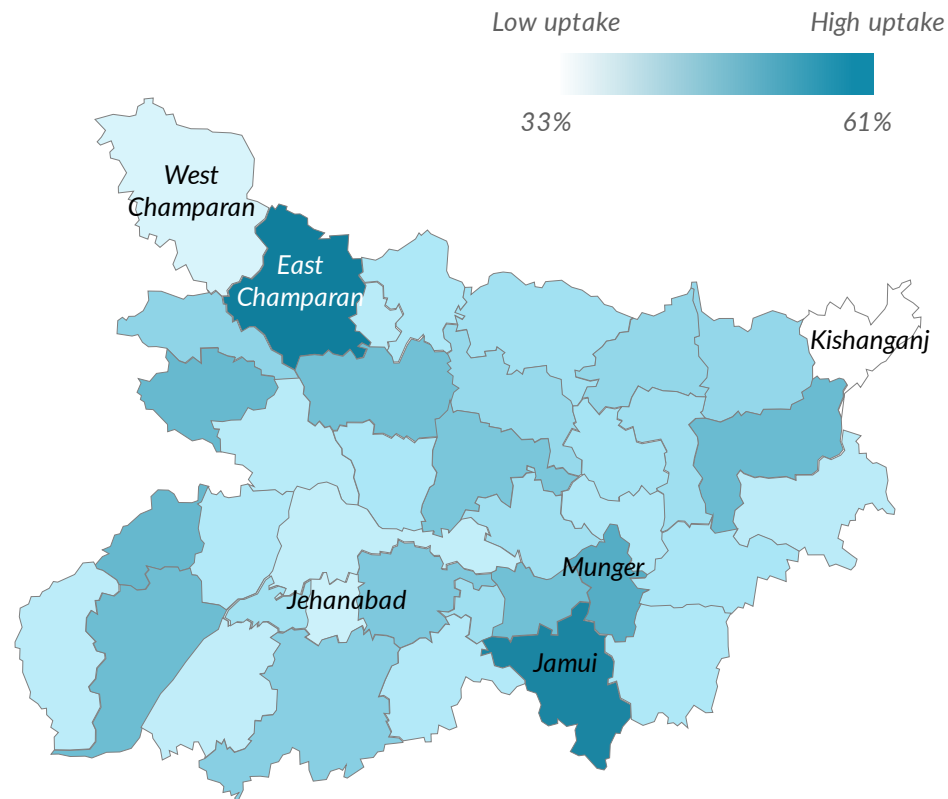
# District-wise disparity persists, with need for focusing efforts in areas like Kishanganj and West Champaran

Where are we?

Why are we here?

How do we move forward?

Covid-19 vaccine uptake among adolescents (15-18 yo) in Bihar, by district  
% of eligible who have received their 1<sup>st</sup> dose, January 27<sup>th</sup> 2022



## High performing districts:

East Champaran, Jamui, and Munger continue to lead Covid-19 vaccine uptake among adolescents

## Low performing districts:

Districts like Kishanganj, Jehanabad, and West Champaran continue to have lower Covid-19 vaccine uptake among both adults and adolescents

*These trends have persisted for the past 3 weeks, suggesting they will continue without targeted interventions*

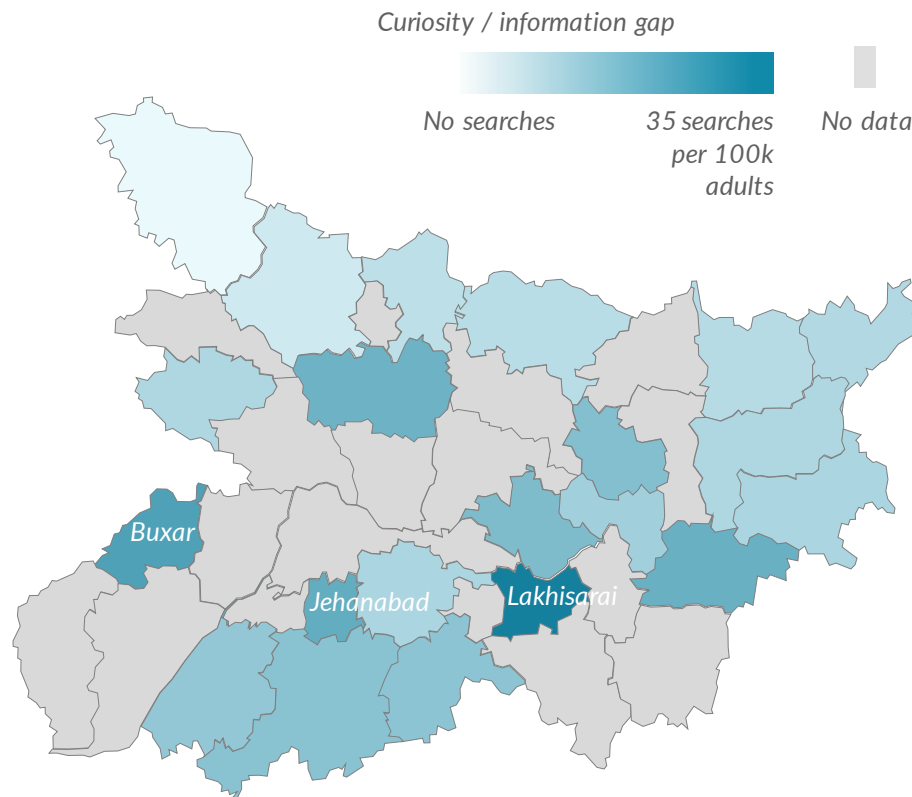
# Searches indicate rising interest in adolescent vaccines in Dec but still a lower priority, with more searches in Lakhisarai, Buxar, and Jehanabad

Where are we?

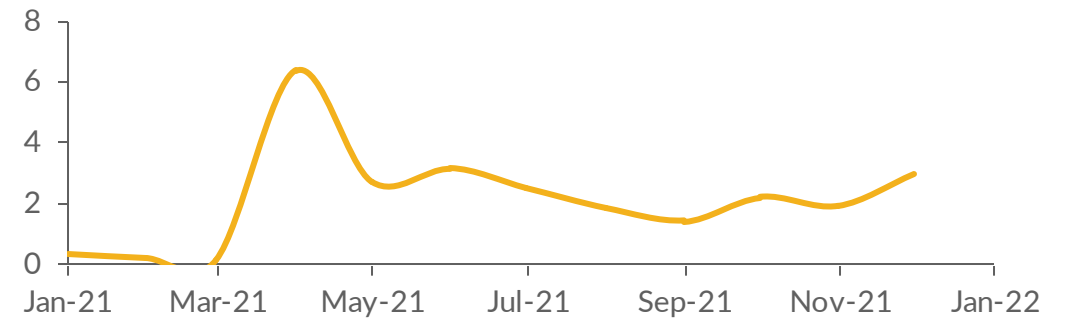
Why are we here?

How do we move forward?

Searches on adolescent vaccination (normalised for population)  
Oct 2021 - Dec 2021



Searches on adolescent vaccination (per 1,000 Covid related searches)  
Jan 2021 - Dec 2021



While adolescent related searches have started to gain share of covid searches in December, it is significantly below the level during wave 2.

- This could be due to lower perceived severity of Omicron and belief that children recover faster
- Additional preliminary data indicates that this may have increased further in January '22

Most of these searches are on:

- process for registration / slot booking for adolescent vaccines
- Vaccination starting date
- vaccine requirements for classes and exams

# As of 14/01, Bihar was less negative than India; national pride drove positive sentiment, while safety concerns persisted

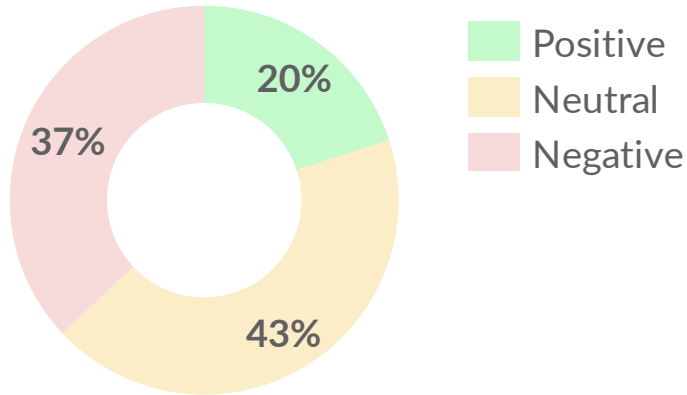
Where are we?

Why are we here?

How do we move forward?

Adolescents are more positive than general population (10%) and less neutral

## India Sentiment Analysis<sup>1</sup>



- Positive
- Neutral
- Negative

### Reasons for Negative Sentiment:

- Foreign origination of vaccination
- Lack of complaint resolution
- Theories around pharma lobby
- Lack of sufficient studies and recognition

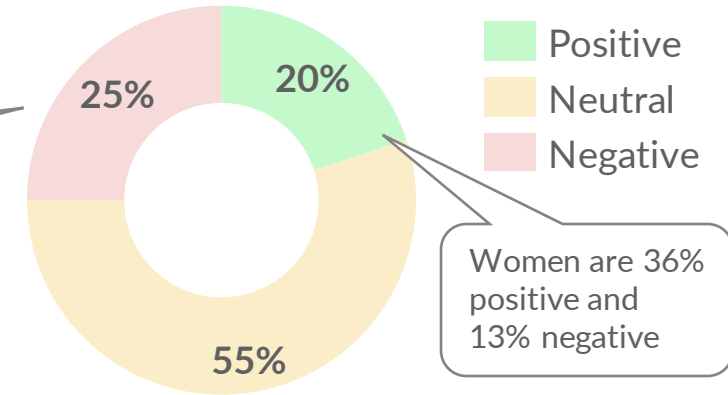
### Reasons for Positive Sentiment:

- India
- Achievement
- Narendra Modi
- Domestic congratulations

A patriotic and achievement-related sentiment drives positive sentiment

Preliminary

## Bihar Sentiment Analysis<sup>1</sup>



- Positive
- Neutral
- Negative

Bihar is less negative and more neutral compared to India

Women are 36% positive and 13% negative

### Reasons for Negative Sentiment:

- Safety concerns
- PM Modi's photo on certificate
- Lack of complaint resolution

Bihar's negative sentiment is driven by safety concerns and lack of complain resolution

### Reasons for Positive Sentiment:

- Citizen benefit
- "Largest vaccination drive"
- GOI

# Young adults want to get vaccinated, seek information from official accounts, but worry about “need” and “eligibility” if re-infected

Where are we?

Why are we here?

How do we move forward?

Preliminary

*Insight*

*Explanation*

I

There is active interest to get vaccinated amongst adolescents

- There is search-related activity focused on vaccination “guidelines”, “camp timings”, “manufacturer” of vaccination
- Use of positively connotated words such as “warriors” and “country”, “Achieves” has also been observed

II

They look up to government officials accounts for information

- Accounts of Nitish Kumar, Bihar government, BJP, Narendra Modi, Kishan Reddy have been actively looked up and quoted
- There are fewer mentioned non-governmental personalities

India-level analysis reveals a greater focus on “Sabko muft vaccine” (free vaccine for all)

III

They are worried about eligibility if infected/re-infected

- There are searches around “need” and “eligibility” if one has contracted Covid-19 in the past
- With the recent Omicron wave, there is concern regarding eligibility for vaccination if one has gotten re-infected

The recent wave has been large, with untested but potentially Covid-19 positive young adults confused on eligibility

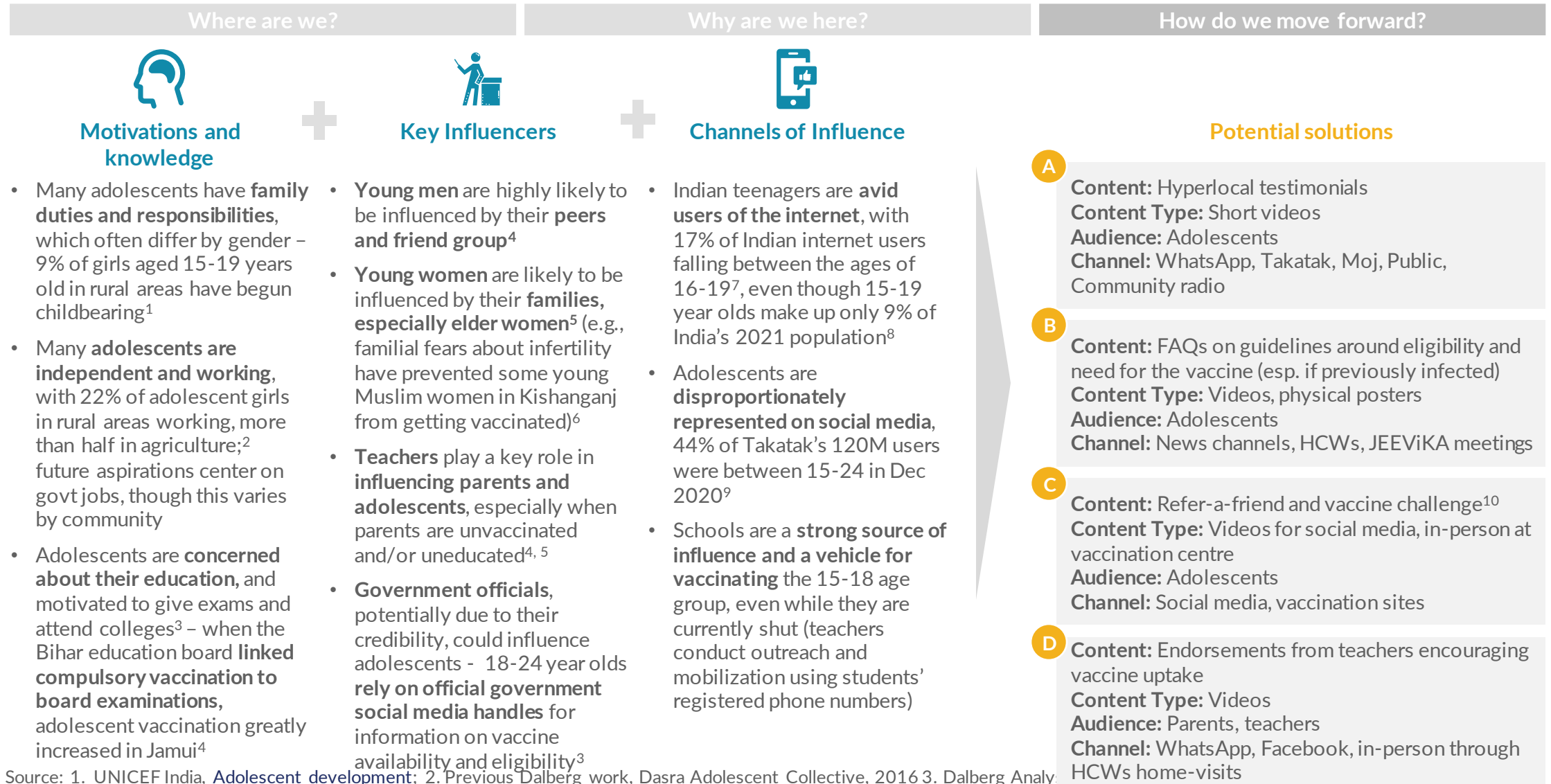
IV

They are “information providers” to senior citizens in the family on eligibility

- Search terms around “co-morbidities”, “elderly”, “senior citizens” point towards young adults looking up information for older members in the family

This demography may be leading online search for the family including senior citizens

# Given the importance of schools and teachers for adolescent vaccination, we have incorporated them in the design of our solutions



Source: 1. UNICEF India, [Adolescent development](#); 2. Previous Dalberg work, Dasra Adolescent Collective, 2016 3. Dalberg Analy. Saksham, Jamui; 5. Dalberg/PCI Male Engagement Study, 2019; 6. Dalberg Interview, Project Potential, Kishanganj; 7. Statista, [Indian internet demographics](#); 8. NHM [Population Projection](#), 2019; 9. Indiantelevision.com, [MX Takatak's monthly active users up by 150%](#), 2020; 10. Behavioral Evidence Hub, Refer-a-Friend to Family Planning

# FAQ-style guidelines on vaccine eligibility and necessity

**SUMMARY AND VALUE PROPOSITION:** An initiative focused on increasing uptake of the vaccination among adolescent groups by 1) equipping them with the right informing about the need for and their eligibility for the Covid-19 vaccination and 2) addressing their concerns (e.g., around side-effects) through a list of FAQs distributed through channels that are convenient and relevant to them.

## Intervention mapping

<b>Key influencer and their appeal</b>	<b>Teachers:</b> Teachers are another trusted source of information and guidance for adolescents and their parents, and are suited to address questions and concerns that adolescents may not be comfortable sharing with parents and general information about how to access the vaccine.	<b>Community healthcare workers:</b> Community health workers such as ASHAs and ANMs are credible points of contact, associated with healthcare and likely trusted sources of health information.
<b>Channels</b>	<ul style="list-style-type: none"> <li>• Print (posters- as job aides)</li> <li>• Digital posters shareable on social media (WhatsApp, Facebook, Twitter, Instagram, Youtube Ads &amp; Channels)</li> </ul>	<ul style="list-style-type: none"> <li>• Print (posters- as job aides)</li> <li>• Digital posters shareable on social media (WhatsApp, Facebook, Twitter, Instagram, Youtube Ads &amp; Channels)</li> </ul>
<b>Messaging tone</b>	Familiar and reassuring	Informative and advisory
<b>Message example</b>	<i>“If we all get vaccinated, our homes and schools will be a much safer place for us all. We all need to stay protected in order for us to win this fight against COVID-19.”</i>	<i>“Worried about the vaccine? Here are some answers to questions that you might have on this topic, so that you can put your mind at ease and prepare yourself with information before getting the vaccine.”</i>
<b>Cross cutting design consideration (across all solutions)</b>	<p><b>Call to action:</b> Ensure that there is a clear and easy call to action for SMS, dial in, WhatsApp bots and in- person messaging across all intervention material</p> <p><b>Assurance:</b> As people in the 15-18 age group are shown to be highly skeptical of the vaccine, ensure that all material is paired with access to information that can offer assurance e.g “Worried about the vaccine? Dial XYZ or follow XYZ account to speak to a health professional.”</p> <p><b>Relevance:</b> Use current themes, terms and events that are relevant to adolescents as a means of engaging them in the intervention messaging.</p> <p><b>Visual media:</b> Ensure that visual material includes diverse and relatable imagery that is relevant and attractive to adolescent groups .</p> <p><b>Print and audio:</b> Incorporate local dialects and that messaging is entertaining and engaging.</p> <p><b>Credibility of information:</b> Ensure that all intervention media gives people information on credible sources of information e.g designated MoH numbers.</p>	

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## POSTERS- front

- Use framing that references social proof and relatable messaging from other young people
- Use imagery of familiar Bihari youth
- Adding any GIF, moving visual to make it more attractive and interesting
- Frame the information as a dialogue among young people rather than general vaccine information
- Include social media handles and imagery that people can quickly identify and engage with
- Make it visual and colourful
- Use hashtags that young people can engage with and keep track of on popular social media channels

## Option 1



#I'M  
VACCINATED  
BECAUSE

**“I want to spend more time with my friends”**

Have questions about the vaccine? Join other young people in conversation in 2 simple ways:

1. Connect with other young people through our social media @xxx
2. Find us on WhatsApp for more videos, pictures and live chats by sending 'Hi' to Vaccine Mitra at +91 94310 25555.

For any additional information related to COVID-19, call 104

     To see what other young people think about the vaccine, follow us on social media @xxxx

## Option 2

Why do you want to get vaccinated?



**“I want to get back to my dance class.”**



**“I want to attend Holi festival this year.”**



**“I want to get back to playing cricket .”**

# I'M  
VACCINATED  
BECAUSE

 Want to know more? Chat to us on WhatsApp, simply sending the word “Hi” to this number +91 94310 25555.

     To see what other young people think about the vaccine, follow us on social media @xxxx

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## POSTERS- Back

- Make the FAQ framing specific to young people
- Ensure to include information about the new eligibility criteria for young people

Dalberg



### GENERAL QUERIES ON VACCINES FOR CHILDREN BETWEEN 15-18 YEARS

**Q1: When can I get the COVID-19 vaccine?**  
**A1:** Anyone aged 15 years or over is eligible to get the COVID-19 vaccine starting January 3rd, 2022.

**Q2: Which COVID-19 vaccine can I get?**  
**A2:** Covaxin is the name of the vaccine available to children between the ages of 15 and 18 years.

**Q3: How many doses of the COVID-19 vaccine do I need?**  
**A3:** Like adults, children aged 15-18 are recommended to get 2 doses of the vaccine. They are eligible for the 2nd dose of Covaxin 4-6 weeks (approx. 1-1.5 months) after taking the 1st.

**Q4: Where can I get the vaccine?**  
**A4:** You can get the vaccine from any government approved walk-in centre. Look for the government logo when you walk into a centre for vaccination.

**Q5: Will COVID-19 vaccine protect me from COVID-19?**  
**A5:** Yes, 2 doses of COVID-19 vaccine helps in building immunity against COVID-19 and prevents any severe infection from this diseases. One is advised to still take all the precautions and follow Covid appropriate behaviour even after getting fully vaccinated.

### QUERIES ON ELIGIBILITY

**Q1: Do I need my parents consent before getting the vaccine?**  
**A1:** No, you do not require written or oral consent from your parents before getting the vaccine.

**Q2: If I got COVID-19 recently, how long should I wait before getting the vaccine?**  
**A2:** If you were diagnosed with COVID-19 recently, it is recommended to wait 3 months from the date of the positive lab test before getting your COVID-19 vaccine dose.

**Q3: If I have a medical condition, what must I do before getting the vaccine?**  
**A3:** If you have a serious medical condition, you should visit your doctor or local clinic and speak to a clinician to ensure that it is okay for you to get the vaccine.

**Q4: Can I get the vaccine if I am on my menstrual period?**  
**A4:** According to research by the Centres for Disease Control, there is no reason to put off the vaccine because one is menstruating.

**Q5: Is enrollment in school necessary to get vaccination?**  
**A5:** Any child between the age of 15 to 18 years old can get vaccinated. School enrollment is not necessary for getting vaccination.



# FAQ-style guidelines on vaccine eligibility and necessity

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<p><b>QUESTIONS AROUND THE NECESSITY OF VACCINATION</b></p>	<p><b>Q1 I am not suffering from any disease, then is this vaccination needed for me?</b>  A1: This vaccination will protect you from getting severely infected from COVID-19. It will help you build immunity against its infection. Prevention is always better than cure. Please get yourself vaccinated as soon as possible for your future health and wellbeing. Also encourage your friends in this age group to get vaccinated as soon as they can.</p> <p><b>Q2: People are getting infected with COVID-19 even after getting vaccinated, then what's the benefit of getting vaccinated?</b>  A2: Vaccination will help in reducing severity of infection and illness during Covid. So even if one gets infected post vaccination, it will be mild. Just like how wearing helmet does not prevent accident, but helps in reducing the chances of any serious injury, similarly vaccination will help in preventing any severe infection from COVID-19.</p> <p><b>Q3 Do I need to take the vaccine to take my board exams?</b>  A3: It is advised that one gets vaccinated before the board exams to prevent any serious infection and help preventing community spread of the virus. Currently there is no directive for compulsory vaccination.</p>
<p><b>QUERIES ON SAFETY</b></p>	<p><b>Q1: Is the vaccine safe for children between 15 to 18 years?</b>  <b>A1:</b> Yes, the vaccine is safe for adolescents and teenagers between the ages of 15-18. The government has recently mandated the vaccination of people within this age group in the national fight against the Covid-19 pandemic.</p> <p><b>Q2: Will the vaccine side effects affect my ability to attend to school or house chores?</b>  A2 :You may experience some mild symptoms such as fatigue and low grade fever, and you may need to take a day or so off from school to recover from the symptoms. If you experience prolonged symptoms after taking the vaccine, please consult a doctor or medical professional.</p>

# Endorsements from influential stakeholders encouraging vaccine uptake

**SUMMARY AND VALUE PROPOSITION:** An initiative that is focused on increasing uptake of the vaccination among adolescent groups by 1) leveraging the influence parents, teachers and doctors have on adolescents and 2) endorsing vaccination to parents as a way to protect their children's health and their progress at school

## Intervention mapping

<p><b>Key influencer and their appeal</b></p>	<p><b>Teachers:</b> Research shows that teachers are important influencers for adolescents and parents as they're perceived as credible sources of information that are grounded and respected in the community. Parents and adolescents have found it comforting to hear from teachers during school-closures.</p>	<p><b>Doctors:</b> Parents and adolescents both trust docs to be knowledgeable sources for information on the health of their family. Doctors are also respected for the part they play in their communities by safeguarding people's health.</p>	<p><b>Parents:</b> As primary caregivers and bread earners of the family, parents are concerned about their child's health and family's well-being. Parents relate to other parents and find it helpful to listen to stories of how they navigated similar circumstances.</p>
<p><b>Channels</b></p>	<ul style="list-style-type: none"> <li>• Video messages sent on WhatsApp bots to adolescents and parents; Videos posted and boosted on social media channels like Moj, Takatak, Public, FB, Insta</li> <li>• In-person visits from teachers, SHG leaders, ASHAs, ANMs and other HCWs</li> </ul>		
<p><b>Messaging tone</b></p>	<p>Familiar and assuring</p>	<p>Knowledgeable and advisory</p>	<p>Friendly and cautionary</p>
<p><b>Message example</b></p>	<p><i>"Getting vaccinated will protect your health and ensure you're ready to attend school when it opens"</i></p>	<p><i>"Be a responsible member of the community and get vaccinated. Let us all safeguard the health and wellbeing of our community."</i></p>	<p><i>"Vaccinating your child against COVID will protect their health and their progress at school. It will also protect your from the financial risks of seeking medical attention"</i></p>
<p><b>Cross cutting design consideration (across all solutions)</b></p>	<p><b>Call to action:</b> Ensure that the videos are clear, information and short.</p> <p><b>Assurance:</b> Parents and adolescents have found messaging from teachers to be ensuring during the pandemic. Videos must provide a sense of comfort to parents about their child's schooling while encouraging them to vaccinate their children.</p> <p><b>Relevance:</b> Use current themes, terms and events that are relevant to adolescents as a means of engaging them in the messaging.</p> <p><b>Visual media:</b> Ensure that video is shot in a familiar setting that is identifiable to adolescents and parents.</p> <p><b>Print and audio:</b> Incorporate local dialects and that messaging is entertaining and engaging.</p> <p><b>Credibility of information:</b> Ensure that all intervention media gives people information on credible sources of information e.g designated MoH numbers.</p>		

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Short description:  
Adolescents and parents receive a video message from teachers, doctors and other parents encouraging them to take the vaccine as a way to protect their health and ensure their progress at school.



1 Teachers, doctors and parents make an endorsement video in a setting that is familiar to adolescents and parents eg. classroom, school backdrop etc



» 2 ASHAs, ANM or SHG leaders can show the video to parents on their phone, followed by a discussion on next steps etc.



» 3 Video is sent to adolescents and their parents either through WhatsApp bots or through in-person visits

# Endorsements from influential stakeholders encouraging vaccine uptake

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Dalberg

Inputs for short video with Teacher endorsement	
Who should be in the video?	A few select teachers from local schools
What should be the tone?	<p><b>Familiar and assuring</b></p> <p>Parents and adolescents have both found it reassuring to hear from teachers during school closures due to the pandemic. The video should provide adolescents and parents the comfort of hearing from a teacher. The teacher can also speak briefly about adolescents well-being during remote learning as a way to reassure them and build trust.</p>
What should be the key message?	<p><b>Encouragement to take the vaccine to protect adolescents' health and academic growth</b></p> <p>The teacher should talk about how taking the vaccine will help protect their health and boost their ability to continue their academic growth. The teacher should underline how vaccination will make it safe for everyone to return to school.</p>
Sample script	<p><b>Eg:</b> A teacher is standing in a classroom with a blackboard behind her. She is speaking into the camera "Dear students, we know that the past two years have caused significant concern due to school closures, postponed exams, inability to meet with your friends etc that has changed life as we know it. But as your teachers we are here to support you through it all. In order to make it safe for us all to come together and reopen schools, it's necessary that all children aged 15-18 years get vaccinated. COVID-19 vaccines are safe for 15-18 years old children. Being vaccinated will protect your health from COVID-19 illness, which means lesser disruption to your life and your studies. And to you, the parents, it is your duty to protect your child and their future, get them vaccinated along with the rest of your family."</p>

## Endorsements from influential stakeholders encouraging vaccine uptake

**SUMMARY AND VALUE PROPOSITION:** An initiative that is focused on increasing uptake of the vaccination among adolescent groups by 1) leveraging the influence parents, teachers and doctors have on adolescents and 2) endorsing vaccination to parents as a way to protect their children's health and their progress at school

Inputs for short video with Doctor endorsement	
Who should be in the video?	A few select doctors from local PHCs/CHCs and clinics
What should be the tone?	<b>Knowledgeable and advisory</b> Parents and adolescents both have high trust in doctors as credible sources of information. The video should reinforce that trust and communicate the urgency to take the vaccine.
What should be the key message?	<b>Encouragement to take the vaccine to protect adolescents' health and do your part in protecting your community</b> The doctor should talk about the need to take the COVID-19 vaccine to protect yourself from illness, for the safety of more vulnerable community members, and to stop the chain of infection. It should underscore communal responsibility in the fight against COVID-19.
Sample script	<b>Eg:</b> A doctor is sitting in a clinic examining an elderly patient. The doctor looks at the camera, <i>"It is my duty to safeguard the health of my patients just as it your duty to get vaccinated and stop COVID-19 from infecting others in your community. Children aged 15-18 years are now eligible for the COVID-19 vaccination as per Government of India guidelines and it is safe for them. I encourage each child in this age group to get vaccinated. Taking the vaccination protects your health and contains the chain of infection, thereby protecting those around you. Be a responsible member of the community and get vaccinated. Let us all safeguard the health and wellbeing of our community."</i>

# Endorsements from influential stakeholders encouraging vaccine uptake

**SUMMARY AND VALUE PROPOSITION:** An initiative that is focused on increasing uptake of the vaccination among adolescent groups by 1) leveraging the influence parents, teachers and doctors have on adolescents and 2) endorsing vaccination to parents as a way to protect their children's health and their progress at school

Dalberg

Inputs for short video with parent endorsement	
Who should be in the video?	A few parents chatting with each other
What should be the tone?	<p><b>Friendly and cautionary</b></p> <p>Parents viewing the video should relate to the characters and story in the video and take lessons that apply to their own circumstances. The video should be cautionary about the risks of not taking the COVID-19 vaccine.</p>
What should be the key message?	<p><b>Encouragement to take the vaccine to protect adolescents' health and safeguard your family from the financial burdens of an illness</b></p> <p>The video should communicate the urgency to take the vaccine to protect your child's health and negate the financial risks of falling ill and needing medical attention. It should convey the burden a family faces when one member falls sick and its impact on everyone's future. Finally, it should present the COVID-19 vaccine as a way to safeguard your family from these risks.</p>
Sample script	<p><b>Eg:</b> A few parents are sitting in the village square and talking, Parent 1: "Everyone at home has fallen ill. I am unable to go to work and get money to pay for the medicines for my families recovery."</p> <p>Parent 2: "I'm sorry to hear that. I got my family vaccinated - now that children aged 15-18 are eligible, I've got my son and daughter vaccinated as well. COVID-19 vaccines are completely safe for them. Finally, we are all protected from severe illness because of COVID-19. You should take your children and your family to get the COVID-19 vaccine after they recover. It will protect their health and it will protect you from financial risks seeking medical attention."</p>

## Endorsements from influential stakeholders encouraging vaccine uptake

**SUMMARY AND VALUE PROPOSITION:** An initiative that is focused on increasing uptake of the vaccination among adolescent groups by 1) leveraging the influence parents, teachers and doctors have on adolescents and 2) endorsing vaccination to parents as a way to protect their children's health and their progress at school

The video can be shared in-person with teachers, SHG leaders, ASHAs, ANMs and other HCWs. In either case follow up from local HCWs will be required to remind adolescents and parents about next steps.

Dalberg

Inputs for Teachers, SHG leaders, ASHAs, ANMs, other HCWs and community members to engage parents and adolescents with the video	
Introduction (before showing the video)	Give a brief description of the video, where it's from and what the intention of the video is. Play it for the adolescents/parents
Discussion points after watching the video	Ask the adolescents what they thought of the video. Reiterate that taking the vaccine keeps them and their community safe and prepares them for when schools will reopen. Assure them and any other family members present that taking the vaccine is safe and recommended.
Next steps	Give them information on where and when they can access vaccines. If other family members are present give them this information as well.
Sample script	<i>Eg: "As we all know, COVID-19 vaccination have started for children in age group of 15-18 years old and it is completely safe for them. We have a message for you from a Teacher/Doctor/Parent about the need to get yourself/your child vaccinated. Let's watch the video together and see what they have to say. I'm here to answer your questions or anything else you want to talk about during the video and after it's over."</i>

# WhatsApp bots



# WhatsApp bot: We designed interventions utilizing both digital and in-person channels to boost uptake of and engagement with the *Vaccine Mitra* bot

	Overview	Channel	Pathway to launch
Higher priority	Encouraging people who are already using the bot to spread the word amongst their network	<ul style="list-style-type: none"> <li>WhatsApp Bot</li> </ul>	Dalberg to hand over push message (already designed) to Paurush and Yellow Messenger team to build into WhatsApp Bot logic
	Short reels on “How to use Vaccine Mitra” and its other features for social media targeting the youth of the community	<ul style="list-style-type: none"> <li>Takatak</li> <li>Moj</li> <li>Public</li> <li>Facebook</li> </ul>	Dalberg to work with Paurush to build such reels with SMART radio jockey network set up for adolescent hyper-local testimonials
	Use case based posters along with QR code with link to the bot, highlighting key features of WA bot	<ul style="list-style-type: none"> <li>Facebook</li> <li>Print</li> </ul>	Dalberg to hand over key messages for posters to Rahul and team to design and launch through print and digitally
Lower priority	<ul style="list-style-type: none"> <li>Print ad with influencers like Bihar Minister of Health or doctors introducing Vaccine Mitra</li> <li>Integrating “Vaccine Mitra” with existing and any new govt. communication materials</li> </ul>	<ul style="list-style-type: none"> <li>Newspaper print ad</li> </ul>	Dalberg to hand over key messages for posters to Rahul and team to design and launch through ongoing and planned print comms
	Take home stickers about Vaccine Mitra	<ul style="list-style-type: none"> <li>Ration Shops</li> <li>Medical shops / pharmacies</li> <li>Vaccine camps</li> <li>Colleges / universities</li> <li>Markets</li> </ul>	Dalberg to work with GoB channels / JEEViKA to design and distribute stickers to ration shops, pharmacies, etc.
	Promoting Vaccine Mitra through JEEViKA network and ASHAs/ANMs (in rural areas), through Municipal councillors (in urban areas)	<ul style="list-style-type: none"> <li>JEEViKA network (rural)</li> <li>ASHA/ANM (rural)</li> <li>Municipal councillors (urban)</li> </ul>	Dalberg to work with JEEViKA / PCI, CARE, and relevant GoB departments to provide talking points on promoting Vaccine Mitra among their communities

# Overall suggestions for promoting *Vaccine Mitra*

- Promoting *Vaccine Mitra* Whatsapp bot through multiple channels like newsprint ads, social media (Facebook, Takatak, Moj, Public), loudspeaker announcements, as well as in-person channels
- Anchoring promotions in idea that *Vaccine Mitra* enables convenient access to disparate kinds of information, boosting the speed, ease, and trust with which a user can privately learn what they need to from the government about Covid-19; benefits include:
  - Speed:
    - Bite-sized information, reducing the time taken to find information that applies to oneself (by eliminating the need to watch a lengthy video or navigate through a website to locate specific information of interest)
    - Accessibility as and when needed, eliminating reliance on someone else's (ASHA, doctor) availability to get information
  - Ease:
    - Convenience of having multiple functionalities in one place (i.e., combines benefits of CoWin, GoB website, etc.)
    - Ease for user to reach GoB just as they would reach out to a friend, on a platform they know and use regularly
    - Potential to share information with others on the same platform, facilitating users to become change agents themselves
    - Benefit from having access to chat history whenever you need it, allowing user to refer to answers to past questions
  - Trust:
    - Verified nature of information that users can trust, given it's endorsed by the government
    - Guarantee of privacy, allowing users to ask whatever questions they have, without thinking of social considerations
- Involving images / signifiers of credible sources like GoB / doctors to build public trust in the bot
- Highlighting widely used features like “downloading vaccine certificate” in promotion materials to provide a tangible benefit new users can visualize

## Ideas for promoting Vaccine Mitra (1/2)

Suggestion	Channel	Description
<p>(1a) Print ad with influencers like Bihar Minister of Health or doctors introducing Vaccine Mitra</p> <p>(1b) Integrating “Vaccine Mitra” with existing and any new govt. communication materials</p>	<ul style="list-style-type: none"> <li>Newspaper print ad</li> </ul>	<p>(1a) This promotion ad can focus on how Vaccine Mitra is exclusively designed to help people in Bihar easily access verified information around Covid-19 and vaccination. It can highlight its key features like:</p> <ul style="list-style-type: none"> <li>- Information available in Hindi and English</li> <li>- Very fast and easy to use</li> <li>- Helpful in finding info around nearby vaccination camps, downloading certificate or any queries around Covid-19</li> </ul> <p>Ending it with actionable message saying “Open your WA now, and send “hello” to Vaccine Mitra at 9431025555</p> <p>(1b) Any new ads or campaigns related to Covid-19 and vaccination can have a line in the end saying “For more information, reach out to Vaccine Mitra on 9431025555”</p>
<p>(2) Encouraging people who are already using the bot to spread the word amongst their network</p>	<ul style="list-style-type: none"> <li>WA Bot</li> </ul>	<p>Existing bot user receives a a pre-crafted message after downloading the certificate saying “Did you tell your family and friends about Vaccine Mitra? Just forward the following message and help them also to receive latest information about Covid-19 and vaccination. Let’s make Bihar safe together!” along with a WA poster about Vaccine Mitra which can be forwarded</p> <p>Illustrative Message on poster : नमस्ते! मैं आपका वैक्सीन मित्र हूं, बिहार सरकार ने मुझे कोविड-19 के खिलाफ इस लड़ाई में आपकी मदद करने के लिए बनाया है। मैं आपको नज़दीकी टीकाकरण केंद्र खोजने में मदद कर सकता हूं, टीकों पर जागरूकता और अन्य जानकारी दे सकता हूं. मुझसे बात करने के लिए बस इस <a href="https://wa.me/919431025555">https://wa.me/919431025555</a> पर "नमस्ते" अथवा "Hi" भेजे</p>
<p>(3) Short reels on “How to use Vaccine Mitra” and its other features for social media targeting the youth of the community</p>	<ul style="list-style-type: none"> <li>Takatak</li> <li>Moj</li> <li>Public</li> <li>Facebook reels</li> </ul>	<p>Short video reel showcasing “How to use Vaccine Mitra” and its common features, along with the link to Vaccine Mitra in the end encouraging viewers to start chatting</p>

## Ideas for promoting Vaccine Mitra (2/2)

Suggestion	Channel	Description
(4) Use case based posters along with QR code with link to the bot, highlighting key features of WA bot	<ul style="list-style-type: none"> <li>• FB</li> <li>• Print</li> </ul>	<p><b>Poster 1:</b> How to find the nearest vaccination centre? – WA Vaccine Mitra, your trusted source of information by Bihar Health Department to find information around covid-19 vaccination. Just send “hi” to 919431025555 on Whatsapp and find all the details on your nearby vaccination centers in just 2 mins</p> <p>Similarly,</p> <p><b>Poster 2:</b> How to download the Covid-19 vaccine certificate (with a broader emphasis on benefits of ease, speed, and trustworthiness)</p> <p><b>Poster 3:</b> How to find verified covid vaccine related information? (with a broader emphasis on benefits of ease, speed, and trustworthiness)</p> <p><b>Potential locations to put up print posters:</b> Outside PDS Shops, Pharmacies and medical shops, Health centers, Vaccination Camps, Shopping malls, Theatres, Colleges</p>
(5) Take home stickers about Vaccine Mitra	<ul style="list-style-type: none"> <li>• Ration Shops</li> <li>• Medical shops / pharmacies</li> <li>• Vaccine camps</li> <li>• Colleges / universities</li> <li>• Markets</li> </ul>	<p>Small stickers highlighting Vaccine Mitra number, saying chat with Vaccine mitra at 94310255555 and get any information around Covid-19 and vaccination, which can be distributed to community members at ration shops, medical shops and at vaccination camps. People can take them back home and these stickers can trigger further conversation in the community and spread the word about Vaccine Mitra (<i>illustrative sticker on next slide</i>)</p>
(6) Promoting Vaccine Mitra through JEEViKA network and ASHAs/ANMs (in rural areas), through Municipal councillors (in urban areas)	<ul style="list-style-type: none"> <li>• JEEViKA network (rural)</li> <li>• ASHA/ANM (rural)</li> <li>• Municipal councillors (urban)</li> </ul>	<p><b>In-person:</b> JEEViKA CM to share about Vaccine Mitra during any household visits and during SHG meetings using posters and help community members to start using Vaccine Mitra; ASHA/ANM to share about it with individuals during their regular duties as a verified source of information for any questions related to Covid-19 and vaccination; Municipal councillors to share about Vaccine Mitra in their wards</p> <p><b>Digital:</b> Sharing the Vaccine Mitra promotional message and digital poster on Whatsapp with JEEViKA CMs/Municipal councillors which they can circulate with other community influencers like Village Head/Ward members who can further promote the use of Vaccine Mitra within the community.</p>