




Improving  
Vaccine Uptake

BILL & MELINDA  
GATES *foundation*

**finalmile.**  
a fractal company



Designing  
Segment-Targeted  
Interventions for  
Improving COVID 19  
Vaccine Uptake

Psycho-behavioral  
Segmentation in Pakistan  
April 2023

## Content

1. About Segmentation
2. Objectives and Methodology
3. Segmentation Frameworks
4. Segment Profiles
5. Using Segmentation



# About Segmentation



# Segmentation Origins and Purpose

## Segmentation involves clustering individuals by shared characteristics

First developed in private sector for three key purposes:

1. **Prioritization** – niche, ease of engagement
2. **Customization** – higher engagement, better subjective experiences and market expansion
3. **Targeting** – efficiency in distribution and supply



### **DINK** (Double/Dual Income, No Kids)

Both partners in a household earn an income and have no children. They tend to exhibit discretionary expenditure on luxury goods and entertainment, as well as dining out.



### **GLAM** (Greying, Leisured and Moneyed)

Retired rich older people. They tend to exhibit higher spending on recreation, travel, and entertainment.



### **(American) Preppy**

Well-educated, wealthy, upper-class young people. Often, graduates of expensive schools. They can be distinguished by a style of dress.



### **SITKOM** (Single Income, Two Kids, Oppressive Mortgage)

They have very little discretionary income to spend and struggle to make ends meet.



### **YUPPY or YUPPIE** (Young, Upwardly-Mobile Professional)

Well-educated and career-minded. They are ambitious and affluent. They also spend their money freely.

# Activating Demand

## Latent Demand

In contrast to the traditional demand generation approach which is heavy touch, a **behavioral psychology**-driven approach posits that **demand isn't 'generated', but exists in the form of needs, preferences and tendencies of individuals**, which can be converted into actual demand, given the right context and cues. We call this **latent demand**.

## Self-Selected Attention

When the **design** of products, services and communications is **aligned to the behavioral drivers and latent demand** of the target population, they are **intrinsically driven** to engage with the product/service, without any external pushes or influences. This outcome is known as 'self-selected attention'.

# Latent Demand

## Assumed Demand for Vaccine

[X] is a dangerous disease,...

Vaccine can protect me from [X].....

Without serious side-effects.

## Latent Demand for Vaccine

I want to follow the vaccination norm in my community

I am safe but I want to protect my vulnerable family members

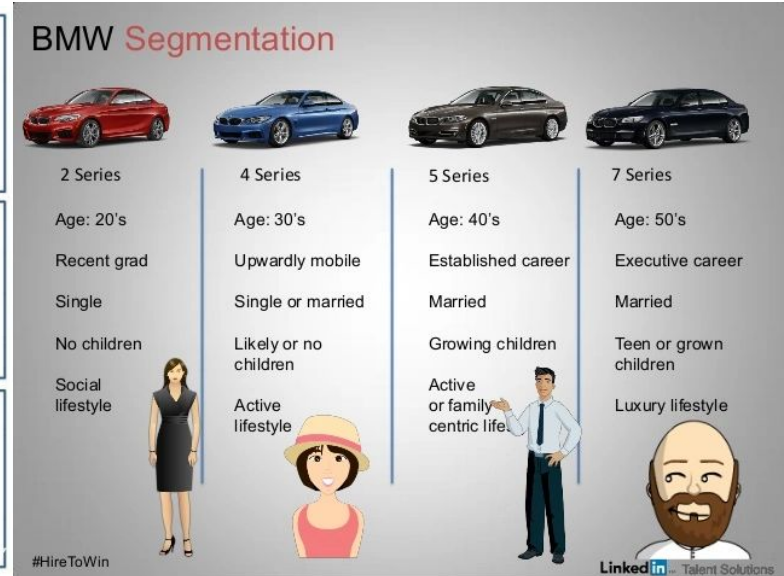
Free vaccine must be low quality, I will go to a private clinic and get [Y] brand

I trust [Z] and they told me to get vaccinated

Latent demand is often **non-conscious and inexplicit**, therefore it has to be **inferred and decoded**

# Self-Selected Attention

 <p>Mini Seg. A (10%)</p> <ul style="list-style-type: none"> <li>Hyundai i10</li> <li>VW up!</li> <li>Suzuki Alto</li> </ul>	 <p>Supermini Seg. B (26%)</p> <ul style="list-style-type: none"> <li>Ford Fiesta</li> <li>Opel Corsa</li> <li>VW Polo</li> </ul>	 <p>Lower medium Seg. C (31%)</p> <ul style="list-style-type: none"> <li>Ford Focus</li> <li>VW Golf</li> <li>Opel Astra</li> </ul>
 <p>Upper medium Seg. D (10%)</p> <ul style="list-style-type: none"> <li>BMW 3 Series</li> <li>Opel Insignia</li> <li>Audi A4</li> </ul>	 <p>Executive Seg. E (3%)</p> <ul style="list-style-type: none"> <li>BMW 5 Series</li> <li>Audi A6</li> <li>Mercedes-Benz E-Class</li> </ul>	 <p>Luxury Seg. F (0.2%)</p> <ul style="list-style-type: none"> <li>BMW 7 Series</li> <li>Jaguar XJ</li> <li>Mercedes-Benz S-Class</li> </ul>
 <p>Specialist sports Seg. G (1%)</p> <ul style="list-style-type: none"> <li>VW Scirocco</li> <li>Audi TT</li> <li>Mercedes-Benz SLK</li> </ul>	 <p>Dual purpose Seg. H (18%)</p> <ul style="list-style-type: none"> <li>Ford Kuga</li> <li>Kia Sportage</li> <li>Range Rover Evoque</li> </ul>	 <p>MPV Seg. I (1%)</p> <ul style="list-style-type: none"> <li>Citroen C4 Picasso</li> <li>Ford C-Max</li> <li>Opel Zafira</li> </ul>



**Diversity and variability** of latent demand necessitates **multiple, differentiated solutions** for self-selected attention

## Unique Benefits in Development Sector

When used in activating latent demand for public health and development programs, many of the benefits of this approach in private sector, like **higher engagement and efficiency**, translate well to the sector. Others, like prioritization, do not align with the needs of the sector.

Beyond its purpose in private sector, segmentation provides some **unique benefits in the development sector**.

1. **More inclusive and equitable outcomes**
2. **Reduced externalities and collateral impact**
3. **Reduced resource and time requirements**
4. **Managing complexity**
5. **Universalization**



# Objectives and Methodology



# Overall Project Objective

## Identify

Identify the **conscious and non-conscious drivers** of hesitancy or aversion towards COVID-19 vaccines and **barriers** to vaccine confidence and uptake.

## Assess

Assess the **prevalence and clustering of the drivers and barriers** in different segments of the population, profiling those segments for effective and actionable solution-targeting.

## Strategize

Strategize on **effective levers of behavior change** to boost confidence in an willingness to receive COVID vaccines for each segment.

## Co-develop

Co-develop **segment-targeted solution concepts** with governments, implementing partners and local stakeholders supporting vaccine demand and uptake.

## Support

Build **guidance materials and tools** to support implementers and public health authorities to comprehensively **understand and use** the segment profiles, solutions strategy, and to help them effectively **adapt and deploy localized interventions** to address the barriers.

# Project Process

Psycho-behavioral segmentation enables us to identify the most vulnerable individuals, who they are, how they vary across key dimensions in order to better address their needs and mitigate risks, allowing for more actionable and relevant interventions and solutions.



## Qualitative Research Planning

- Secondary research review
- Stakeholder immersion
- Hypothesis building
- Research tools
- IRB



## Research Execution

- Moderator training
- Qualitative formative research



## Analysis and Synthesis

- Transcripts analysis
- Sensemaking
- Data synthesis to inform quant survey instrument



## Quantitative Research Planning

- Quantitative survey instrument
- Quantitative sampling design
- In-country localization
- IRB amendment
- Coding survey into platform - survey, data checks, GPS, audio



## Pretest/Pilot

- Elite team training
- Pre-test
- Feedback and iteration
- Elite team trains enumerators
- Pilot with enumerators
- Feedback and iteration



## Main Field Work

- Field work execution
- Ongoing quality checks for data quality audit, audio audit and physical back checks
- Daily feedback to enumerators



## Data Analysis

- Preparing final data set
- Cluster modelling



## Data Synthesis

- Variable level analysis
- Journey sense making
- Barrier mapping
- Segmentation Description



- The sample size in the **qualitative research** was 40 participants across various geographic and demographic criteria
- The sample size in the **quantitative research** was 3000 adult (18+) respondents in Pakistan.
- For the quantitative survey, the main sample was drawn from a probability-based stratified random cluster design.
- The sampling frame was a listing of micro-areas that provide comprehensive coverage of the entire country.
- Each micro-area served as a primary sampling unit (PSU). 300 PSUs were randomly selected with probability proportional to size (PPS) within urban/rural strata. Within each PSU, rapid household listings were conducted.
- Each selected PSU permitted random sampling of 10 households within each PSU.



# Psycho-Behavioral Approach - Stability, Scalability and Predictive Value

## Typical KAP Surveys

- Based on self-reports of individuals' attitudes, beliefs, preferences and intentions
- Self-reports **don't capture non-conscious tendencies**, therefore insufficient for latent demand
- Attitudes and preferences are **unstable and context dependent**, therefore not predictive of real-world behavior
- Gives us the current preferences but **not the strategies to change them**

## Psycho-Behavioral Survey

- **Deconstruct** decision-making, intent formation and preference construction
- Capture the **components and processes**
- Build a **psycho-behavioral model** to not only understand current preferences, but also **predict preferences in other contexts**
  - Future scenarios
  - Other geographies
  - Response to programmatic interventions

# Quantitative Survey Design Overview



## Screener

- Respondent age
- COVID beliefs
- Vaccination status



## COVID Risk Appraisal

- Risk perceptions
- Testing experiences
- Sickness experiences
- Personal COVID impacts
- Disease comparison



## COVID Vaccine Experiences

- When does received
- Vaccine intentions
- Vaccine experiences
- Vaccine safety & efficacy perceptions
- Vaccine emotions
- Needle fear



## Other Enablers & Barriers

- Trust in authorities
- Virus & vaccine myths & beliefs
- Decision autonomy
- Inertia & procrastination
- Vaccine benefits
- Process awareness
- Constraints & resources
- Sources of information



## General Health Status & Access

- Overall health
- Doctor influence
- COVID symptoms
- Care seeking
- Access to care



## Knowledge Quiz / Coping Actions

- Actions to protect against COVID
- Frequency of actions vs. 12 months ago



## Socio-demographics

- Household type
- Occupation
- Gender
- Education
- Religion

## Sampling - Probability-based stratified random cluster design

1. Randomized selection of primary sampling unit (PSU) with probability proportional to size within urban/rural strata
2. Random sampling of 10 households within each PSU
3. Random selection of adult household member to interview

## Quality Control

- Screening and in-person training of moderators, including live pilots in the field
- Standardized surveys and tablet-assisted interviewing
- Audits - data quality flags, audio backchecks, physical backchecks

# Segmentation Modelling -

## Semi-Supervised AI/ML-Driven Iterative Exploratory Approach

### Qual Insights

Journey framework with enablers & barriers

### Factor Analyses

Latent factors identified in quant data

### Regression Analyses

Factors identified as sig. associated with vaccine uptake

### Segmentation Analyses

Competing Models  
Factors which have significant variation & produce differentiated segments

These segmentation variables were not “pre-determined”\*. The iterative analytic process and competing models identified them as existing in the data to use in a final model

#### Core Variables Used to Segment Across Countries

##### General variables

- Trust in government, health system
- Economic hardship
- Health system engagement

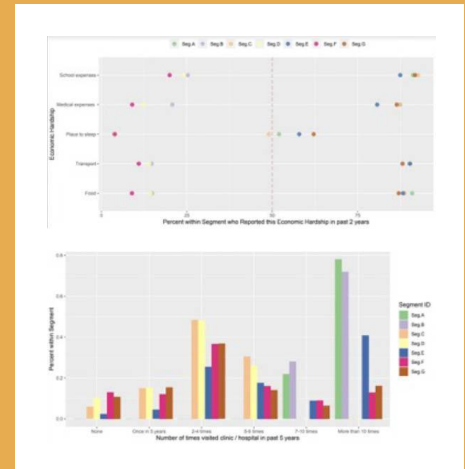
##### COVID specific variables

- COVID vaccinations rates for zero dose, one dose, 2 doses and booster shots
- COVID perceptions
- Risk appraisals
- COVID vaccine perceptions

\* Predictive modeling using cluster segmentation is an iterative exploratory approach vs. a hypothesis-testing approach to identifying and building actionable predictive models

#### Variables Used to Profile Segments

All variables in quant survey which show differentiation between segments, including outcome indicators





# Segmentation Frameworks

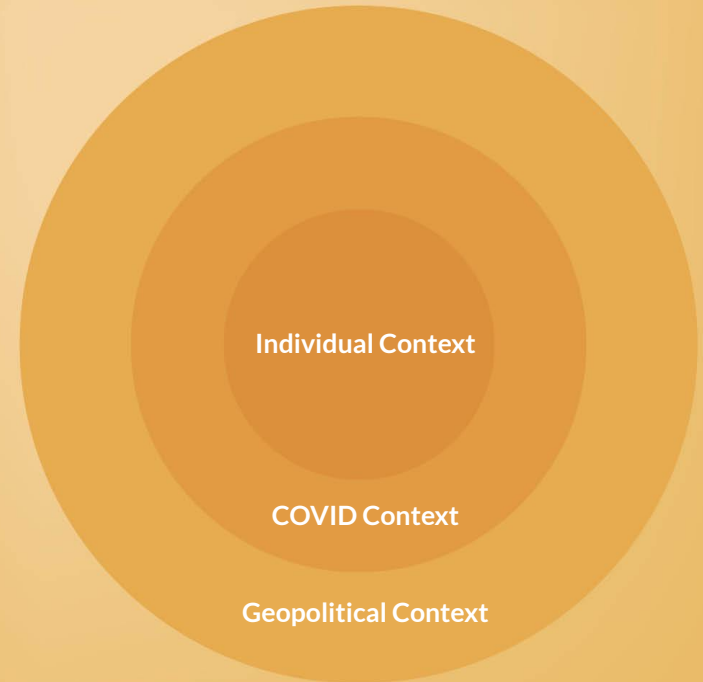


# Context Impacts the Decision Journey to COVID-19 Vaccine Uptake

The individual decision making journey exists within the larger dynamic context, which has a large impact on the cognitive appraisal of vaccine and decision and behavior for uptake.







The context impacting the COVID-19 vaccination uptake decision includes:

- **The larger geopolitical context:** international relations and perceptions, government stability, hierarchical structure
- **The dynamic COVID context:** COVID rates, COVID hospitalization and death rates, reinstatement of mask mandates, vaccine mandates
- **The individual context,** as COVID is more than a disease context, includes large lockdowns/restrictions and disruption to economic and social dimensions. These have a larger impact on the subsequent appraisals of:
  - The information and misinformation
  - Influencer landscape
  - Socio-Economic
  - Priors-trust in government and health systems, health system access



# Journey to COVID Vaccine Uptake Framework

The journey consists of **decision stages** through which an individual progresses in their effort to make a decision about uptake of COVID-19 vaccine. While certain **enablers** help individual progress forward in the journey, **barriers** that lead to unfavourable assessment of COVID-19 vaccine can deter them off the positive pathway and lead them to **drop off** the journey.

Internalization of COVID-19 Risk	Vaccine enters consideration set	Perceived need for vaccine	Acceptance of vaccine	Getting 1st vaccine jab	Complete COVID-19/boosters vaccine
 <p><b>COVID-19 Disease Appraisal</b> What do I feel about the COVID-19 disease?</p>	 <p><b>Coping with COVID</b> <i>How can I cope with the COVID-19 risk?</i></p>	 <p><b>COVID-19 Vaccine Appraisal</b> <i>How do I feel about the COVID-19 Vaccine?</i></p>	 <p><b>Coping with Vaccine Risk</b> <i>How can I cope with vaccine risk?</i></p>	 <p><b>Vaccination Uptake</b> <i>How can I get this vaccine?</i></p>	 <p><b>Vaccination Adherence</b> <i>Should I get the second dose?</i></p>
<p>Negligible COVID-19 risk Vaccine information and decision avoidance</p>	<p>Confidence in current mitigation measures Vaccine decision avoidance</p>	<p>Unfavorable vaccine appraisal and favorable status quo appraisal Selective engagement with information</p>	<p>Unfavorable vaccine and favorable status quo appraisal Procrastination and reappraisal</p>	<p>Ability/access gaps Inaction and rationalization</p>	<p>Lack of coping expectation discrepancy or poor intent Second dose avoidance</p>

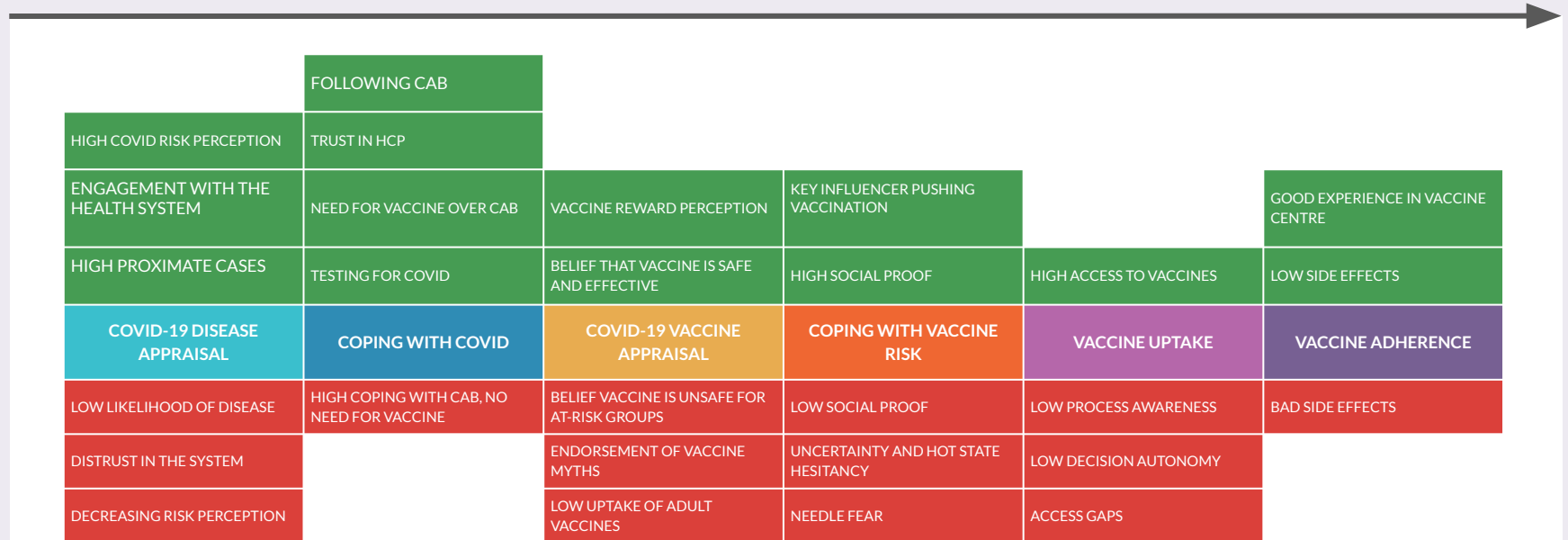


**Enablers:**

Facilitate a person to move forward in their COVID-19 vaccine uptake journey through the different decision stages

**Barriers:**

Impede the forward movement of a person through the decision stages resulting in either regression to previous stage(s) or drop off from their COVID-19 vaccine uptake journey



# Country Context and Segments

## Pakistan

### Geopolitical Context

- Distrust in Govt from 2022 Political instability
- Skeptical of Foreign influence
- Strict mandates in place
- Motivated negative information search leading to large impact of misinformation

### COVID Context

- Higher relevance of covid due to high caseload during esp delta wave
- COVID not only a health risk, but more a socio-economic risk and disruption
- Belief that virus is getting weaker

### COVID Vaccination Context

- Late-stages of its COVID vaccination campaign, Covid single dose vaccination rate of 63.1%
- Uptake has been driven by severity and strict enforcement of vaccine mandates and door-to-door vaccination camps
- High social proof in communities
- Vaccine are not safe for sickly, pregnant, breastfeeding mothers and children

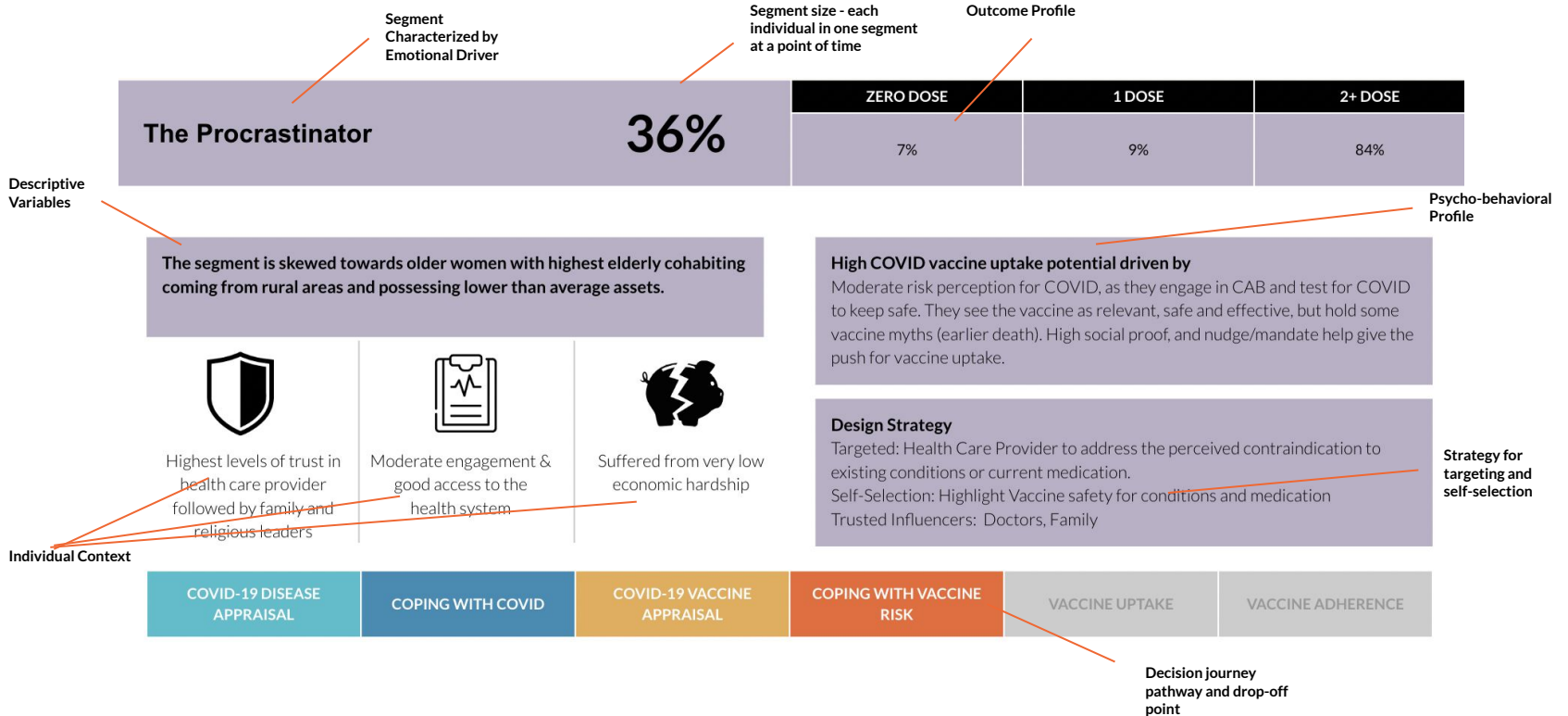
SEGMENT NAME	SEGMENT SIZE	ZERO DOSE	1 DOSE	2+ DOSE
<b>The Hopeful</b>	<b>14%</b>	4%	16%	80%
<b>The Indifferent</b>	<b>24%</b>	3%	14%	82%
<b>The Procrastinator</b>	<b>36%</b>	7%	9%	84%
<b>The Skeptic</b>	<b>15%</b>	40%	20%	41%
<b>The Coerced</b>	<b>11%</b>	11%	16%	73%

- High vaccine uptake rates across the majority of segments, with only one low uptake potential segment. We see more favorable opinions about COVID vaccines which might be partly due to post-choice rationalization of their decision to get vaccinated.
- We are seeing some signs of resentment among some segments which felt coerced into receiving COVID vaccine, which may lead to alienation from and distrust in health system and institutional actors, impacting engagement with other health programs in the future.



SEGMENT NAME AND POPULATION SIZE				
The Hopeful 14%	The Indifferent 24%	The Procrastinator 36%	The Coerced 11%	The Skeptic 15%
<p>This segment consists of population skewed towards younger people with half of them speaking Punjabi. It largely consists of married people that suffered substantially from economic hardships. They trust HCPs, family and religious leaders more than the government.</p>	<p>This segment mostly consists of married men with more than half living in rural areas and that also suffered from health and economic problems. They have high trust and engagement with the health system &amp; moderate trust in government.</p>	<p>The segment is skewed towards older women with highest elderly cohabitation. They mostly live in rural areas and possess lower than average assets. They have a lot of trust in the health system and moderate engagement with the same.</p>	<p>This segment comprises of the second youngest cohort, suffering from high self reported health issues and high economic hardships. Overall, they have low trusting behaviors and low engagement with the health system.</p>	<p>This segment has the youngest people with a skew towards males. They have a high elderly family member cohabitation. They are the least trusting segments and believe that perverse incentives are involved with the government and health systems.</p>
ZERO DOSAGE				
4%	3%	7%	40%	11%

# Understanding Segment Profiles



# Example of Segment-Targeted Strategy

## TOUCHPOINTS & INFLUENCERS

- Leverage high engagement with private healthcare system
- Trust in family along with doctors and religious leaders
- TV news is the key source, along with peers and family

### TARGETED COMMUNICATION

#### Communication script:

*[If already aware of a pre-existing condition, reference it here and use 'you'] It is a good idea to consult with your health care provider about the vaccine, especially when someone has a health condition like diabetes or high blood pressure. Someone with a condition like this may have heard about and are worried that the vaccine will interfere with their treatments or make their condition worse. But actually, it is really important that people with these conditions take the vaccine because unfortunately these people may experience really severe complications from COVID. It is almost more important for these people to take the COVID vaccine.*

### SELF SELECTED ATTENTION CAMPAIGNS

#### Framing:

Vaccine rewards- economic stability, travel and safety for pre-conditions

#### Illustrative Messaging:

It can not only help you get back to normal life but also help keep you safe.

#### Illustrative Creative:

Group of people (family, community) standing together in their community smiling.  
Could be showing bandaids on arms

### SERVICE DELIVERY INTERVENTION

Protocol for doctors to inquire about COVID vaccination status and proactively provide a recommendation during other health visits. Can group COVID vaccine in with other routine vaccinations, lab work, etc.

Signage in health facilities - COVID vaccine is available here. Talk to your doctor now!



# Detailed Segment Profiles





## The Hopeful

# 14%

**ZERO DOSE**
**1 DOSE**
**2+ DOSE**

4%

16%

80%

This segment consists of population skewed towards younger people with half of them speaking Punjabi. They suffered substantially from economic hardships and trust HCPs, family and religious leaders more than the government.



High trusting behaviors; trust doctors, religious leaders and family more than the government



Suffer severe health issues & have high engagement and good access with the health system



Suffered from severe economic hardships during COVID & have very low financial engagement

### High COVID vaccine uptake potential driven by

High levels of trust in authorities and high information seeking behavior drives uptake. High risk perception and knowing more people that suffered from the disease might also be a contributor. Suffering from great economic distress during the last two years, the desire to seek normalcy also likely to be driving uptake.

### Design Strategy

Targeted: At health facilities address concerns about vaccine side, and frame benefits in terms of return to normal  
 Self-Selection: Relief from economic hardship framing  
 Trusted Influencers: Doctors, Family, Religious leaders, Government

 COVID-19 DISEASE  
APPRAISAL

COPING WITH COVID

 COVID-19 VACCINE  
APPRAISAL

 COPING WITH VACCINE  
RISK

VACCINE UPTAKE

VACCINE ADHERENCE

**TOUCHPOINTS & INFLUENCERS**

- Leverage high engagement with healthcare system
- Trust in government, family and religious leaders for information
- TV News and religious leaders are the key sources

**TARGETED COMMUNICATION****Communication script:**

*"Side effects can be a big concern for people when they are trying to decide whether to take the COVID vaccine or not. Here are some of the common side effects you might experience [share side effects ie fatigue, slight fever]. You can help with these side effects by [simple coping mechanisms ie pain reliever, extra rest]. If you are one of the few who experiences something like [more severe side effects], please come back or give me a call and we will address this. Do you have any questions about the vaccine?"*

**SELF SELECTED ATTENTION CAMPAIGNS****Framing:**

Relief from economic hardship

**Illustrative Messaging:**

It not only protects you and your family, it can help you get back to normal life

**Illustrative Creative:**

Group of people (family, community) standing together in their community smiling.  
Could be showing bandaids on arms

**SERVICE DELIVERY INTERVENTION**

Protocol for doctors to inquire about COVID vaccination status and proactively provide a recommendation during other health visits. Can group COVID vaccine in with other routine vaccinations, lab work, etc.

Signage in health facilities - COVID vaccine is available here. Talk to your doctor now!



## The Indifferent

# 24%

**ZERO DOSE**
**1 DOSE**
**2+ DOSE**

3%

14%

82%

This segment mostly consists of married men with more than half living in rural areas and that also suffered from health and economic problems.

### High COVID vaccine uptake potential driven by

Moderate risk perception for the disease and favorable beliefs around vaccine safety and efficacy. High social proof of vaccine uptake in the community. They also suffered from economic hardships which led them to seek normalcy.



High institutional trust in health system and moderate trust in government



Very high engagement with private health system with majority suffering from health problems.



High economic hardships during COVID

### Design Strategy

Targeted: Reinforce vaccinated populations experienced rewards and control  
 Self-Selection: Experienced vaccination rewards - control, travel, economic stability  
 Trusted Influencers: Doctor, Family

 COVID-19 DISEASE  
 APPRAISAL

COPING WITH COVID

 COVID-19 VACCINE  
 APPRAISAL

 COPING WITH VACCINE  
 RISK

VACCINE UPTAKE

VACCINE ADHERENCE

**TOUCHPOINTS & INFLUENCERS**

- Leverage high engagement with private healthcare system
- Trust in doctors and family for information
- TV news is the key source

**TARGETED COMMUNICATION****Communication script:**

*"A lot of people in your community have already taken the COVID vaccine and have benefited substantially. They may have had minimal side effects like feeling tired or a slight fever [change with what has been observed], but in the long run, the vaccine protects us against the severe illness from COVID. So we won't have to miss out on several days of work or worry about hospitalization. Getting vaccinated is another way to take care of our families and our community."*

**SELF SELECTED ATTENTION CAMPAIGNS****Framing:**

Vaccine rewards- economic stability, travel and control

**Illustrative Messaging:**

It can not only help you get back to normal life but also help keep you safe.

**Illustrative Creative:**

Group of people (family, community) standing together in their community smiling. Could be showing bandaids on arms

**SERVICE DELIVERY INTERVENTION**

Protocol for doctors to inquire about COVID vaccination status and proactively provide a recommendation during other health visits. Can group COVID vaccine in with other routine vaccinations, lab work, etc.

Signage in health facilities - COVID vaccine is available here. Talk to your doctor now!



## The Procrastinator

# 36%

ZERO DOSE

7%

1 DOSE

9%

2+ DOSE

84%

The segment is skewed towards older women with highest elderly cohabiting coming from rural areas and possessing lower than average assets.



Highest levels of trust in health care provider followed by family and religious leaders



Moderate engagement & good access to the health system



Suffered from very low economic hardship

### High COVID vaccine uptake potential driven by

Moderate risk perception for COVID, as they engage in CAB and test for COVID to keep safe. They see the vaccine as relevant, safe and effective, but hold some vaccine myths (earlier death). High social proof, and nudge/mandate help give the push for vaccine uptake.

### Design Strategy

Targeted: Health Care Provider to address the perceived contraindication to existing conditions or current medication.

Self-Selection: Highlight Vaccine safety for conditions and medication

Trusted Influencers: Doctors, Family

COVID-19 DISEASE  
APPRAISAL

COPING WITH COVID

COVID-19 VACCINE  
APPRAISAL

COPING WITH VACCINE  
RISK

VACCINE UPTAKE

VACCINE ADHERENCE



### TOUCHPOINTS & INFLUENCERS

- Leverage high engagement with private healthcare system
- Trust in doctors and family for information
- TV news is the key source

#### TARGETED COMMUNICATION

##### Communication script:

*[If already aware of a pre-existing condition, reference it here and use 'you'] It is a good idea to consult with your health care provider about the vaccine, especially when someone has a health condition like diabetes or high blood pressure. Someone with a condition like this may have heard about and are worried that the vaccine will interfere with their treatments or make their condition worse. But actually, it is really important that people with these conditions take the vaccine because unfortunately these people may experience really severe complications from COVID. It is almost more important for these people to take the COVID vaccine.*

#### SELF SELECTED ATTENTION CAMPAIGNS

##### Framing:

Vaccine rewards- economic stability, travel and safety for pre-conditions

##### Illustrative Messaging:

It can not only help you get back to normal life but also help keep you safe.

##### Illustrative Creative:

Group of people (family, community) standing together in their community smiling. Could be showing bandaids on arms

#### SERVICE DELIVERY INTERVENTION

Protocol for doctors to inquire about COVID vaccination status and proactively provide a recommendation during other health visits. Can group COVID vaccine in with other routine vaccinations, lab work, etc.

Signage in health facilities - COVID vaccine is available here. Talk to your doctor now!



## The Coerced

# 11%

**ZERO DOSE**
**1 DOSE**
**2+ DOSE**

11%

16%

73%

The segment is the second youngest group between 26-35 followed by 18-25



Low trust in government, community leaders and friends.



Suffer from high self reported health issues & have very low engagement with the health system



Suffered from high economic hardships during COVID & are amongst the least employed

### Moderate COVID vaccine uptake potential driven by

Given their concerns about vaccine safety, one would expect their vaccination rate to be much lower than where it stands currently. High levels of distrust, along with high vaccination rates in social groups and low reported decision autonomy points towards the role of mandates, coercion, social pressure and decision surrogacy in their vaccine uptake

### Design Strategy

Targeted: In health facilities, acknowledge the vaccine safety concerns, debunk and inform

Self-Selection: Vaccine rewards framed as low economic hardship and return to normal

Trusted Influencers: Family

COVID-19 DISEASE  
APPRAISAL

COPING WITH COVID

COVID-19 VACCINE  
APPRAISAL

COPING WITH VACCINE  
RISK

VACCINE UPTAKE

VACCINE ADHERENCE



**TOUCHPOINTS & INFLUENCERS**

- Leverage high engagement with private healthcare system
- Trust in family along with doctors and religious leaders
- TV news is the key source, along with peers and family

**TARGETED COMMUNICATION****Communication script:**

*People have concerns about the safety of the COVID vaccine and that is natural. It is a new vaccine and it has been difficult living in a pandemic.*

*Can you let me know what concerns you have about the vaccine? [Address any of these concerns, explaining in terms easy to understand. Be certain to listen for and debunk any misinformation about the vaccine, that they may share]*

**SELF SELECTED ATTENTION CAMPAIGNS****Framing:**

Vaccine rewards- economic stability, return to normal

**Illustrative Messaging:**

It can not only help you get back to normal life but also help keep you safe.

**Illustrative Creative:**

Young group showing vaccination card and smiling in a place of work

**SERVICE DELIVERY INTERVENTION**

Protocol for doctors to inquire about COVID vaccination status and proactively provide a recommendation during other health visits. Can group COVID vaccine in with other routine vaccinations, lab work, etc.

Signage in health facilities - COVID vaccine is available here. Talk to your doctor now!



## The Skeptic

# 15%

**ZERO DOSE**
**1 DOSE**
**2+ DOSE**

40%

20%

41%

The segment has the youngest cohort skewed towards men with high cohabitation with elderly family members.



Least trusting segment with belief that perverse incentives are involved in the government and health system



Suffer from low self reported health issues & have a high to moderate engagement with the health system



Moderate economic hardship with lower than average asset ownership

### Low COVID vaccine uptake potential driven by

A distrust of information sources/influencers outside their social group is likely the key barrier that leads to them doubting COVID risk and vaccine safety. Lack of social proof of vaccine is likely to contribute to a sense of safety in status quo.

### Design Strategy

Targeted: Indirect targeting by building capacity of vaccinated population to have conversations with strong ties

Self-Selection: Vaccination as a community behavior, and reinforce decision autonomy

Trusted influencers: Family

**COVID-19 DISEASE  
APPRAISAL**
**COPING WITH COVID**
**COVID-19 VACCINE  
APPRAISAL**
**COPING WITH VACCINE  
RISK**
**VACCINE UPTAKE**
**VACCINE ADHERENCE**

**TOUCHPOINTS & INFLUENCERS**

- Leverage high engagement with private healthcare system
- Trust in family along with doctors and religious leaders
- TV news is the key source, along with peers and family

**TARGETED COMMUNICATION****Communication script:**

*[If already aware of a pre-existing condition, reference it here and use 'you'] It is a good idea to consult with your health care provider about the vaccine, especially when someone has a health condition like diabetes or high blood pressure. Someone with a condition like this may have heard about and are worried that the vaccine will interfere with their treatments or make their condition worse. But actually, it is really important that people with these conditions take the vaccine because unfortunately these people may experience really severe complications from COVID. It is almost more important for these people to take the COVID vaccine.*

**SELF SELECTED ATTENTION CAMPAIGNS****Framing:**

Vaccine rewards- economic stability, travel and safety for pre-conditions

**Illustrative Messaging:**

It can not only help you get back to normal life but also help keep you safe.

**Illustrative Creative:**

Group of people (family, community) standing together in their community smiling. Could be showing bandaids on arms

**SERVICE DELIVERY INTERVENTION**

Protocol for doctors to inquire about COVID vaccination status and proactively provide a recommendation during other health visits. Can group COVID vaccine in with other routine vaccinations, lab work, etc.

Signage in health facilities - COVID vaccine is available here. Talk to your doctor now!

# Using Segmentation

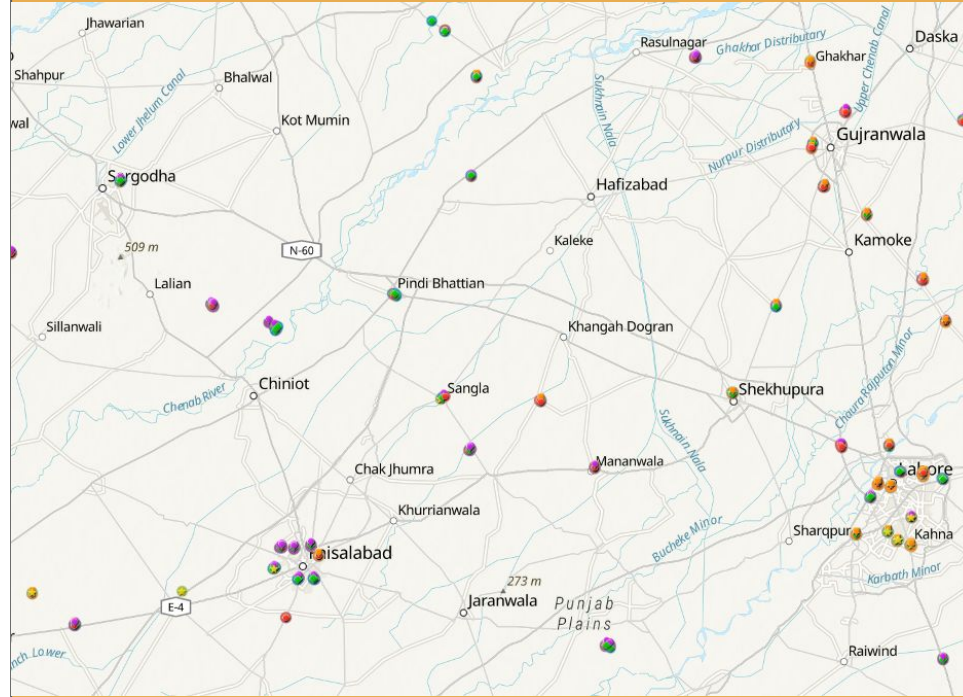


# How to Use Segmentation – Customizing and Targeting

## Targeting Clusters and Individuals

Descriptive **demographic, geospatial and behavioral variables** associated with the segments can be used to target clusters with a dominant segment profile. Segment-specific information channels and influencers can be used for targeted communication.

Descriptive variables and psycho-graphic methods are used to create simple **segment typing tools** that can be used at point of service delivery to identify an individual's segment profile based on their responses and tailor delivery based on the profile. The typing tool can also be used to conduct **mini-surveys** to build segment distribution at hyperlocal level.

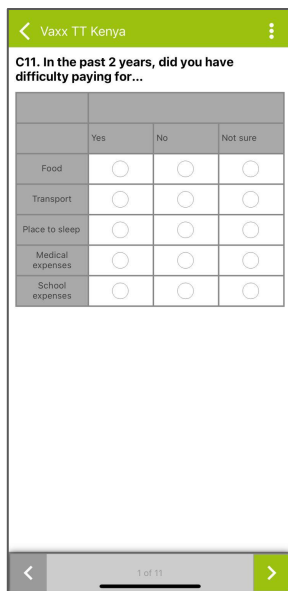


# How to Use Segmentation – Customizing and Targeting

## ILLUSTRATIVE TYPING TOOL

Short, simple **questionnaire** and response-based **classification tree** to identify the segment profile of individuals

**Q1 Economic hardship:** In the last 2 years, Did you have difficulty paying for food, shelter, healthcare, education, transport?

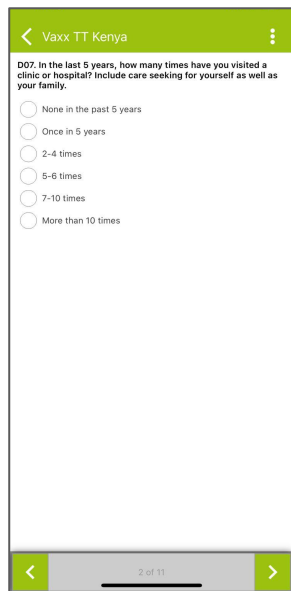


Q11. In the past 2 years, did you have difficulty paying for...

	Yes	No	Not sure
Food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Place to sleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medical expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1 of 11

**Q2 Health system engagement:** In the last 5 years how many times have you visited a clinic or doctor?

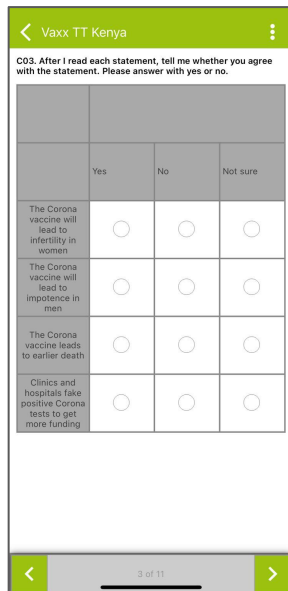


D07. In the last 5 years, how many times have you visited a clinic or hospital? Include care seeking for yourself as well as your family.

- None in the past 5 years
- Once in 5 years
- 2-4 times
- 5-6 times
- 7-10 times
- More than 10 times

2 of 11

**Q3 COVID myth endorsement:** Choose the statements about COVID you believe to be true.

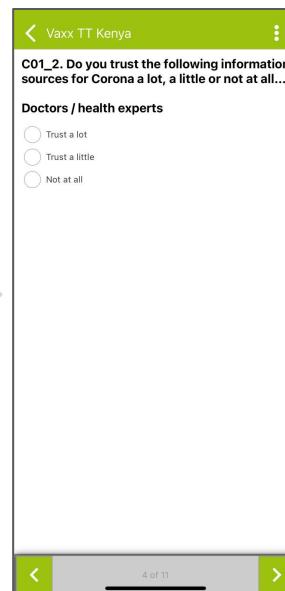


C03. After I read each statement, tell me whether you agree with the statement. Please answer with yes or no.

	Yes	No	Not sure
The Corona vaccine will lead to infertility in women	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Corona vaccine will lead to impotence in men	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Corona vaccine leads to earlier death	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clinics and hospitals fake positive Corona tests to get more funding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3 of 11

**Q4 Institutional trust:** Do you trust government and doctors as sources of information for COVID?

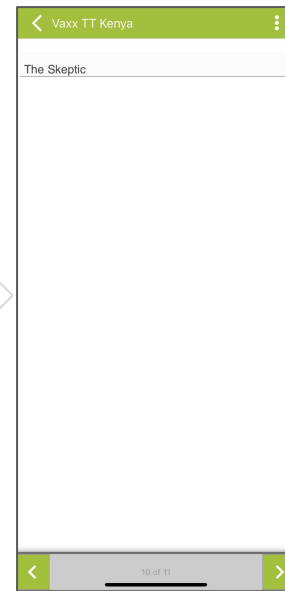


C01\_2. Do you trust the following information sources for Corona a lot, a little or not at all...

**Doctors / health experts**

- Trust a lot
- Trust a little
- Not at all

4 of 11



The Skeptic

10 of 11

# How to Use Segmentation – Example of Customized Communication at Point of Service Delivery



Note: Details for other segments in next section

## Typing Tool Script

“Hello, I’d like to take a few minutes of your time to learn more about you so that I can provide you with some information about the COVID-19 vaccine that could be relevant for you.

To begin, **could you share how many times you have visited a doctor or clinic within the last five years?**

The past few years have been difficult for a lot of us with COVID. Could you tell me a little bit about your experience over the last two years? **Did you have any difficulty paying for your basic needs?**

Thank you for sharing. We have received a lot of information about COVID from many sources. **Now if you could think about government and doctors as sources of information for COVID, do you trust them a little, a lot or not at all?**

Thank you. Finally, could you let me know **which of the following statements about COVID you agree with?** *[read through the four statements]*“

**Segment:** Anxious

## Customized Communication

“Thank you again for your time and answering my questions. I’d like to talk to you about the COVID vaccine. Can you tell me a little bit about your thoughts about the COVID vaccine?”

A lot of people have concerns about the safety of the COVID vaccine and that is natural. It is a new vaccine and it has been difficult living in a pandemic. Can you let me know what concerns you have about the vaccine?

*[Address any of these concerns, explaining in terms easy to understand. Be certain to listen for and address any misinformation about the vaccine, especially side effects, that they may share]*

Thank you for letting me share a bit about the COVID vaccine. Do you have any questions for me?”

# How to Use Segmentation – Self-Selected Attention

TARGET	SEGMENTS	MESSAGING	IMAGE
Relief from economic hardship	<b>The Hopeful</b>	It not only protects you and your family, it can help you get back to normal life	Group of people (family, community) standing together in their community smiling. Could be showing bandaids on arms
Vaccine rewards- economic stability, travel and control	<b>The Indifferent</b>	It can not only help you get back to normal life but also help keep you safe.	Group of people (family, community) standing together in their community smiling. Could be showing bandaids on arms
Vaccine rewards- economic stability, travel and safety for pre-conditions	<b>The Procrastinator</b>	It can not only help you get back to normal life but also help keep you safe.	Group of people (family, community) standing together in their community smiling. Could be showing bandaids on arms
Vaccine rewards- economic stability, return to normal	<b>The Coerced</b>	It can not only help you get back to normal life but also help keep you safe.	Young group showing vaccination card and smiling in a place of work
Vaccine rewards- economic stability, travel and safety for pre-conditions	<b>The Skeptic</b>	It can not only help you get back to normal life but also help keep you safe.	Group of people (family, community) standing together in their community smiling. Could be showing bandaids on arms

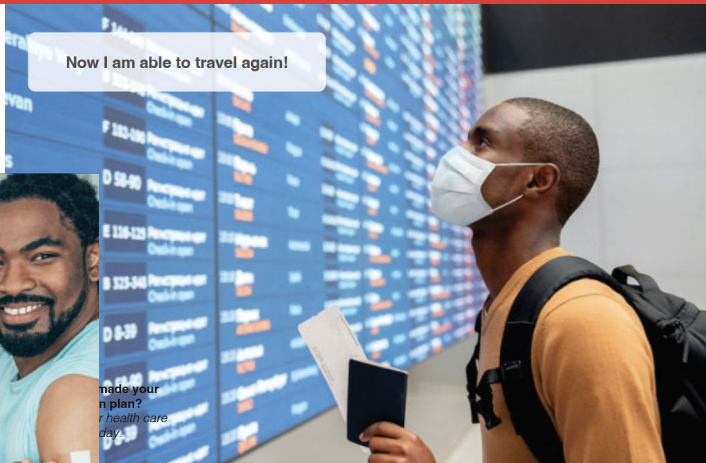


# How to Use Segmentation - Self-Selected Attention



*The Hopeful*

*The Doubtful*



*The Anxious*

*The Relieved*

*The Indifferent*  
*The Skeptic*  
*The Distrustful*

# How to Use Segmentation - Service Delivery Design

## Where and how to deliver services and incentives

### At health facilities

- Integrate with routine health services
- Leverage provider interactions

### In public spaces

- Travel-related touchpoints
- Educational and professional spaces
- Community spaces
- Recreational spaces
- Champions and advocates

### Mandates and incentives

- Travel mandates
- Workplace mandates
- Economic incentives

# How to Use Segmentation - Segmentation-Led Prioritization

Prioritization Factors	High Intrinsic Potential Segments The Hopeful	High Extrinsic Potential Segments The Procrastinator, The indifferent	Moderately Extrinsic Potential Segments The Coerced	Low Intrinsic Potential Segments The Skeptic
<b>Impact</b>	Moderate impact as they are a high uptake potential segment	Moderate impact as they are a high uptake potential segment	High impact as they are a moderate uptake potential segment	Highest impact as they are the lowest uptake potential segment
<b>Behavioral Barrier Type</b>	There is a need to push uptake to <b>resolve the hot state hesitancy</b> and drive adherence for all. As vaccines are relevant, this is relatively <b>easier barrier</b> to overcome.	While the vaccine is considered safe, there is a <b>need to drive risk internalization and urgency</b> for all and to reframe vaccine (reward framing) to drive urgency. This is a <b>moderately hard barrier</b> to overcome.	While this is a moderate uptake potential segment, there is a low belief in the vaccine, it is essential to solve for this; <b>reframing vaccine relevance</b> is crucial.	Since risk internalisation is extremely low for this segment, it is essential to solve for this; <b>reframing vaccine relevance</b> is crucial.
<b>Perceived Access Barrier</b>	<b>Low-Moderate</b> Not at all difficult to access the vaccine Lower registration process awareness	<b>Low</b> Easily able to access the vaccine Higher registration process awareness	<b>High</b> Lower awareness about vaccine sites and registration process Relatively difficult to get the vaccine	<b>High</b> Lower awareness about vaccine sites and registration process
<b>Implication on Other Programs</b>	Low implications	Moderate Implications	High Implications - growing distrust and alienation with the health system due to coercive measures	High Implications - high resistance to engagement with health system and services and low trust
<b>Health System Reach</b>	<b>Easier to reach</b> Easy to access vaccines but lower registration awareness. High trust in government and health experts.	<b>Hard to reach</b> Lower access contrasted with highest engagement with health system. Highest trust in government and health experts	<b>Hard to reach</b> Difficult to access to the vaccine and low process awareness. Low health system engagement and low trust in doctors.	<b>Harder to reach</b> Low health system engagement and lowest trust in government and health system workers.

# For More Information:

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