

Behavioural and social drivers (BeSD) of vaccine uptake

Slide pack to support dissemination and use of the tools and guidance

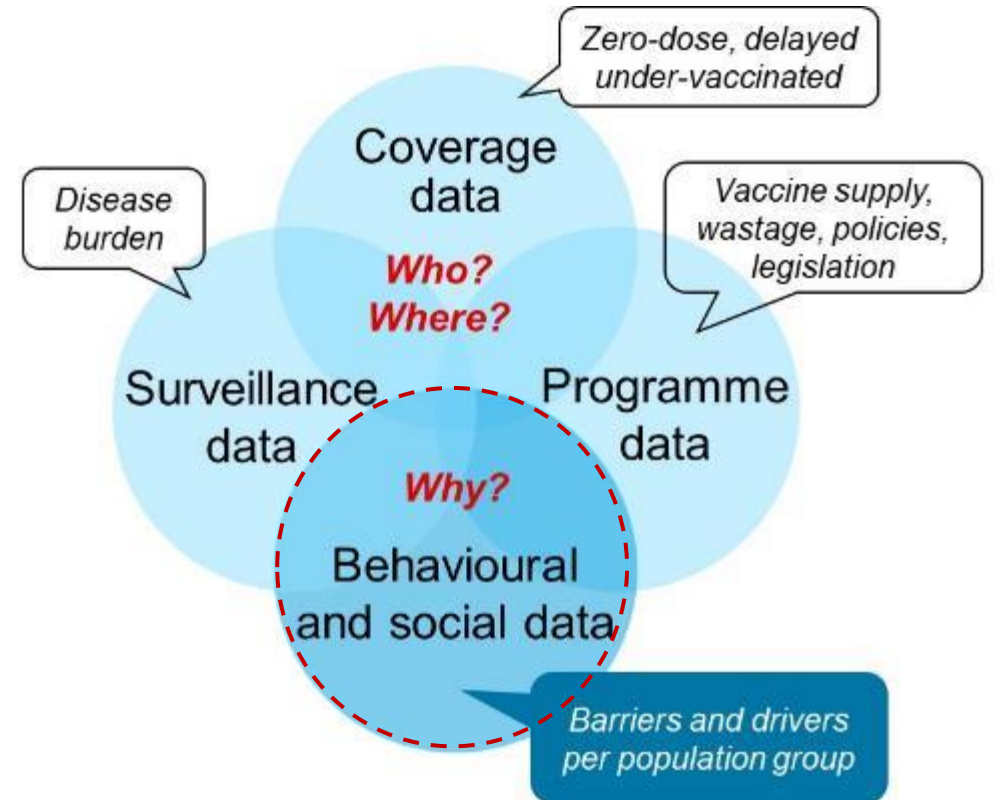
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How to assess and address drivers of uptake?

Our objectives:

- **Boost the quality, availability and use** of data on behavioural and social drivers (BeSD) with validated, standardized and user-friendly tools
- **Integrate tools** into existing mechanisms for data collection and use, or as separate
- **Monitor and evaluate** interventions and track comparable trends at all levels
- **Support reporting** for IA2030 and Gavi 5.0 global indicators



Summary of the development process

(2019-2021)

Testing sites:
Indonesia, Sierra Leone, Guatemala, Australia

Validation sites:
Angola, Ethiopia, DRC, India, Nigeria, Pakistan

PHASE	KEY ACTIVITIES	END-USER INPUTS
1 Tool development	<ul style="list-style-type: none"> ☑ Literature review ☑ Identification of constructs ☑ Qualitative interview questions ☑ Survey items and iterative reduction ☑ Demographic items and survey instructions 	<ul style="list-style-type: none"> ☑ Key informant interviews ☑ MIR-AC consultations (two)
2 Field testing	<ul style="list-style-type: none"> ☑ Languages and countries selected ☑ Study protocol and scripts ☑ Translation of all materials (& translator feedback) <p>Surveys:</p> <ul style="list-style-type: none"> ☑ Cognitive interviewing ☑ Analysis spreadsheet: item, results, revisions <p>Qualitative tools:</p> <ul style="list-style-type: none"> ☑ Draft qualitative guides ☑ Interviewer debrief form and analysis framework 	<ul style="list-style-type: none"> ☑ Regional and Country Offices feedback ☑ EPI programme and implementer feedback
3 Psychometric validation and indicator selection	<ul style="list-style-type: none"> ☑ Validation study protocol ☑ Translations and data-gathering ☑ Data analysis ☑ Working group review and indicator selection 	<ul style="list-style-type: none"> ☑ Implementing end-user feedback on guidebook
4 Finalisation of all tools and guidance	<ul style="list-style-type: none"> ☑ Tools for childhood vaccination ☑ Tools for COVID-19 vaccination ☑ Guidance for data collection and use 	<ul style="list-style-type: none"> ☑ Continue to gather end-user feedback

Tools and guidance on BeSD

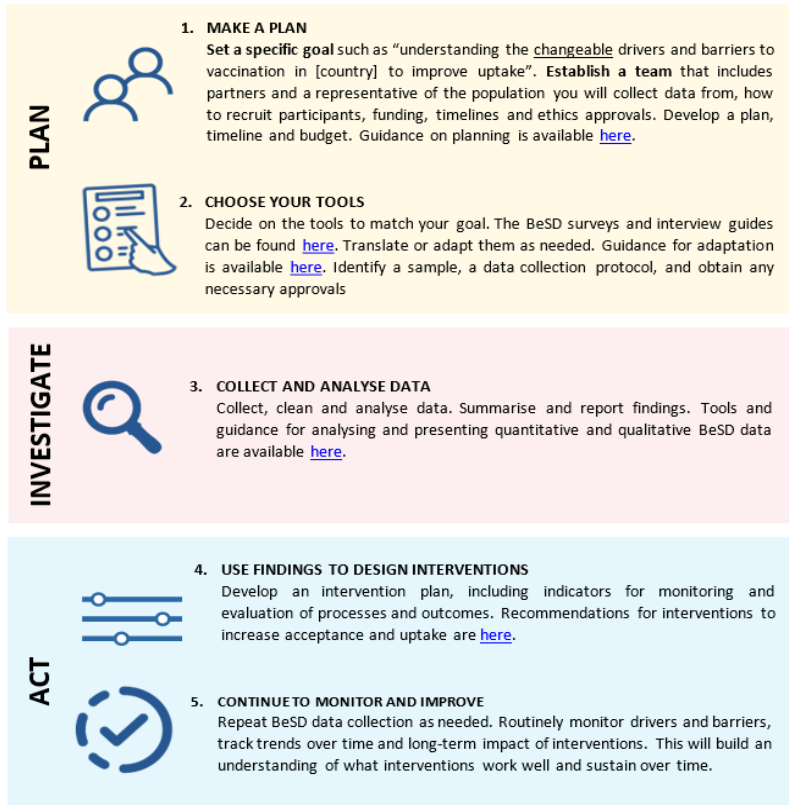
Childhood vaccination tools

- **Survey:** for parents of children under 5 years
- **Qualitative tools:**
1) parents, 2) health workers, 3) community stakeholders, and 4) authorities

COVID-19 vaccination tools

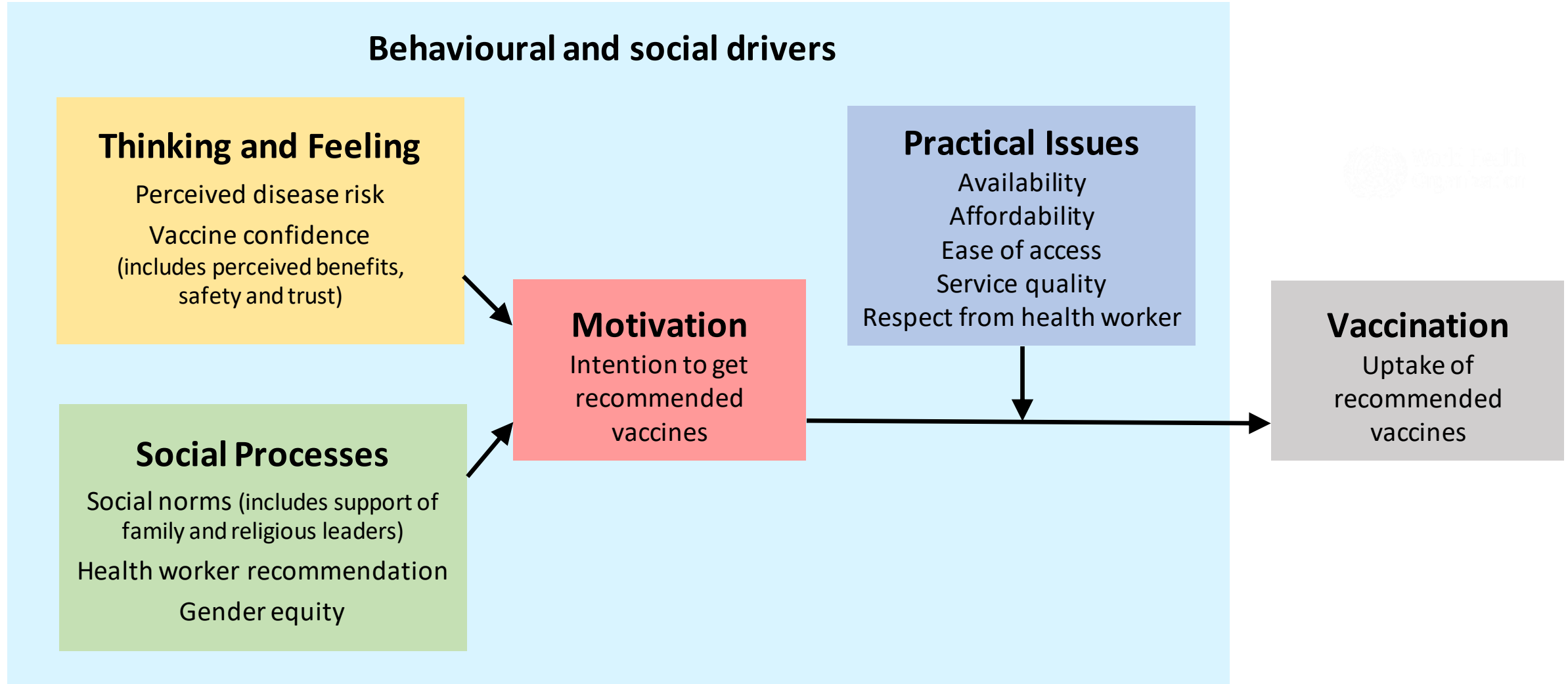
- **Surveys:** for 1) adults, 2) health workers
- **Qualitative tools**

Practical implementation guidance



Access all tools and guidance here: <https://apps.who.int/iris/handle/10665/354459>

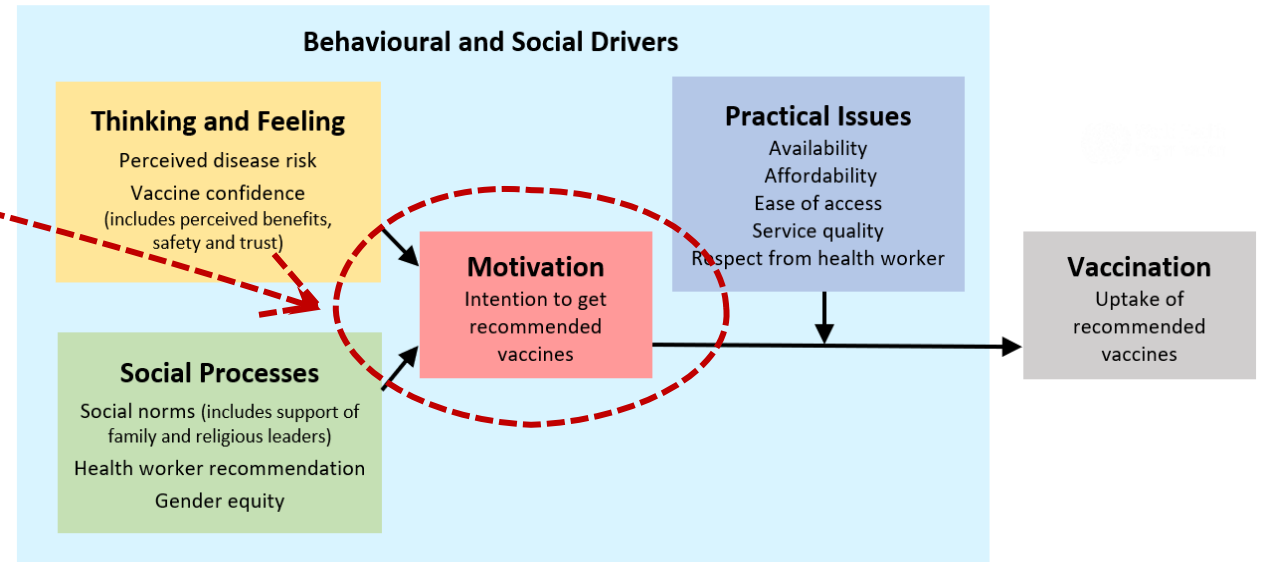
What drives vaccine uptake?



What about hesitancy?

“Vaccine hesitancy” is part of the *Motivation* domain.

Hesitancy is a motivational state of being conflicted about, or opposed to, getting vaccinated; includes intentions and willingness.



Summary of all topics measured:

Childhood vaccination survey

Thinking and feeling	Motivation	Social processes	Practical issues	Demographics
<ul style="list-style-type: none"> ★ Confidence in vaccine benefits 	<ul style="list-style-type: none"> ★ Intention to get child vaccinated 	<ul style="list-style-type: none"> ★ Family norms 	<ul style="list-style-type: none"> ★ Know where to get vaccination 	Age
<ul style="list-style-type: none"> ● Confidence in vaccine safety 		<ul style="list-style-type: none"> ● Health worker recommendation 	<ul style="list-style-type: none"> ★ Affordability 	Gender
<ul style="list-style-type: none"> ○ Confidence in health workers 		<ul style="list-style-type: none"> ● Peer norms 	<ul style="list-style-type: none"> ● Took child for vaccination 	Parent/caregiver
		<ul style="list-style-type: none"> ● Community leader norms 	<ul style="list-style-type: none"> ● Received recall 	Number of children under 5
		<ul style="list-style-type: none"> ○ Religious leader norms 	<ul style="list-style-type: none"> ● Ease of access 	Relationship to child
		<ul style="list-style-type: none"> ○ Mother's travel autonomy 	<ul style="list-style-type: none"> ● Reasons for low ease of access 	Age of child
			<ul style="list-style-type: none"> ● Vaccine availability 	Gender of child
			<ul style="list-style-type: none"> ● Service satisfaction 	Vaccination status
			<ul style="list-style-type: none"> ● Service quality 	

- Main survey question.
- ★ Priority question in main survey.
- Optional question.

Priority indicators for monitoring: childhood vaccination

DOMAIN/ construct	Childhood vaccination survey	
	Priority question	Indicator
THINKING AND FEELING Confidence in vaccine benefits	How important do you think vaccines are for your child's health? Would you say... <input type="checkbox"/> Not at all important <input type="checkbox"/> A little important <input type="checkbox"/> Moderately important, or <input type="checkbox"/> Very important?	<i>% of parents/caregivers who say that vaccines are "moderately" or "very" important for their child's health</i>
SOCIAL PROCESSES Family norms	Do you think most of your close family and friends want you to get your child vaccinated? <input type="checkbox"/> NO <input type="checkbox"/> YES	<i>% of parents/caregivers who say most of their close family and friends want their child to be vaccinated</i>
MOTIVATION Intention to get vaccine	[COUNTRY NAME] has a schedule of recommended vaccines for children. Do you want your child to get none of these vaccines, some of these vaccines or all of these vaccines? <input type="checkbox"/> NONE <input type="checkbox"/> SOME <input type="checkbox"/> ALL	<i>% of parents/caregivers who want their child to get "all" of the recommended vaccines</i>
PRACTICAL ISSUES Know where to get vaccination	Do you know where to go to get your child vaccinated? <input type="checkbox"/> NO <input type="checkbox"/> YES	<i>% of parents/caregivers who know where to get their child vaccinated</i>
PRACTICAL ISSUES Affordability	How easy is it to pay for vaccination? When you think about the cost, please consider any payments to the clinic, the cost of getting there, plus the cost of taking time away from work. Would you say... <input type="checkbox"/> Not at all easy <input type="checkbox"/> A little easy <input type="checkbox"/> Moderately easy, or <input type="checkbox"/> Very easy?	<i>% of parents/caregivers who say vaccination is "moderately" or "very" easy to pay for</i>

Summary of all topics measured:

COVID-19 vaccination survey

Thinking and feeling	Motivation	Social processes	Practical issues	Demographics
<ul style="list-style-type: none"> ★ Confidence in COVID-19 vaccine benefits 	<ul style="list-style-type: none"> ★ Intention to get vaccinated 	<ul style="list-style-type: none"> ★ Family norms 	<ul style="list-style-type: none"> ★ Know where to get vaccination 	Age
<ul style="list-style-type: none"> ● Confidence in COVID-19 vaccine safety 	<ul style="list-style-type: none"> ● Vaccine confidence – brand 	<ul style="list-style-type: none"> ● Peer norms 	<ul style="list-style-type: none"> ★ Affordability 	Gender
<ul style="list-style-type: none"> ● COVID-19 vaccine – see friends and family 	<ul style="list-style-type: none"> ● Willingness to recommend vaccine to others 	<ul style="list-style-type: none"> ● Religious leader norms 	<ul style="list-style-type: none"> ● Received recall 	Occupation
<ul style="list-style-type: none"> ○ Perceived risk – self 		<ul style="list-style-type: none"> ● Community leader norms 	<ul style="list-style-type: none"> ● Ease of access 	*Health worker role
<ul style="list-style-type: none"> ○ Confidence in health workers 		<ul style="list-style-type: none"> ● Health worker recommendation 	<ul style="list-style-type: none"> ● Reasons for low ease of access 	COVID-19 risk
		<ul style="list-style-type: none"> ○ Workplace norms 	<ul style="list-style-type: none"> ● Service satisfaction 	COVID-19 diagnosis
		<ul style="list-style-type: none"> ○ Gender equity – travel autonomy 	<ul style="list-style-type: none"> ● Service quality 	
			<ul style="list-style-type: none"> ○ On-site vaccination 	

- Main survey question.
- ★ Priority question in main survey.
- Optional question.

Priority indicators for monitoring: COVID-19 vaccination

DOMAIN/ construct	COVID-19 vaccination survey	
	Priority question	Indicator
THINKING AND FEELING Confidence in vaccine benefits	How important do you think getting a COVID-19 vaccine will be for your health? Would you say... <input type="checkbox"/> Not at all important <input type="checkbox"/> A little important <input type="checkbox"/> Moderately important, <i>or</i> <input type="checkbox"/> Very important?	<i>% of adults/health workers who think a COVID-19 vaccine is “moderately” or “very” important for their health</i>
SOCIAL PROCESSES Family norms	Do you think most of your close family and friends want you to get a COVID-19 vaccine? <input type="checkbox"/> NO <input type="checkbox"/> YES	<i>% of adults/health workers who think most of their close family and friends want them to get a COVID-19 vaccine</i>
MOTIVATION Intention to get vaccine	Do you want to get a COVID-19 vaccine? Would you say... <input type="checkbox"/> You do not want to, <input type="checkbox"/> You are not sure, <input type="checkbox"/> You want to, <i>or</i> <input type="checkbox"/> You are already vaccinated?	<i>% of adults/health workers who want to get a COVID-19 vaccine</i>
PRACTICAL ISSUES Know where to get vaccination	Do you know where to go to get a COVID-19 vaccine for yourself? <input type="checkbox"/> NO <input type="checkbox"/> YES	<i>% of adults/health workers who know where to get a COVID-19 vaccine for themselves</i>
PRACTICAL ISSUES Affordability	How easy is it to pay for vaccination? When you think about the cost, please consider any payments to the clinic, the cost of getting there, plus the cost of taking time away from work. Would you say... <input type="checkbox"/> Not at all easy <input type="checkbox"/> A little easy <input type="checkbox"/> Moderately easy, <i>or</i> <input type="checkbox"/> Very easy?	<i>% of adults/health workers who say vaccination is “moderately” or “very” easy to pay</i>

Examples of qualitative questions



Survey item

Parent

How easy is it to get vaccination services for your child?

Would you say...

- Not at all easy
- A little easy
- Moderately easy
- Very easy

Programme Manager

What makes the provision of childhood immunization a success in your area?

Probe: Are there specific examples you can describe?

Health Worker

I'd like to understand the process you follow to immunize a child, starting from the very beginning.

Probe: Can you summarize the procedure of immunization in around 5 steps starting once a family arrives at the center for vaccination?

Parent

Thinking about vaccination day for your child, tell me about what happens before you arrive at the place where your child gets their vaccine. Start with before you leave home.

Probe: What do you need to do to prepare before you leave home?

Moving from data to action:

Promising interventions by BeSD domain to guide planning



Domain where problem is identified	Interventions shown to increase vaccination
Thoughts and feelings and Motivation	Campaigns to inform or educate the public about vaccination Dialogue-based interventions, including one-to-one counseling to encourage vaccination
Social processes	Community engagement Positive social norm messages Vaccine champions and advocates Recommendations to vaccinate from health workers
Practical issues	Reduced out-of-pocket costs Service quality improvements Reminder for next dose /recall for missed dose Onsite vaccination at home, work and school Default appointments Incentives School and work requirements (mandates)

NB: Multi-component interventions more effective than single – and M&E always needed

Steps to use BeSD for local data?

1. **ENGAGE:** Establish a core group with key stakeholders
2. **PARTNER:** Identify implementing partner to assist with methods, data collection and analysis
3. **PRIORITIZE:** Review existing data and challenges, identify prioritized population, formulate research question
4. **TOOLS:** Decide what BeSD tools to use: survey (with priority indicators), or interview guides. Test and adapt tools to match local needs and context.
5. **PLAN:** Develop project plan including timelines, budget, process for data collection and analysis
6. **ACT:** Consider how findings may be used to guide planning and implementation
7. **MONITOR:** Continue M&E to guide iterative improvements

Why measure BeSD?

- Understand main reasons for low uptake and related trends
- Guide policy-making, planning and evaluation
- Tailor and evaluate specific interventions
- Better allocate resources
- Enhance transparency and ownership
- Support training programmes
- Strengthen stakeholder engagement
- Inform advocacy efforts at all levels

IA2030 Global Indicators for Strategic Priority 2

SP2: Commitment and demand

2.1 Proportion of countries with legislation in place that is supportive of immunization as a public good

2.2 Proportion of countries that have implemented behavioural or social strategies (or demand generation strategies) to address under-vaccination

SAGE conclusions and recommendations: *Behavioural and social drivers (BeSD) of uptake*



“SAGE recommended the systematic gathering and use of data on behavioural and social drivers to assess the reasons for low uptake, for routine tracking of trends, and monitoring and evaluation of interventions.”

SAGE, October 2021

MORE INFORMATION:

SAGE October 2021 meeting conclusions and recommendations (WER, 17 Dec 2021):

<https://apps.who.int/iris/handle/10665/350649>

SAGE October 2021 meeting agenda, background documents, presentations and highlights:

https://www.who.int/news-room/events/detail/2021/10/04/default-calendar/sage_meeting_october_2021

Final tools and guidance:

<https://www.who.int/teams/immunization-vaccines-and-biologicals/essential-programme-on-immunization/demand>

WHO Position Paper on BeSD, May 2022:

<https://apps.who.int/iris/bitstream/handle/10665/354458/WER9720-eng-fre.pdf>



WHO Position Paper – May 2022:

Understanding the behavioural and social drivers of vaccine uptake

Outline of contents:

- Summary of the development and validation of BeSD tools, indicators, and guidance
- Findings of a scoping review: interventions to increase vaccine uptake
- Recommendations on use of BeSD tools and resulting data to prioritize local interventions
- Future research directions

Access the Position Paper here:

<https://apps.who.int/iris/bitstream/handle/10665/354458/WER9720-eng-fre.pdf>



WHO Position Paper – May 2022:

Understanding the behavioural and social drivers of vaccine uptake

RECOMMENDATIONS (1):

Countries are recommended to...

- i. **Regularly collect quality, standardized quantitative data using BeSD validated surveys and priority indicators**, focusing on districts and subgroups with vaccination coverage gaps and inequities:
 - **All countries:** Integrate the five BeSD questions linked to the priority indicators (in Table 2) into routine data-collection processes and assessments
 - **Countries with overall low coverage** (of childhood vaccination or COVID-19 vaccination): Implement the full BeSD survey nationally every 2–3 years, or annually if triggered by an event
 - **Countries with inequities in vaccine uptake** (e.g. disparities across the population): Implement the full BeSD survey and in-depth interview guides in prioritized subnational settings at least every 2–3 years.
- ii. **Implement the in-depth interviews using BeSD guides** in prioritized subnational settings, adapting for population and purpose. Frequency may be determined by coverage gaps and need for monitoring to guide continuous improvement of interventions.
- iii. **Analyse, disaggregate, and use behavioural and social data in conjunction with other vaccination programme data**, to improve programme implementation and address the reasons for low uptake
- iv. **Conduct ongoing monitoring and evaluation** to track and assess trends and patterns on BeSD priority indicators, and enhance interventions
- v. **Establish or strengthen partner coordination mechanisms** for routine data collection and use of data

WHO Position Paper – May 2022:

Understanding the behavioural and social drivers of vaccine uptake

RECOMMENDATIONS (2):

National and Regional Immunization Technical Advisory Groups are recommended to:

- i) analyse and use data from BeSD surveys and in-depth interview guides (in conjunction with other programme data, including digital listening insights) to guide planning and prioritization; and,*
- ii) include individuals with social sciences expertise and representatives from civil society to their membership to strengthen work on vaccination.*

*To contribute to the above recommendations, **global and regional organizations, implementing partners, donors, and other stakeholders** may offer support in a range of areas including technical assistance; capacity building; documenting effective interventions and related lessons; and promoting the use of validated BeSD tools to enable standardization and improved future comparability of data*

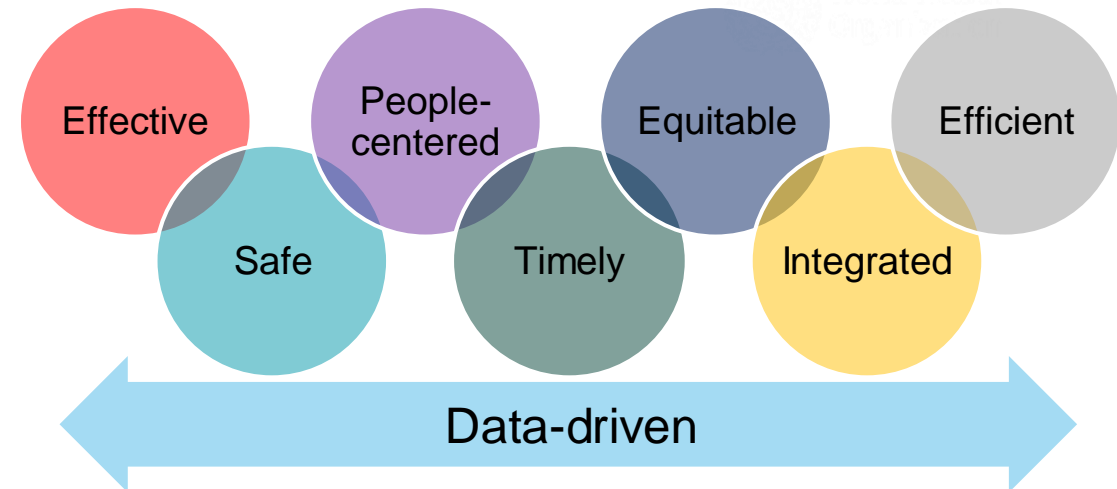
Quality Immunization Services Planning Guide

An **evidence informed guide** for policy makers, programme managers, stakeholders and providers of care including sub-national teams to:

- Reinforce the **importance of quality services** for sustainably increasing vaccination uptake
- Direct action towards **data-driven strategies**
- Highlight **practical steps** for the delivery of quality vaccination services **across levels of the system**

- >> **Enhance trust in health workforce and vaccination**
- >> **Strengthen community engagement in planning**

Guiding principles of quality



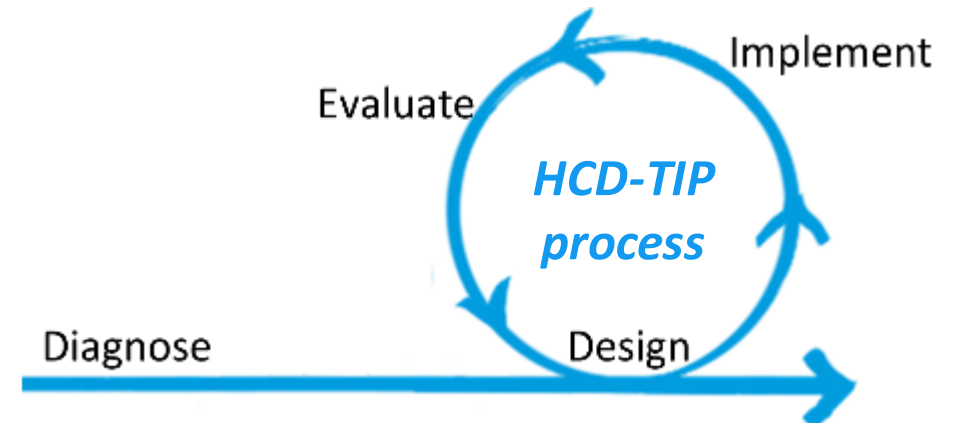
CLOSING GAPS:

Human Centred Design for Tailoring Immunization Programmes (HCD-TIP)



For engaging with prioritized communities to understand reasons for low uptake and to co-design services and interventions to meet local needs.

- **Puts communities at the centre**
- **Partnership-driven** and inclusive
- **Data-driven** and iterative problem-solving process
- **Adaptable and user-friendly** for use at sub-national level
- Applicable across the life course, for hesitant groups, zero dose settings, new vaccines and in outbreaks
- Integrates with other key tools, e.g., the Behavioural and Social Drivers (BeSD) of vaccination tools



Access the guide here: <https://apps.who.int/iris/handle/10665/354457>

Gathering BeSD data...

Where to start for programmes?

1. Integrate **priority indicators** into routine data collection mechanisms
2. Consider **national planning processes**:
 - Include activities in annual plan, e.g., national BeSD survey in 2023
 - Bring to the agenda of the NITAG to integrate BeSD in reviews
 - Include in any national cross-partner planning meetings
3. Include in Gavi **funding** request, e.g., Full Portfolio Planning
4. Seek added **technical assistance** and capacity building support
5. Identify potential local **partners** for specific research support, e.g., academics

How will use of the tools be supported?

Building on existing platforms and activities...

- **Promote awareness** of tools and guidance
- **Technical assistance** for gathering and using data, including digital tools, trainings, report templates, community of practice
- **Support to integrate tools and indicators** into existing surveys, reports and processes
- **Facilitate use of data** and learning at all levels, e.g. via rapid report development, and dissemination and planning workshops
- **Track and evaluate impact** via feedback loops and documentation



*Collaboration
with
partners,
NITAGs,
CSOs,
experts,
researchers*

More information?

Visit our web page:

<https://www.who.int/teams/immunization-vaccines-and-biologicals/essential-programme-on-immunization/demand>

Essential Programme on Immunization

The Essential Programme on Immunization aims to strengthen vaccine programmes, supply, and delivery, and ensure universal access to all relevant vaccines for all populations across the life course.

[About >](#)

Increasing vaccination demand and uptake

Increasing and maintaining vaccination uptake is vital for vaccines to achieve their success. Addressing low vaccination requires an adequate **understanding of the determinants** of the problem, tailored evidence-based strategies to **improve uptake**, and **monitoring and evaluation** to determine the impact and sustainability of the interventions.

1. Understanding the drivers of immunization uptake

A range of factors influence whether a person is vaccinated or not. The framework of behavioural and social drivers (BeSD) of vaccine uptake (see below chart) illustrates states the four domains that can be measured to understand reasons for under-vaccination. The BeSD framework includes influences that are measurable, potentially changeable, and specific to vaccination.

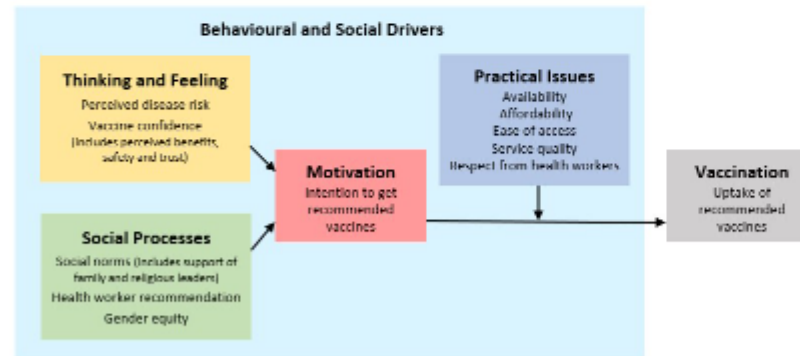
To support the systematic assessment of these drivers of vaccination, WHO established the Measuring Behavioural and Social Drivers of Vaccination global working group in October 2018, in collaboration with core partners, to oversee development of field-tested and validated tools and guidance.

BeSD tools include surveys and in-depth interview guides for both childhood and COVID-19 vaccinations, and guidance is available to support the gathering and use of data. Countries are recommended to systematically collect and analyse data on behavioural and social drivers of vaccine uptake. These data may be routinely used to guide programme planning, implementation and evaluation.

[Behavioural and social drivers of vaccine uptake: tools and practical guidance](#)

[Understanding the behavioural and social drivers of vaccine uptake. WHO position paper – May 2022](#)

The WHO behavioural and social drivers of vaccination framework



Source: The BeSD working group. Based on Brewer et al. *Psychol Sci Public Interest*. (2017).

2. Engage with communities

Because the drivers of uptake are contextual, assessing and addressing low uptake requires engaging with communities to generate insights on their needs and perspectives, and to guide the development of better quality vaccination services, systems, policies, and other programme strategies.