

Smart investments that improve immunisation equity

Evidence-based activities for practitioners, managers and influencers of demand promotion



“We have now seen the impact of evidence-informed, tailored, and targeted interventions that determine the barriers to vaccination and work to increase uptake. I call on national programme managers to take advantage of the latest guidance to apply these strategies in order to increase demand for vaccination, and achieve and maintain high coverage rates.”

Dr Jean-Marie Okwo-Bele

Director of the Department of Immunization,
Vaccines and Biologicals,
WHO Headquarters in Geneva

“Recent supply-side investments by national immunisation programmes have generated impressive gains. Now we must balance these with additional investments in proven strategies that create and sustain public demand for vaccines. When we put caregivers and communities at the centre of our programming, we empower them, and thereby generate demand for high-quality, accountable services that better meet the needs of the populations we are trying to reach.”

Dr Robin Nandy

Principal Advisor & Chief of Immunizations,
Health Section,
UNICEF Programme Division

“Gavi supports investments to strengthen both supply and demand to increase and sustain equitable coverage. Focusing on evidence-based demand promotion interventions that are tailored to the needs of specific populations and rigorously monitored and evaluated should contribute to more effectively reducing drop-out, improving timeliness, and overcoming vaccine hesitancy.”

Hind Khatib-Othman

Managing Director,
Country Programmes,
Gavi, the Vaccine Alliance



Ebola
PROTECT YOUR COMMUNITY
Join the fight to stop Ebola from spreading in your community. You can help protect your community by following these steps:

- 1. Avoid contact with people who are sick with Ebola.
- 2. Avoid contact with people who have died from Ebola.
- 3. Avoid contact with blood and body fluids of people who are sick with Ebola.
- 4. Avoid contact with blood and body fluids of people who have died from Ebola.
- 5. Avoid contact with needles and syringes.
- 6. Avoid contact with needles and syringes.
- 7. Avoid contact with needles and syringes.
- 8. Avoid contact with needles and syringes.
- 9. Avoid contact with needles and syringes.
- 10. Avoid contact with needles and syringes.

Full, equitable coverage needs universal, sustainable demand

Thanks to 40 years of Expanded Program on Immunization progress, today more than 80% of the world's infants receive at least three doses of vaccines delivered through routine immunisation programmes. Immunisation is now also widely recognised as one of the 'best buys' in public health, offering returns on investment of more than 16-times against the cost of averted illness, and more than 44-times in broader economic benefits.¹ Progress towards universal vaccine coverage has been in large part enabled by significant improvements in service provision and supply-side systems of national EPI programmes, as a part of broader health systems. However, even where adequate and reliable supply infrastructure is in place, crucial gaps in coverage remain, in large part, because of poor demand for immunisation.

These gaps often concern the hardest to reach communities or those groups that are already most at risk of vaccine-preventable diseases. Caregivers in these contexts may lack knowledge on the benefits of immunisation, or the practical information on where and when it can be found. They may be reluctant to seek services at facilities perceived to be of poor quality or where customer service is sub-optimal. They may be unable to access services at the hours they are offered. A small number may actively resist vaccination for a variety of reasons relating to culture, community, religion or mis-information. All of these factors can limit immunisation demand or contribute to drop out.

Increasingly, national governments cite factors related to low demand amongst the key obstacles to achieving immunisation coverage and equity goals.² Likewise, Gavi, the Vaccine Alliance, along with the international community recognises that broader and better investments to promote demand for immunisation are urgently required if countries are to achieve their coverage and equity goals.³

Increasing immunisation demand is key to reaching every child

1 in 5 children miss out on life-saving vaccines



When individuals and communities understand the value of vaccines they demand immunisation as both their right and responsibility

Activities that reduce hesitancy and help convince people to accept and ask for vaccines is defined as demand promotion.

Help boost your national demand programmes with these established and effective activities:

A companion **Power Point** tool is available with this brochure, intended to stimulate and facilitate country level action planning and decision-making.

<http://www.gavi.org/library/publications/gavi/smart-investments-demand-promotion-working-session-tool/>



¹ DOI: 10.1377/hlthaff.2015.1086

² Gavi, the Vaccine Alliance, Country Programmes Update Report to the PPC. 7-8 October 2015, Annex 3, Appendix A

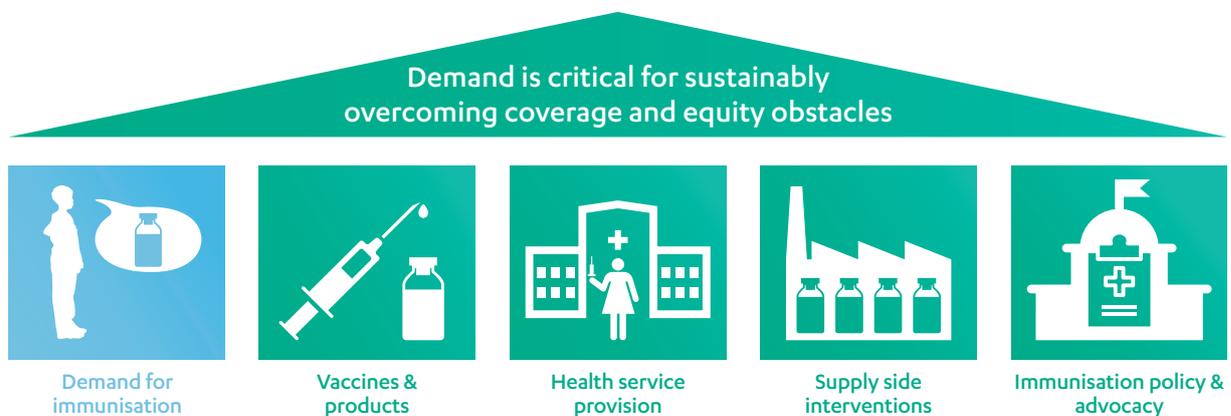
³ World Health Organization (2014), "Making Fair Choices on the Path to Universal Health Coverage: Final Report of the WHO Consultative Group on Equity and Universal Health Coverage"

Beyond a 'business as usual' approach...

- Standard approaches or 'one size fits all' activities may not be reaching - or convincing - many low demand or high drop out groups, including those at greatest risk of vaccine-preventable diseases.

If low demand for immunisation or a high drop out rate is frustrating progress towards full coverage amongst some communities, then one solution is to improve sub-optimal, inappropriate or insufficient demand promotion activities. For example, traditional or 'default' demand promotion activities may be failing to reach some population segments altogether. Or activities may not sufficiently address caregivers concerns, motivate them to overcome practical barriers, or enable people to access the immunisation services that are available.

Current investments in demand promotion may simply not be enough to achieve and sustain full demand. Funds that are invested may be inefficient, or failing to achieve the desired impact if they are not targeted towards those activities that offer the best return on investment. In many cases, there are likely to be newer or more modern demand promotion activities, and tools which can deliver better outcomes and that are more cost-effective than traditional alternatives.



We cannot achieve broad, sustained coverage of vaccines, nor the full return on supply and vaccine investments, until all communities are empowered and enabled to access immunisation services.

...towards demand promotion that is effective and value for money

Gavi, together with UNICEF and the World Health Organization, have partnered with the Emory Vaccine Centre at Emory University to compile the best available evidence on a range of demand promotion activities. What we have learnt is both compelling and inspiring.

- A range of different strategies, approaches and tools have been shown to be effective at increasing demand for immunisation amongst unimmunised and under-immunised groups.
- The value of these demand interventions is tangible and the impact can be measured, as well as demonstrated, using appropriate tools.

Optimising demand-side investments

Emerging evidence for a range of effective demand promotion tools and approaches is presented in the following pages. The best available evidence is brought together in an overview of promising activities that have been tried, tested and found to be successful in specific contexts.

This ‘evidence base’ organises findings within a simple framework of behavioural change which considers how values, attitudes and intentions can play a role in public demand for vaccines.

We encourage you to consider how these inspirational tools and examples are relevant to low-demand or high drop-out groups in your country, and as a part of your broader demand promotion programmes.

A call to action: robust data for decision-making

Whilst the evidence presented here demonstrates that the outcomes and impact of demand-side activities are both measurable and tangible, greater efforts are required on the part of all immunisation stakeholders to track, measure and evaluate the outcomes of demand promotion activities.

A broad set of robust data is essential to enable evidence-based decision-making and to continuously improve demand programming. Further resources for demand promotion-planning, monitoring and evaluation, as well as a checklist of key action steps, are presented in the concluding pages of this brochure.

Emerging evidence points towards some effective ways to stimulate public demand for immunisation. However, greater efforts are needed to scale-up and institutionalise the collection of outcomes and impact data.

“There is a need for evidence-based, cost-effective interventions to increase and sustain demand for vaccines in low and middle-income countries.”

Dr Saad Omer

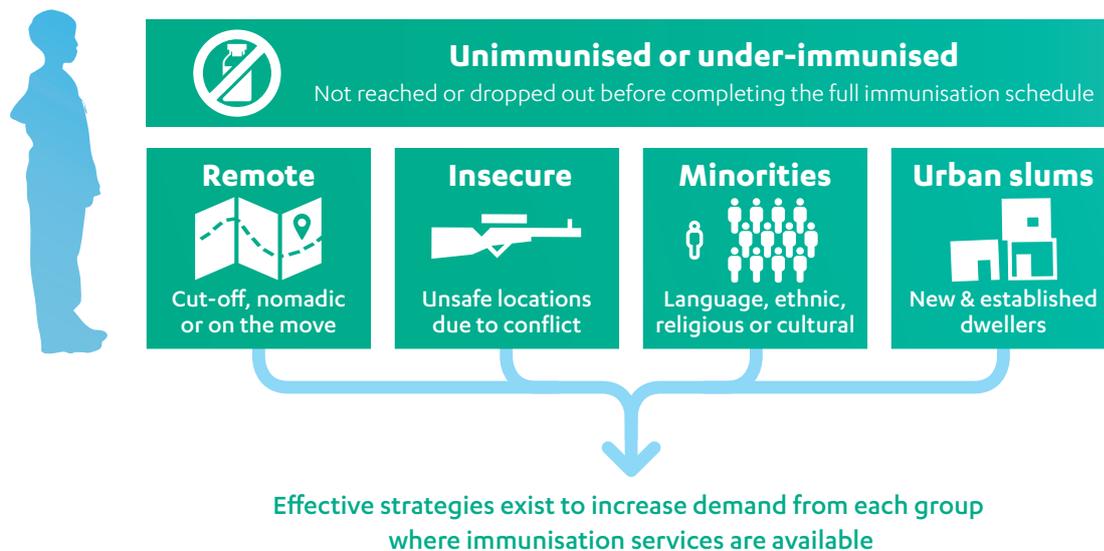
William H. Foege,
Professor of Global Health,
Emory University



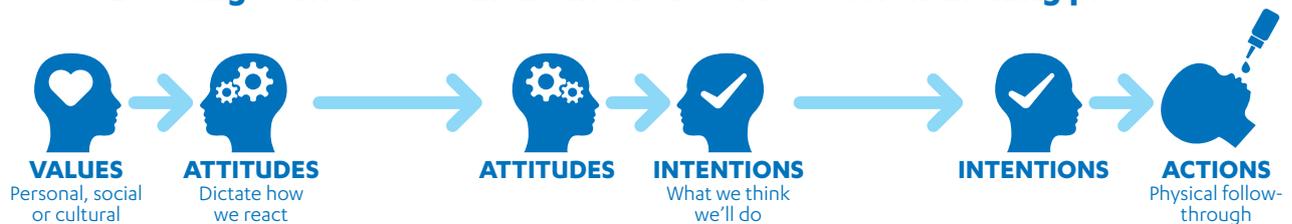
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A framework for stimulating demand:

The role of values, attitudes, intentions and actions



Locating barriers to demand in the vaccine decision-making process



This framework is one way to map out the reasons for low coverage or high-drop out rates amongst some groups. Various unimmunised or under-immunised groups may be located at different points across the framework.

What are values, attitudes, intentions and actions?

Values > What we perceive as good, right or acceptable. Often rooted in social or cultural context.

Attitudes > Our feelings towards certain ideas or issues. Dictate reactions in concrete situations.

Intentions > The act or instance of deciding upon some action or result. Gives purpose to an attitude.

Actions > The follow-through on an intention. All necessary steps or 'acts' to achieve an aim.

How does the framework interact with common barriers to immunisation demand?

Social, demographic and economic barriers to demand can act on different transition stages of the framework (ie. values > attitudes; attitudes > intentions; and intentions > actions). Some barriers may act on more than one transition stage.

- Factors related to the cultural or religious context may influence vaccine-refusing **values**;
- Service availability barriers – such as distance or limited opening hours – might lead care-givers to think that if he/she really needed to immunise their child, there would be more resources;
- Care-giver knowledge and acceptance of the risk of a disease, or the severity of its consequences, can modulate **attitudes** and **intentions** to see out vaccination;
- Fear of poor or unequal treatment by health workers or vaccinators might reduce the strength of otherwise positive **intentions** to vaccinate and might mean that care-givers do not ultimately take **action**.

Effective ways to stimulate and maintain demand for immunisation

The examples presented here come from a thorough review of published studies on immunisation demand promotion in the academic literature. They are intended to point to novel, varied and inspiring practices that are relevant to different contexts and which help to overcome different types of demand barriers, whether related to values, attitudes or intentions to vaccinate. This brochure does not include all promising approaches, nor does it constitute detailed technical guidance.

It can however serve as a starting point to encourage decision-makers to begin investing in more proven, effective demand promotion interventions.

The original source reference for each example is provided in the form of a DOI (digital object identifier) or the PMID (unique identifier number used in PubMed). This provides a link to the source on the Internet. Enter the DOI or PMID into your preferred search engine to find the source article.

“In areas where we have low coverage, high drop-out or communities with increased susceptibility to vaccine-preventable diseases, we have been able to apply evidence-based interventions to boost acceptance of immunisation at a community level. In areas where these interventions were implemented, we recorded a significant increase in the number of children who were vaccinated. To equitably extend the benefits to all, there is real potential now in the area of demand promotion and all countries should explore the latest guidance.”

Dr Fiona Braka
Immunization Team Leader,
WHO Nigeria

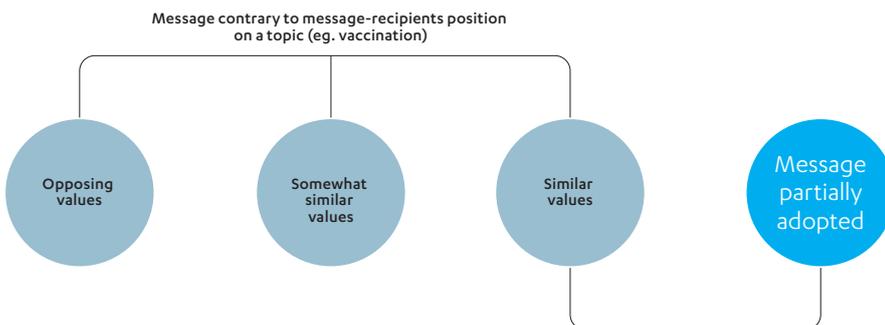
Working with values



1. IDENTIFYING NORMATIVE POSITIONS

Match the messenger to recipient:

Care-givers may be more likely to accept information that contradicts their current attitudes if they recognise that the messenger holds similar core values to themselves.

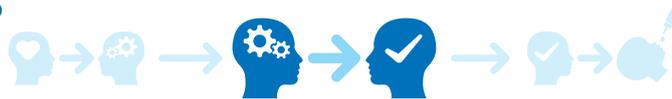


Message recipients were shown to partially adopt the new message when they perceived they shared similar values to the advocate. This was true even if the message was contrary to the message recipient’s position on a specific topic like vaccination.

Demand campaigns should make use of multiple advocates to ensure that all target groups can receive messages from the appropriate advocates.

DOI: 10.1007/s10979-009-9201-0

From attitudes to intentions



1. PERSONALISING APPEALS

Reach out through relevant types of media:

Using media channels and formats that are familiar to specific target populations, and with which they culturally identify, can be effective in changing negative attitudes to immunisation. Examples might include storytelling via radio and television programmes, or live cultural or dramatic performances.

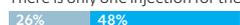
Percent of care-givers answering correctly

■ Before intervention ■ After intervention

Most medical plans and medical coupons cover the cost of the HPV vaccine (True)



There is only one injection for the HPV vaccine (False)



The vaccine is recommended for girls at ages 11 and 12 but can also be given between 9-26 (True)



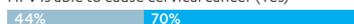
Usually a woman is able to detect HPV in herself (False)



Most women are infected with HPV at some point in their lives (Yes)



HPV is able to cause cervical cancer (Yes)



$p < 0.05$ All differences between percent of parents answering correctly before and after the intervention were significant compared to before and after differences of a control group, with the exception of answer to the statement 'HPV is able to cause cervical cancer'

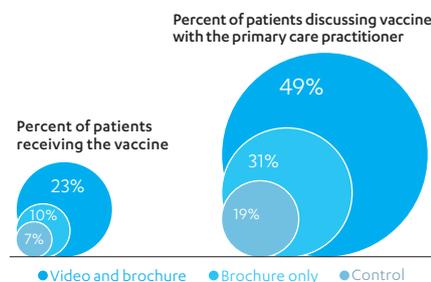
After listening to 'radionovelas' with plot-lines that addressed uptake of the human papillomavirus (HPV) vaccine, US-living, rural Hispanic parents of Mexican descent demonstrated higher knowledge and positive-vaccine beliefs.

Radio drama series, or 'Radionovelas' in Mexico. This novella told the story of a girl who learns about the HPV vaccine at school. She tells her mother, who talks to a nurse friend, to the girl's father, and to a doctor about her thoughts and concerns.

DOI: 10.1007/s10900-011-9395-1

Help your target groups identify with the messenger:

Images and videos that promote vaccinations should almost exclusively feature individuals that are of a similar ethnicity or culture to the target groups.



A significantly higher percentage of subjects viewing a pneumococcal conjugate vaccine (PCV) video presented by ethnically-similar actors went on to discuss the vaccine with their primary care practitioner, and a higher proportion also received the vaccine vs. other study groups.

$p < 0.05$ All differences are significant with the exception of the difference between percentage of patients receiving the vaccine in the control arms compared with the patients receiving the brochure only.

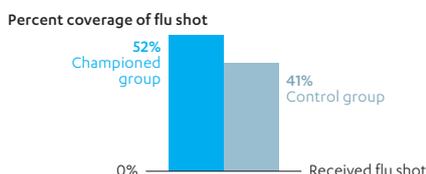
Ethnically-similar actors were used to create a three-minute informational video on the pneumococcal conjugate vaccine (PCV). A brochure was also created that prompted subjects to discuss the PCV with their primary care practitioner. A first group of subjects received both the video and the brochure, a second group of subjects received only the brochure, and a control group received no health-related information.

DOI: 10.1136/jim-51-03-16

2. LEVERAGING SOCIAL NORMS

Identify vaccine "champions":

Using champions from the target population, who are generally well-liked and influential, can be an effective tool in shaping the perceptions peers have of vaccines.



$p < 0.05$ Difference is significant.

Healthcare workers that were encouraged by workplace 'champions' were statistically more likely to receive the seasonal influenza vaccine.

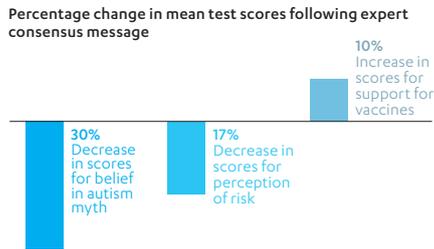
'Champion' healthcare workers were selected to encourage co-workers to receive the vaccine. Of this group of subjects, 11% more ultimately received the vaccine compared to an 'unchampioned' control group of healthcare workers.

PMID: 19891169

3. COMMUNICATING AN EXPERT OPINION

Present the 'expert consensus':

Offering a united front across experts and spokespeople on the topic of immunisation has been shown to bolster general support for vaccination and reduce belief in vaccine myths.



Participants in a study that received any sort of consensus-highlighting message believed less strongly in the autism myth, perceived less vaccine-associated risk and had stronger support for vaccines overall vs. those receiving no message.

Examples of 'expert-consensus' messages used in the study include: "90% of medical scientists agree that vaccines are safe", and "90% of medical scientists agree that all parents should be required to vaccinate their children".

DOI: 10.1186/s12889-015-2541-4

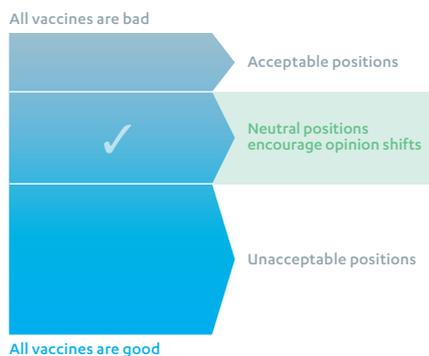
$p < 0.01$ All differences between 'any consensus message' and 'no message' are significant. No statistically significant difference in scores between different consensus messaging conditions.

4. FRAMING THE MESSAGE

Make messages persuasive:

For subjects holding vaccine-refusing attitudes to some or all vaccines, attitudes are more likely to be improved by presenting messages that are more 'neutral' vs. those that are overwhelmingly vaccine-positive.

Vaccine-refusers



Vaccine-refusing study participants demonstrated shifts in their opinion towards the new vaccine message when that message was one that they neither agreed nor disagreed with. However, when a message was too positive and did not address their concerns, it did not encourage positive shifts in their opinion.

People tend to be most strongly persuaded by messages that are not too different from the attitudes that they hold.

When presented with strongly vaccine-accepting messages, participants perceived the difference between these messages and their own beliefs to be even bigger than they were. These 'incompatible' messages rarely prompted participants to shift their opinions in the direction of the vaccine-accepting messages. On the other hand, when presented with vaccine-refusing messages that were similar to their own beliefs, participants perceived any differences between the messages and their own beliefs to be even smaller than they actually were.

DOI: 10.1002/ejsp.2420230510

Know the right time to use messages about gains or losses:

Presenting the potential gain from an action appears to be more effective in some specific circumstances, and presenting what stands to be lost – or the negative consequences of not acting – appears to be more effective in others.

Gain-framed messages are more effective when:



- the message recipient already believes vaccines are effective;
- the overall cultural attitude is more individual-orientated; or
- a specific vaccine requires only one dose.

Loss-framed messages are more effective when:



- the message recipient has low confidence in vaccines;
- the overall cultural attitude is more group-orientated; or
- when a vaccine requires multiple doses.

Example of a 'gain-framed' message: "If you decide to get the vaccine, you may decrease your chance of contracting the potentially deadly H1N1 flu virus." Example of a 'loss-framed' message: "If you decide not to get the vaccine, you may increase your chance of contracting the potentially deadly H1N1 flu virus".

DOI: 10.1080/10410236.2011.617243

DOI: 10.1007/s12160-008-9024-0

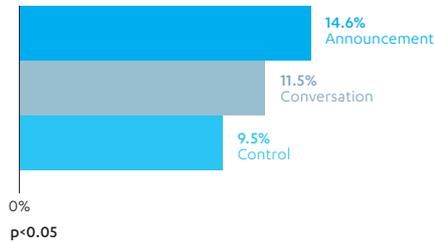
DOI: 10.1007/s12160-011-9273-1

5. DEFINING LENGTH OF MESSAGE

Less (talk) is sometimes more:

Encouraging health workers to give short, clear messages to caregivers, instead of engaging them in conversations beforehand, has been shown to increase initiation coverage of the HPV vaccine.

Percent change in HPV vaccine coverage over previous 6 months post-training



When physician-educators provided only a short announcement about the timeliness of the human papillomavirus (HPV) vaccine to parents of 11-12 year-old children, vs. engaging the parents in a longer conversation, there was a significant increase in coverage of the vaccine.

The 'short announcements' intervention group observed an increase of 5 percentage points in coverage of the vaccine (one or more dose) at 6 months vs. control. In an intervention group in which providers were trained to immediately initiate a conversation with parents an increase in coverage vs. control was not observed.

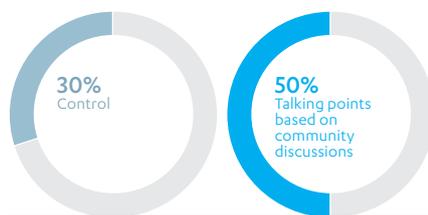
DOI: 10.1542/peds.2016-1764

6. DEVELOPING EDUCATION TOOLS

Listen to your target communities:

Educational messages were found to be more effective when they reflected the critical factors - such as disease salience - that impact the target groups' and their decisions to vaccinate. Conducting this research and designing messaging together with communities is more effective compared to 'one size fits all' messaging.

Percent measles vaccine uptake



Standardised talking points developed on the basis of the community learnings more than doubled the odds of a child in an intervention community receiving the measles vaccine.

Researchers engaged with communities in one of the poorest districts of Balochistan, in Pakistan, to find out the most critical factors informing a parent's decision to vaccinate, or not. These included costs and benefits of vaccination, as well as specific challenges and barriers.

DOI: 10.1186/1472-698X-9-S1-S8

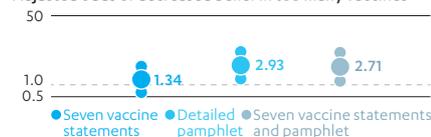
Be specific, not general:

Educational materials that address specific concerns have been shown to be more effective, compared to materials that present only more general ideas. This is particularly true when the materials address specific concerns related to the severity of a disease or its salience (the perceived threat of acquiring the disease).

Adjusted odds of increased confidence in vaccines



Adjusted odds of decreased belief in too many vaccines



Recently-delivered mothers expressed increased confidence and fewer concerns regarding multiple injections after receiving more detailed information.

Mothers with concerns about immunisation received a new, more detailed pamphlet that directly addressed the number of doses, serious adverse events and a one-page overview of the seven-recommended vaccines. A control group received only the standard Vaccine Information Statements (VIS) for each of the seven vaccines.

DOI: 10.1016/j.vaccine.2009.10.046

From positive intentions to action

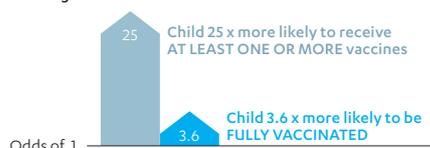


1. REMINDING PEOPLE ABOUT WHAT, WHERE AND WHEN

Remind frequently, communicate simply:

Sending multiple reminders is most effective. These reminders should ideally convey short, comprehensive messages about when and where the vaccination will take place.

Adjusted odds of a child being fully vaccinated or being left out



An automatic schedule of text message-based reminders for mothers in rural Bangladesh was tested. It more than tripled the odds of a child being fully vaccinated* (OR 3.6) and increased the odds of a child receiving at least one or more vaccines by twenty-five times (OR 25).

The 'mTika' programme sent reminders about routine vaccination sessions one day before the session, at the beginning of the session and, two hours before close of the session.
DOI: 10.1016/j.vaccine.2015.11.024

Consider mobile technology for hard to reach groups:

Phone calls and text messages are effective ways to remind hard-to-reach people about when they need to be vaccinated.

Probability of a child NOT missing a scheduled appointment vs. control group

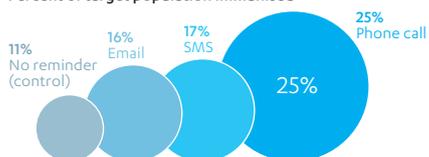


$p < 0.05$ Statistically significant difference between SMS message and control. No statistically significant difference between sticker and control.

Children in three districts of Kenya were less likely to miss a pentavalent vaccine third-dose when parents received an appointment reminder on a sticker, and even less likely to miss the appointment when the parent received an SMS text reminder.

The study measured the odds of a child not returning for vaccination two weeks or more after the scheduled date for third dose of the vaccine. It compared the impact of SMS text reminders and stickers to other factors associated with missed vaccination.
DOI: 10.1186/s12889-016-2823-5

Percent of target population immunised



$p < 0.05$ All differences are significant with the exception of the difference between email and SMS text message

In Beirut, patients over the age of 40 who had not yet received the pneumococcal vaccine were significantly more likely to take-up the vaccine after receiving a short phone call reminder, compared to an email or SMS text reminder.

Each group received three identical reminders spaced by a period of four weeks, either with or without additional education on pneumococcal disease. There was no statically significant difference for the additional education component.
DOI: 10.1016/j.vaccine.2015.07.050

2. MAKING AN ACTION PLAN

Encourage realistic planning:

Providing ways for the target audience to make an action plan, even if it is non-binding, increases likelihood of vaccination. Examples could range from requesting care-givers to write down a planned vaccination appointment on a paper schedule, or reply to an email or SMS.

Vaccination rate per group



$p < 0.05$ Difference between date vs. date and time is significant.

Employees of a company receiving a reminder mailing about the seasonal influenza vaccine availability were more likely to take up the vaccine if they were prompted to write down their planned choice of date and time for the vaccine.

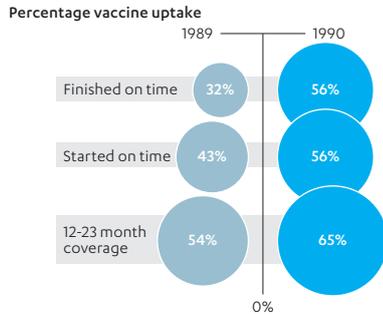
This 'date and time' group were more likely to receive the vaccine compared to a group that received only the appointment schedule. They were also more likely to receive the vaccines compared to a group that were asked to only write down their planned date.
DOI: 10.1073/pnas.1103170108

* 'Fully vaccinated' in the study includes: BCG (Bacillus Calmette–Guérin) vaccine (1 dose); Penta3 (pentavalent vaccine covering diphtheria, tetanus, pertussis, hepatitis B and *Haemophilus influenzae* type b (3 doses)); and, MR (measles rubella) vaccine (1 dose).

3. COMBINING DEMAND PROMOTION ACTIVITIES

Integrate different strategies to drive uptake and coverage:

Integration of the strategies discussed in this evidence base is feasible and also promising in terms of results for increasing vaccine uptake and overall coverage. Consider combining multiple channels of communication to target a specific group or groups, rather than relying on only one tool such as posters or community volunteers.



A national intervention in the Philippines leveraged both mass media and face-to-face communication between the healthcare worker and mother. It also employed messaging focussed exclusively on measles. Not only did measles coverage increase, but so too did the 12-23 months coverage of the complete schedule of vaccines.

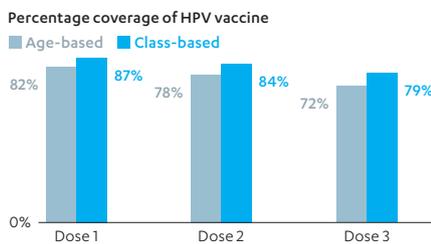
The proportion of infants starting their immunisation schedules on time (at less than four months of ages) and completing on time (nine to eleven months old) also increased. The campaign emphasised logistical information (where, when, cost) and focused on urban areas, which had lower coverage on average vs. rural areas.

PMCID: PMC2486710
Cabanero-Verzosa et al, Managing a Communication Program on Immunization Metro Manila, Philippines, Department of Health, (1989) Dec. vii, 63 p. Source: <http://www.popline.org/node/378743>

4. REACHING-OUT

Target age-defined contexts:

For age-group specific vaccines, such as the human papillomavirus (HPV) vaccine, holding vaccination clinics where those of the target age are grouped can increase vaccination rates.



In rural and urban Tanzanian schools, providing the HPV vaccine to girls based on their school class grouping was found to further increase the odds of eligible girls receiving the first dose, when compared to targeting girls based on their age in the same schools.

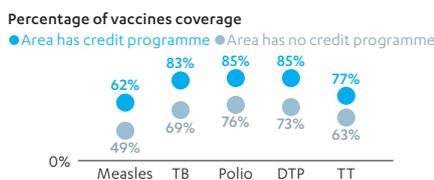
In addition, while the different strategies produce similar outcomes for dose one of the vaccine, in urban settings class-based strategies have more of an impact for sustaining coverage (doses 2 and 3 of the vaccine).

DOI: 10.1093/infdis/jis407

5. INCENTIVISING FOR VACCINATION

Consider providing additional motivation:

Financial incentives, along with non-financial incentives, are one way to motivate those who are undecided, those who do not actively think about immunisation or those who face practical or financial barriers to accessing services. However, incentive-based interventions also require long-term buy-in to achieve scale and sustainability, and to avoid sharply declining demand if and when these interventions end.



The same trend can be seen in the coverage of each vaccine for members of a credit programme vs. non-members.

Non-collateral credit loans for immunisation were found to increase uptake of various vaccines in Bangladesh. Uptake was higher in areas with a credit programme vs. areas without, and for women who were credit members vs. those who were not.

Roughly half of the study sample was drawn from areas in which established NGO credit programmes existed, and half from neighbouring areas where there were no established programmes.

DOI: 10.1300/J013v25n01_05

Mass media delivering cost-effective improvements in child survival outcomes in Burkina Faso:

Preliminary end-line findings of the largest cluster-randomised trial to date on mass media

A first-of-its-kind, three-year randomised control trial rigorously measured the potential of mass media to save lives, and assessed the associated costs. Development Media International (DMI) together with the London School of Hygiene and Tropical Medicine (LSHTM) predicted that simply by disseminating information and guidance about important life-saving behaviours via radio broadcasts, low income countries could see up to a 23% reduction in child mortality. The prediction was derived using a mathematical model developed by DMI and LSHTM, building on the Lancet Child Survival Series¹.

The performance of key life-saving behaviours requires care-giver awareness and action, much the same as immunisation. Even when supply side interventions have been both adequate and successful, stagnating coverage levels have been detected where community demand is weak. Burkina Faso's strong, highly localised media environment enabled the selection of 14 geographical areas, which were randomised and equally divided into an intervention group and a control group. The study has recently completed three years of broadcasting a media campaign for maximum coverage in the seven intervention areas. The campaign comprised ten daily one-minute radio adverts (spots) and longer nightly, radio dramas.

Mid-line results, based on a survey of 5,000 households, were published in 2014. These results demonstrated evidence of the campaign having positively influenced some health-seeking behaviours.



Moreover, these types of mass media intervention carry a lower cost per life-year saved (DALY) vs. any other existing public health intervention. In 2014, mid-line results of the study indicated that the activity may be effective in changing some behaviours on a scale large enough to result in measurable reductions in all-cause, post-neonatal, under-five child mortality. Recently, preliminary end-line findings suggest that the behaviour changes that were measured indeed led to a 7.5% reduction in under-five mortality in the intervention zones.

Recent preliminary findings from the end-line evaluation suggest that:

- The radio campaign led to a 35% increase in health facility visits for children with symptoms of pneumonia, malaria and diarrhoea in intervention zones compared to the control zones ($p < 0.001$) in the first year. The radio campaign also increased antenatal care attendance and facility deliveries by 6% and 7% respectively ($p = 0.004$).²
- In addition, modelling using the 'Lives Saved Tool'³ suggests that the radio campaign achieved a 7.5% reduction in under-five mortality in the intervention zones, at a cost of \$25 per disability-adjusted life year (DALY), or \$750 per life saved. This suggests that child survival radio campaigns are one of the most cost-effective global health interventions.²

Final results of the study are undergoing peer review at the current time and will be published later in 2017.

Investments in trials of this nature help to determine the cost-effectiveness of these approaches.

Trials such as these contribute to a growing base of evidence for the use of mass media and other innovative tools to stimulate demand for key health-seeking behaviours, including immunisation.

Further information:

<http://www.developmentmedia.net/news/dmi-publishes-child-survival-rct-endline-results>

<http://www.developmentmedia.net/burkina-faso-child-survival-rct.html>

DOI: 10.9745/GHSP-D-15-00049

DOI: 10.1016/S0140-6736(14)61649-4

DOI: 10.9745/GHSP-D-15-00153

¹ <http://www.thelancet.com/series/child-survival>

² <http://www.developmentmedia.net/news/dmi-publishes-child-survival-rct-endline-results>

³ <http://livesavedtool.org/>

Social mobilisation networks contributing to the eradication of polio in India:

Effective tools to overcome vaccine resistance and reach chronically underserved groups

UNICEF started the Social Mobilization Network (SMNet) in 2002 as a tool to generate community support for polio immunisation activities. It works by deploying community mobilisers in areas identified as high-risk for polio, with the main task to encourage uptake of the oral polio vaccine (OPV) amongst resistant communities. SMNet delivers a critical mass of communication and strengthens coordination with partners, helping to ensure maximum turnout at vaccination sessions.

An 'underserved' strategy was developed over time to reach specific high-risk groups and areas, ranging from Muslim sub-sects to slum dwellers. One reason for the programme's success has been the involvement of community leaders to inform the evolution of locally-relevant strategies for overcoming vaccine resistance. SMNet is now widely recognised as a 'gold standard' in public health communication.

SMNet was established in the two Indian states with the highest incidences of polio - Uttar Pradesh in 2002 and Bihar in 2005 - and implemented during Supplementary Immunisation Activities (SIA). The network has built a large base of human resources, including 6,500 Community Mobilization Coordinators (CMCs) in the two states, with one per 500 households. They are supported by several levels of coordinators and mentors from district, to sub-regional, up to state level. The Network has leveraged diverse strategies to overcome the diverse range of reasons for vaccine refusal and low uptake across the two states. Strategies have included religious and community influencers, festivals and gatherings, children's brigades, interpersonal communication, counselling, mothers meetings and rallies. The programme expanded the use of a coding and tracking method (the 'X' code) to identify reasons for non-vaccination at the micro-plan level (such as reluctance, sickness or absence) and attributed relevant response strategies in each case.



In January 2016, India celebrated five years of being polio-free. A 2014 review by Deloitte reported significant evidence that SMNet had contributed to the elimination of new polio cases. In the two states covered by SMNet, household visits coverage increased consistently over the years. Polio immunisation rates also increased and, notably, were significantly higher compared to the state average in the districts with heavy SMNet coverage vs. those with less. KAP studies, testimonies from local influencers' and the 'X code' method all pointed towards significant reductions in vaccine refusal. Moreover, the Global Polio Eradication Initiative (GPEI, 2012 Economic Case for Eradicating Polio) noted evidence that SMNet contributed to routine immunisation (RI) coverage increases in Bihar from 19% in 2005 to 67% in 2010. SMNet also delivered the side benefit of trained cadres of health personnel that can contribute to the promotion of other positive health-seeking behaviours beyond immunisation.

The SMNet experience has demonstrated the flexibility of social mobilisation approaches to effectively respond to diverse barriers and resistances.

SMNet contributed to the eradication of polio and to increases in routine immunisation coverage.

Further information:

https://www.unicef.org/evaldatabase/index_73493.html

https://www.unicef.org/evaldatabase/files/India_2013-001_Evaluation_of_Social_Mobilization_Network_Final_Report.pdf

PMID: 27771640

DOI: 10.9745/GHSP-D-12-00018

Increase programme impact

Are you getting the best out of demand promotion tools or approaches?

- 1 INVEST IN DEMAND**
 - Support investments in demand promotion for routine immunisation, via Gavi HSS (health system strengthening) funds, campaigns or other national sources.
 - Prioritise populations or areas where service supply is strong, but community uptake is weak or drop-out rates are high.
- 2 KNOW YOUR LANDSCAPE**
 - If you are missing data, or if information is out-of-date, prioritise implementation of rapid reviews of the demand situation and demand-side coverage and equity challenges.
 - Consider user-centred approaches to demand promotion (such as described in the UNICEF *Human-centered design* resource: <http://hcd4i.org/>), alongside more traditional tools such as KAP surveys. Integrate demand-related enquiries into other planned immunisation or health-related surveys whenever possible.
- 3 MOBILISE SUPPORT AND EXPERTISE**
 - Convene appropriate partners, support and expertise. To help further strengthen your plans look to other health programmes, government agencies, civil society organisations and the private sector.
 - Seek technical assistance (TA) to support implementation of expanded and innovative solutions, or to enhance the monitoring and evaluation of existing interventions. Request support from Gavi PEF (partners engagement framework) and/or HSS, or other sources.
 - Optimise the demand promotion component of your new or existing Gavi-funded HSS programme. Contact your GAVI country manager to discuss the most up to date programme guidance on targeting demand promotion interventions.
- 4 MAKE PLANS EVIDENCE-BASED AND TAILORED**
 - Ensure that communication plans and strategies are evidence-based, that they are tailored to specific populations, and that they are fully included in EPI budgets and comprehensive multi-year plans (cMYPs).
- 5 THINK IN TERMS OF RETURNS**
 - Work with EPI colleagues to ensure that national and Gavi funds are invested in interventions that overcome specific, prioritised demand barriers, and offer good returns on investment at the same time.
 - Insist your EPI programme managers always track and record cost and outcome data, and use them to develop cost-effectiveness metrics for the activities you implement.
- 6 INSIST ON MONITORING & EVALUATION IMPROVEMENTS**
 - Catalyse a national demand database that records coverage and drop out metrics. Plan to monitor and measure your successes right from the beginning, enabling further learning and improvements.
 - Share impact and cost-effectiveness learnings with the international immunisation demand community to help other countries get more value out of demand promotion.

For designing and implementing effective demand promotion programmes:

Creating and tailoring communication programmes

- Tools and guidance for designing data-driven communications (<https://poliok.it/c4d/>)
- WHO EURO guide to tailoring immunisation programmes (TIP), with a range of tools and methodologies for identifying, diagnosing and designing evidence-informed responses (www.euro.who.int/en/health-topics/communicable-diseases/poliomyelitis/publications/2013/guide-to-tailoring-immunization-programmes).
- UNICEF Human-centred design resource for investigating and responding to immunisation demand challenges (<http://hcd4i.org/>).
- WHO/UNICEF/USAID 'Communication handbook for Polio Eradication and Routine EPI' (<https://www.unicef.org/cbsc/files/polio.pdf>).
- Vaccine-specific guides for HPV vaccine communication (www.who.int/immunization/documents/WHO_IVB_16.02/en/); and for IPV introductions a communications planning guide, media kit, and issues management guide (www.who.int/immunization/diseases/poliomyelitis/endgame_objective2/inactivated_polio_vaccine/implementation/en/).

Vaccine safety communications

- WHO resources to support communications on vaccine safety (www.who.int/vaccine_safety/initiative/communication/en/)

Communication to address vaccine hesitancy and promote vaccine acceptance

- WHO and SAGE working group resources on understanding and addressing vaccine hesitancy (www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/), including survey questions designed to assess determinants of hesitancy (www.who.int/immunization/programmes_systems/Survey_Questions_Hesitancy.pdf).

Resource mobilisation and advocacy

- WHO EURO workbook: 'Mobilizing resources for immunization' (www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2015/workbook-mobilizing-resources-for-immunization)
- WHO EURO advocacy library (www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/immunization-advocacy-library), including messages on why Member States should continue to invest in immunisation, and how to present the wider societal benefits of immunisation.
- Gavi's 'Advocacy for immunisation' toolkit (<http://advocacy.vaccineswork.org/>).





Emory university:

Omer Research Group

<http://www.saadomer.org>

UNICEF:

<https://www.unicef.org/immunization/>

https://www.unicef.org/about/contact_contactusform.php

World Health Organization:

[http://www.who.int/immunization/en/](http://www.who.int/immunization/en/vaccines@who.int)

vaccines@who.int

Gavi, the Vaccine Alliance:

www.gavi.org

info@gavi.org