



Organising evidence on communication interventions to improve childhood vaccination in low- and middle-income countries: developing and applying the 'Communicate to Vaccinate' taxonomy

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What is a taxonomy?



- A classification system based on conceptual similarities
- Organises a broad and complex field of research
- Will help to illustrate the range of interventions

Why do we need a taxonomy for vaccination communication interventions?



- Many vaccination communication interventions used globally but limited organisation of the field
- Information spread across process documents, government and NGO reports, trials and other research literature
- Decision makers need to have an overview of the range of interventions available
- Taxonomy can help frame future research or recommendations

The COMMVAC taxonomy

		TARGET		
		<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>
PURPOSE	Inform or educate	<ul style="list-style-type: none"> • One on one interactions • Group interactions • Mail (postcards, letters or email) • Phone-based (calls, hotlines or SMS) • Device or tool • Audio visual / performance • Printed material • Web-based 	<ul style="list-style-type: none"> • One on one interactions • Group interactions • Mail (postcards, letters or email) • Phone-based (calls, hotlines or SMS) • Device or tool • Audio visual / performance • Printed material • Web-based • Media campaign • Community event • Celebrity spokespeople 	<ul style="list-style-type: none"> • Phone-based (calls, hotlines or SMS)
	Remind or recall	<ul style="list-style-type: none"> • One on one interactions • Mail (postcards, letters or email) • Phone-based (calls, hotlines or SMS) • Device or tool 		<ul style="list-style-type: none"> • One on one interactions • Device or tool
	Teach skills	<ul style="list-style-type: none"> • Training in how to communicate / provide education to others • Parenting skills programs 	<ul style="list-style-type: none"> • Training in how to communicate / provide education to others 	<ul style="list-style-type: none"> • Training in how to communicate / provide education to others
	Provide support	<ul style="list-style-type: none"> • One on one interactions • Group interactions • Phone-based (calls, hotlines or SMS) • Web-based 		
	Facilitate decision making	<ul style="list-style-type: none"> • Decision aids 		<ul style="list-style-type: none"> • Decision aids
	Enable communication	<ul style="list-style-type: none"> • Interpreters 		
	Enhance community ownership	<ul style="list-style-type: none"> • Program delivery 	<ul style="list-style-type: none"> • Local opinion leaders • Community input • Program delivery • Community coalition • Partnership building 	

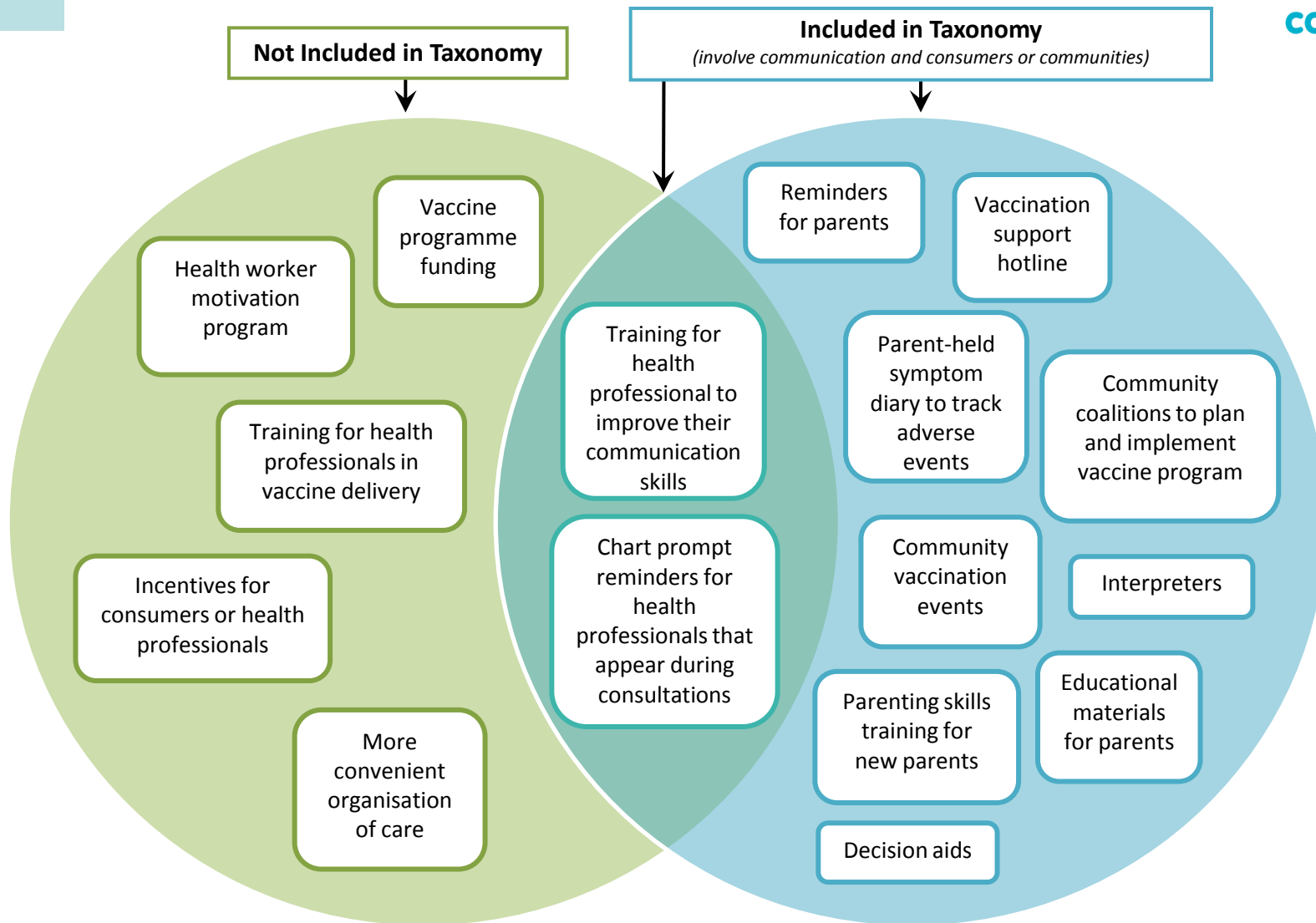
Taxonomy development methods



STAGE 1: Identifying interventions

- Search for interventions
 - CENTRAL, Medline, discussion with experts, grey literature
- Sample, screen and extract data from search results
 - Screened 556 results from CENTRAL and 1001 from Medline
 - Extracted information about study design, participants, intervention type, frequency and delivery method

Scope of COMMVAC project



Taxonomy development methods



STAGE 2: Drafting, consulting and finalising the taxonomy

- Group interventions
 - Database of interventions
 - Purpose, intervention type, target
- Present taxonomy at deliberative forums
 - Ottawa, New York (IUHPE meetings), online
 - Discussion questions
- Finalise

The COMMVAC taxonomy



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		TARGET			
		<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>	
P U R P O S E	Inform or educate	<p>One on one interactions e.g. Hospital education for mothers after birth</p> <p>Group interactions e.g. Group parental education sessions</p> <p>Mail (postcards, letters or email) e.g. Parents mailed written information</p> <p>Phone-based (calls, hotlines, SMS) e.g. Vaccine information phone calls to parents</p> <p>Device or tool e.g. Refrigerator magnets with immunisation schedule</p> <p>Audio visual / performance e.g. Video presentation to parents</p> <p>Printed material e.g. Pamphlet with vaccine information</p> <p>Web-based e.g. Vaccine-related web sites for parents</p>	<p>One on one interactions e.g. Vaccine programme promoted door-to-door by programme workers</p> <p>Group interactions e.g. Community dialogues between communities and health workers</p> <p>Mail (postcards, letters, email) e.g. Influenza vaccine promotion through mass mailing campaign</p> <p>Phone-based (calls, hotlines, SMS) e.g. Phone service with vaccine information for citizens</p> <p>Device or tool e.g. Learning modules for school children about vaccination</p>	<p>Audio visual / performance e.g. TV documentaries about vaccines and related diseases</p> <p>Printed material e.g. Posters to encourage people to be vaccinated in the pharmacy</p> <p>Web-based e.g. Public laptop at clinic for people to access vaccine info</p> <p>Media campaign e.g. Radio, newspaper ads, billboards, town criers</p> <p>Community event e.g. Education sessions held at immunisation carnival</p> <p>Celebrity spokespeople e.g. Famous athletes serve as ambassadors to reinforce key messages on vaccination</p>	<p>Phone-based (calls, hotlines, SMS) e.g. Immunisation hotline for health professionals</p>

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	TARGET			
	<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>	
Inform or educate	<p>One on one interactions e.g. Hospital education for mothers after birth</p> <p>Group interactions e.g. Group parental education sessions</p> <p>Mail (postcard) e.g. Parental education materials</p> <p>Phone-based e.g. Parental education via phone</p> <p>Device or tool e.g. Reminder cards for immunisation</p> <p>Audio visual / performance e.g. Video presentation</p> <p>Printed material e.g. Pamphlet with vaccine information</p> <p>Web-based e.g. Vaccine-related web sites for parents</p>	<p>One on one interactions e.g. Vaccine programme promoted door-to-door by programme workers</p> <p>Group interactions e.g. Community meetings</p> <p>Mail (postcard) e.g. Vaccine information cards</p> <p>Phone-based e.g. Phone service with vaccine information for citizens</p> <p>Device or tool e.g. Learning modules for school children about vaccination</p>	<p>Audio visual / performance e.g. TV documentaries about vaccines and related diseases</p> <p>Printed material e.g. Posters to encourage people to be vaccinated in the pharmacy</p> <p>Web-based e.g. Public laptop at clinic for people to access vaccine information</p> <p>Media campaign e.g. Radio, newspaper ads, billboards, town criers</p> <p>Community event e.g. Education sessions held at immunisation carnival</p> <p>Celebrity spokespeople e.g. Famous athletes serve as ambassadors to reinforce key messages on vaccination</p>	<p>Phone-based (calls, hotlines, SMS) e.g. Immunisation hotline for health professionals</p>

Printed material
e.g. Pamphlet with vaccine information

PURPOSE

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		TARGET			
		<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>	
PURPOSE	Inform or educate	One on one interactions e.g. Hospital education for mothers after birth	One on one interactions e.g. Vaccine programme promoted door-to-door by programme workers	Audio visual / performance e.g. TV documentaries about vaccines and related diseases	Phone-based (calls, hotlines, SMS) e.g. Immunisation hotline for health professionals
		Group interactions e.g. Group parental education sessions	Group interactions e.g. Community dialogues between parents	Printed material e.g. Posters to encourage parents to get vaccinated in	
		Mail (postcards, letters or email) e.g. Parents mailed written information			
		Phone-based (calls, hotlines, SMS) e.g. Vaccine information phone service for parents			
		Device or tool e.g. Refrigerator magnets with immunisation schedule			
		Audio visual / performance e.g. Video presentation to parents	Event e.g. Phone service information for citizens	Event e.g. Vaccination sessions held at immunisation carnival	
		Printed material e.g. Pamphlet with vaccine information	Device or tool e.g. Learning modules for school children about vaccination	Celebrity spokespeople e.g. Famous athletes serve as ambassadors to reinforce key messages on vaccination	
Web-based e.g. Vaccine-related web sites for parents		Celebrity spokespeople e.g. Famous athletes serve as ambassadors to reinforce key messages on vaccination			

Celebrity spokespeople
 e.g. Famous athletes serve as ambassadors to reinforce key messages on vaccination

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	TARGET		
	<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>
PURPOSE	<p>Remind or recall</p> <p>One on one interactions e.g. Parent reminded about child's next vaccination at clinic</p> <p>Mail (postcards, letters or email) e.g. Reminder letter mailed to parents before next appointment</p> <p>Phone-based (calls, hotlines or SMS) e.g. Phone call notifying parents of missed vaccine dose</p> <p>Device or tool e.g. Refrigerator magnet containing date of next vaccination</p>		<p>One on one interactions e.g. Nurses checks for immunisation status at every visit and verbally prompts doctor</p> <p>Device or tool e.g. Point of care reminders for physicians</p>
	<p>Teach skills</p> <p>Training in how to communicate/ provide education to others e.g. Health visitor at child health clinic offered suggestions for mother about how to communicate about vaccination with her child to reduce stress</p> <p>Parenting skills programs e.g. Home visits to teach parenting skills and child health</p>	<p>Training in how to communicate/ provide education to others e.g. Teachers taught to focus teaching on child survival and development topics</p>	<p>Training in how to communicate/ provide education to others e.g. Peer training for nurses about how to provide education to parents and motivate them to immunise</p>

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	Parents or expectant parents	Professionals
PURPOSE	<p>Remind or recall</p> <p>One on one interactions e.g. Parent reminded about child's next vaccination at clinic</p> <p>Mail (postcards, letters or email) e.g. Reminder letter mailed to parents before next appointment</p> <p>Phone-based (calls, hotlines or SMS) e.g. Phone call notifying parents of missed vaccine dose</p> <p>Device or tool e.g. Refrigerator magnet containing date of next vaccination</p>	<p>One on one interactions Nurses checks for immunisation status at every visit and verbally prompts doctor</p> <p>Device or tool e.g. Point of care reminders for physicians</p>
	<p>Teach skills</p> <p>Training in how to communicate/ provide education to others e.g. Health visitor at child health clinic offered suggestions for mother about how to communicate about vaccination with her child to reduce stress</p> <p>Parenting skills programs e.g. Home visits to teach parenting skills and child health</p>	<p>Training in how to communicate/ provide education to others e.g. Teachers taught to focus teaching on child survival and development topics</p> <p>Training in how to communicate/ provide education to others e.g. Peer training for nurses about how to provide education to parents and motivate them to immunise</p>

Mail (postcards, letters or email)
e.g. Reminder letter mailed to parents before next appointment

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	TARGET		
	<u>Parents or expectant parents</u>	<u>Communities, community members, volunteers</u>	<u>Health professionals</u>
PURPOSE Remind or recall	One on one interactions e.g. Parent reminded about child's next vaccination at clinic Mail (postcards, letters or email) e.g. Reminder letter mailed to parents before next appointment Phone-based (calls, hotlines or SMS) e.g. Phone call notifying parents of missed vaccine dose Device or tool e.g. Refrigerator magnet containing date of next vaccination	<div style="border: 2px solid gray; border-radius: 50%; padding: 20px; text-align: center;"> Device or tool e.g. Point of care reminders for physicians </div>	One on one interactions e.g. Nurses checks for immunisation status at every visit and verbally prompts doctor Device or tool e.g. Point of care reminders for physicians
	Teach skills		Training in how to communicate/ provide education to others e.g. Health visitor at child health clinic offered suggestions for mother about how to communicate about vaccination with her child to reduce stress Parenting skills programs e.g. Home visits to teach parenting skills and child health

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Pg 2

		TARGET		
		<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>
PURPOSE	Remind or recall	<p>One on one interactions e.g. Parent reminded about child's next vaccination at clinic</p> <p>Mail (postcards, letters) e.g. Reminder letter mail next appointment</p> <p>Phone-based (calls, e.g. Phone call notifying vaccine dose</p> <p>Device or tool e.g. Refrigerator magnet containing date next vaccination</p>	<div style="border: 2px solid gray; border-radius: 50%; padding: 20px; text-align: center;"> <p>Training in how to communicate/ provide education to others e.g. Teachers trained to teach children about survival and development topics such as vaccination</p> </div>	<p>One on one interactions e.g. Nurses checks for immunisation status at every visit and verbally prompts doctor</p> <p>Device or tool e.g. Point of care reminders for physicians</p>
	Teach skills	<p>Training in how to communicate/ provide education to others e.g. Health visitor at child health clinic offered suggestions for mother about how to communicate about vaccination with her child to reduce stress</p> <p>Parenting skills programs e.g. Home visits to teach parenting skills and child health</p>		<p>Training in how to communicate/ provide education to others e.g. Teachers taught to focus teaching on child survival and development topics</p>

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		TARGET		
		<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>
PURPOSE	Provide support	<p>One on one interactions e.g. Home visits to support first time parents on issues including decisions surrounding vaccination</p> <p>Group interactions e.g. Biweekly parent support groups</p> <p>Phone-based (calls, hotlines or SMS) e.g. Monthly support calls from a family resource specialist</p> <p>Web-based e.g. Support between parents via online chat forum</p>		
	Facilitate decision making	<p>Decision aids e.g. Parents are sent a decision aid booklet before an appointment</p>		<p>Decision aids e.g. Clinical decision support tool for physicians to decide whether to administer influenza vaccine</p>

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		TARGET AUDIENCE	
		Parents or expectant parents	Community health professionals
PURPOSE	Provide support	<p>One on one interactions e.g. Home visits to support first time parents on issues including decisions surrounding vaccination</p> <p>Group interactions e.g. Biweekly parent support groups</p> <p>Phone-based (calls, hotlines or SMS) e.g. Monthly support calls from a family resource specialist</p> <p>Web-based e.g. Support between parents via online chat forum</p>	<p>One on one interactions e.g. Home visits to support first time parents on issues including decisions surrounding vaccination</p>
	Facilitate decision making	<p>Decision aids e.g. Parents are sent a decision aid booklet before an appointment</p>	<p>Decision aids e.g. Clinical decision support tool for physicians to decide whether to administer influenza vaccine</p>

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		TARGET		
		<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>
PURPOSE	Provide support	<p>One on one interactions e.g. Home visits to support first time parents on issues including decisions surrounding vaccination</p> <p>Group interactions e.g. Biweekly parent support group</p> <p>Phone-based (calls, hotline) e.g. Monthly support calls from resource specialist</p> <p>Web-based e.g. Support between parents via chat forum</p>	<div style="border: 2px solid gray; border-radius: 50%; padding: 20px; width: fit-content; margin: 0 auto;"> <p>Decision aids e.g. Parents are sent a decision aid booklet before an appointment</p> </div>	
	Facilitate decision making	<p>Decision aids e.g. Parents are sent a decision aid booklet before an appointment</p>		<p>Decision aids e.g. Clinical decision support tool for physicians to decide whether to administer influenza vaccine</p>

The COMMVAC taxonomy



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		TARGET		
		<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>
PURPOSE	Enable communication	Interpreters e.g. Employment of bilingual staff and translation of vaccine information		
	Enhance community ownership	Program delivery e.g. Community mother supports and educates mothers in travelling community	Local opinion leaders e.g. A prominent member of a community is chosen to act as a vaccination spokesperson Community input e.g. Focus groups to seek recommendations from the community about how to better serve the community	Program delivery e.g. Village chief enlisted to help implement vaccine program Community coalition e.g. Community run coalition plan and implement vaccine program Partnership building e.g. Partnerships with local organisations i.e. churches and child care

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		Interpreters e.g. Employment of bilingual staff and translation of vaccine information		
	<u>Parents or expectant parents</u>			<u>Health professionals</u>
PURPOSE	Enable communication	Interpreters e.g. Employment of bilingual staff and translation of vaccine information		
	Enhance community ownership	Program delivery e.g. Community mother supports and educates mothers in travelling community	Local opinion leaders e.g. A prominent member of a community is chosen to act as a vaccination spokesperson Community input e.g. Focus groups to seek recommendations from the community about how to better serve the community	Program delivery e.g. Village chief enlisted to help implement vaccine program Community coalition e.g. Community run coalition plan and implement vaccine program Partnership building e.g. Partnerships with local organisations i.e. churches and child care

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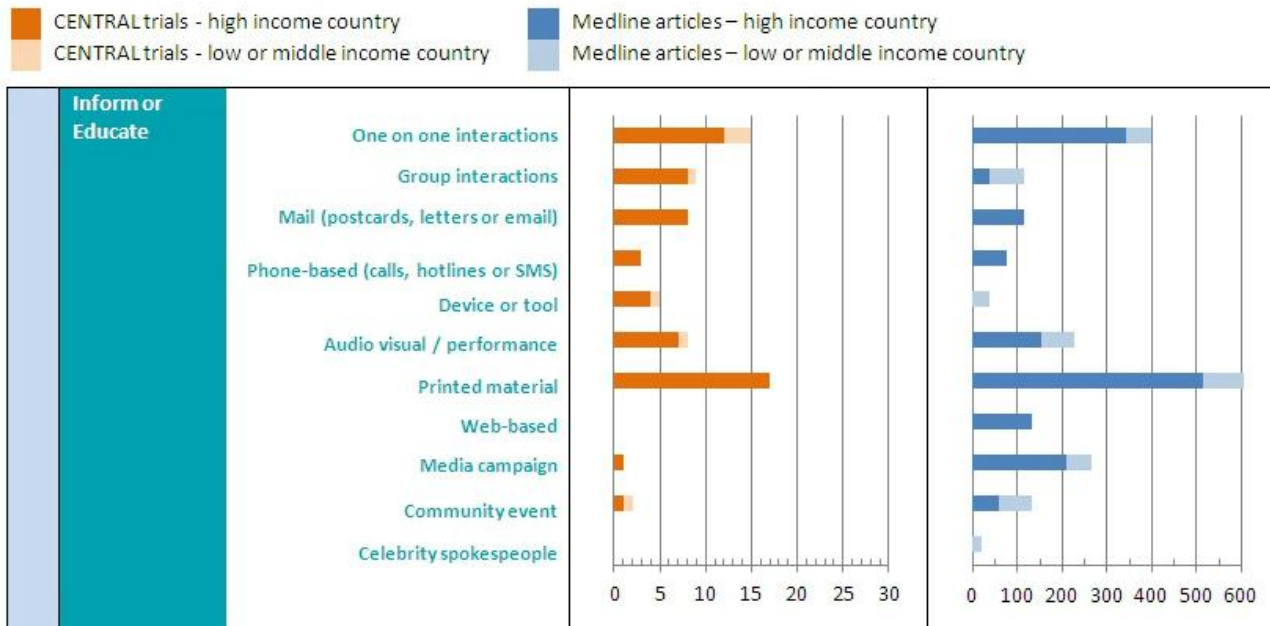
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		TARGET		
		<u>Parents or expectant parents</u>	<u>Communities, community members or volunteers</u>	<u>Health professionals</u>
PURPOSE	Enable communication	Interpreters e.g. Employment of bilingual staff and translation of vaccine information		
	Enhance community ownership	Local opinion leaders e.g. A prominent member of a community is chosen to act as a vaccination spokesperson	Local opinion leaders e.g. A prominent member of a community is chosen to act as a vaccination spokesperson Community input e.g. Focus groups to seek recommendations from the community about how to better serve the community	Program delivery e.g. Village chief enlisted to help implement vaccine program Community coalition e.g. Community run coalition plan and implement vaccine program Partnership building e.g. Partnerships with local organisations i.e. churches and child care

Evidence map



The 'Communicate to Vaccinate' taxonomy: interventions to improve communication about childhood vaccination



- 9% of trials conducted in LICs (light bars) v. 91% in HICs (dark bars)
- Reminders have been heavily covered in trials (HIC)
- Interventions to “enhance community ownership” are used frequently in LMICs but are supported by little trial evidence

Using the taxonomy



- The taxonomy:
 - Clarifies the key purposes and features of interventions
 - Introduces a common language of communication interventions in the vaccination field
 - Assists with the conceptualisation of communication as an intervention in its own right
- It can be used to:
 - Prioritise future research
 - Incorporate vaccination communication into guidelines or guidance
 - Help programme managers map interventions they are delivering (currently developing versions with country-specific examples)

Current limitations and future development



- Evidence map is static (a snapshot in time) and only represents results from two databases
- The map could be developed and used in the future to help build consensus on intervention content and delivery issues
- COMMVAC 2 project will build on the taxonomy
 - Interventions used in mass campaigns (SIA, PIRI, NID)
 - Context and implementation issues

Questions for discussion



- Can you think of any situations in your own work where the taxonomy could be used?
- What kinds of additional information would you like to see included alongside the taxonomy to help decision makers as they consider communication interventions for childhood vaccination?