FACTORS ASSOCIATED WITH RESOURCE UPTAKE AND USE

Promoting implementation of immunization-related toolkits and guidance

This report summarizes findings from a review to identify factors that support uptake and use of immunization-related resources. The term "resource" is used to describe material (e.g., toolkits and guidance) developed to support a specific immunization-related practice, skill, or activity. Table 1 lists characteristics of resources known to promote uptake and use. Table 2 includes factors that support resource implementation. Each table is organized with key findings from the review in the left colum, the middle column provides related strategies that can improve resource uptake and use, and the third column provides evidence for the findings and strategies. These tables can be used by practitioners seeking to prepare for or improve uptake and use of resources, to inform the development of new resources, or improve existing resources. Findings should be viewed as a starting point and can be adapted in accordance with project needs and/or augmented with additional practice-based insights.

TABLE 1. WHAT TO CONSIDER WHEN DESIGNING OR CHOOSING A RESOURCE?

When possible, use a resource that maximizes characteristics known to promote uptake and use. These include offering a relative advantage, being easy to use, demonstrating effectiveness and being adaptable to local input.

CHARACTERISTICS OF THE RESOURCE	WHAT RELATED STRATEGIES COULD IMPROVE UPTAKE AND USE?	WHY IS THIS CHARACTERISTIC IMPORTANT? *WHAT DOES THE LITERATURE TELL US?*

Ease of use
 	
 The end-users of the resource perceive the resource to be easy to understand and use. The language is appropriate for the intended audience, and the resource has an engaging structure that improves the likelihood of use.
	• Evaluate the resource for ease of use using criteria including…
	  Language is simple and easy to read
	  Format/structure is easy to follow
	  Content is simple/not overly complex
	  Tools are available to support use
	  Resource is available in the local language
	 • Pilot test language with local staff.
	 • Develop additional implementation tools to support use.
		• When a resource had a user-friendly structure and layout and information was displayed clearly, it was easier to use.[4]
		 • Users preferred a resource that was not overly complex with fewer components/elements.[5]
		 • Tools to support use by frontline workers (e.g., how-to guides, job aids, or FAQs) facilitated use.[2,6]
		 • Providing resource documents that were in the local language and were easy to understand facilitated use.[6]
		 • Testing or piloting content with the community to ensure appropriate interpretation was helpful for implementation.[6]
		 • The perception that a resource was bulky, complex, or difficult to use was a barrier to use.[1,2]
		 • Resources that were too long, complex, difficult to understand, or difficult to use were not preferred.[4]

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TABLE 1. WHAT TO CONSIDER WHEN CHOOSING A RESOURCE, CONTINUED

CHARACTERISTICS OF THE RESOURCE	WHAT RELATED STRATEGIES COULD IMPROVE UPTAKE AND USE?	WHY IS THIS CHARACTERISTIC IMPORTANT? *WHAT DOES THE LITERATURE TELL US?*

Relative advantage
 	
 The resource is perceived as an alternative that improves existing ways of working and is complementary, not in opposition, to existing interventions and programming.
	• Evaluate the resource for relative advantage using criteria including…
	     Better than alternatives
	     Helps improve work
	     Compatible with work responsibilities
	     Not duplicative of other resources
	 • Pilot test the resource with local workflows.
		• Participant perception that a resource was better than alternatives facilitated resource use.[1]
		 • When health care workers (HCW) perceived that a resource helped them do their jobs better, they were more likely to use it.[2]
		 • When a resource was not compatible with other work responsibilities (e.g., the resource did not fit into busy schedules), implementation was not as successful.[1]
		 • When a resource was duplicative to those already in use, the new resource was less likely to be used.[3]

Effectiveness
 	
 The resource should be developed or supported by a trusted source. It should deliver on its promises, have strong evidence of efficacy, and make recommendations based on the evidence.
	• Evaluate the resource for effectiveness using criteria including…
	     Content is supported by evidence
	     Resource developed by a credible source
	     There is evidence of resource efficacy
		• Users preferred resources that provided strong recommendations based on high quality evidence.[5]
		 • When the resource content was developed by credible and representative developers, it was more likely to be used.[4]
		 • It is helpful when a resource provides a clear connection to the evidence or rationale for inclusion of content.[4]

Adaptable with local input Resources should acknowledge that adaptations may be needed to enable implementation in different contexts. The resource should allow for some modification and could provide guidance on how adaptations can be made.	• Evaluate whether the resource allows for adaptation. • Seek input from local users to adapt the resource. • Identify local adaptations that may be helpful. • Adapt the resource to the local context.	• Implementation was more effective when the implementation approach was modified based on the user and their level of knowledge and experience.[6] • Resource implementation was improved when resources allowed for adaptations to be made to fit the local context.[2,7] • Resources were improved when developers included processes for user reporting and feedback and continued to review and update materials based on learning during implementation. [7,8] • Poor local adaptability was a barrier to resource use.[4]

TABLE 2. WHAT TO CONSIDER WHEN IMPLEMENTING A RESOURCE?

When implementing a well-chosen or designed resource, it is important to be aware that individuals, teams and organizations, and the broader context can support or impede implementation.

WHAT FACTORS ARE ASSOCIATED WITH RESOURCE UPTAKE AND USE?	WHAT RELATED STRATEGIES COULD IMPROVE UPTAKE AND USE?	WHY IS THIS CHARACTERISTIC IMPORTANT? *WHAT DOES THE LITERATURE TELL US?*
Sufficient training and capacity building for users Training and technical assistance is provided to prepare individuals to use the resource with fidelity. Training should be appropriate for the audience, of sufficient duration, and integrated with existing training processes and systems. Supportive supervision should be provided to all members of the team during resource use.	• Offer multidisciplinary training for staff. • Provide ongoing training and technical assistance to support use. • Create systems for supportive supervision. • Leverage existing training systems when possible.	• Resource use was improved when there was sufficient training/orientation provided for staff to be able to use the resource. This included training in resource use, capacity building, and ongoing technical support.[5,8,9] • Providing multidisciplinary training for diverse staff facilitated resource use.[2,7] • Supportive supervision was important to support resource use.[9,10] • Leveraging existing education or training infrastructure or ongoing training opportunities was an effective strategy to support resource use.[2,7] • When training was not provided, insufficient or not well coordinated this was a barrier to implementation.[1,2,11] • When there was insufficient local supervision or supervision was restricted by limited resources or geographic limitations, resource implementation was limited.[8,10] • Resource implementation was less successful when HCW had difficulty interpreting information due to lack of training.[10]
User buy-in for the resource Users are aware of the resource and motivated to use it. They believe it is important, that it can improve their work, and that it addresses a perceived need. This may involve a consideration of what incentives are needed for using the resource.	• Identify and leverage champions that support the resource. • Articulate the rationale for using the resource, including why change is needed. • Provide appropriate incentives for resource use. • Consult with front line workers on resource implementation.	• When users felt that there was a need for change (e.g., perceived lack of own knowledge), they were more likely to use a resource.[1] • HCW were more likely to use a resource when they believed that the resource was important, that it significantly impacted healthcare delivery, and that it was helpful.[2] • Resource implementation is enhanced when clinical staff are engaged in resource use and there are clinical champions for the resource.[7] • Consultation with health workers on the ground to understand their needs helped support resource use.[3] • Reluctance to change practices led to less interest in the resource.[7] • Lack of stakeholder awareness of resource and its rationale limited resource implementation.[5] • Absence of expected incentives led to high staff turnover, low participation rates in implementation of resources.[10]

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Effective messaging and communication There are effective systems and processes to support communication about the resource and its implementation. This may include necessary systems to communicate with frontline staff. Also important are clear and consistent messages about the resource.	• Craft clear, standardized messaging about the resource. • Leverage or strengthen communication systems. • Establish communication process with frontline workers.	• When the process for communicating with frontline staff was challenging, implementation was difficult.[9] • It was difficult to use resources when there wasn't standardized messaging for the target audience.[5] • Conflicting messages about the resource contributed to confusion on which agency or personnel was responsible for implementation, what the objective of the resource was, and where the funding was coming from.[3]
Sufficient human resources There are enough people with the time, training, and expertise to use the resource as intended.	• Ensure sufficient human resources are dedicated to resource implementation.* • Plan for staff attrition during implementation.	• Staff attrition/turnover was a barrier to resource implementation.[2,10] • Staff were overburdened, which decreased their ability to use the resource.[2,9] • Human resource constraints, including insufficient human resources, limited resource implementation.[5,7,9]
Funding/financial support There are dedicated funds and financial means, from private and/or public sources, to support resource implementation which includes resource procurement, training, monitoring and evaluation, and unexpected delays or issues.	• Ensure there are sufficient dedicated funds to support sustained resource implementation. • Consider multiple sources of resources, including local and federal government, donor, and non-health related sectors. • Provide resources to build organizational capacity prior to implementation. • Fund critical elements of implementation including training, supervision, monitoring and evaluation, data infrastructure, and responding to unexpected problems.	• External donor funds were important for resource implementation.[12] • Provision of financial support was needed for supportive supervision and training.[8,10] • Funds were needed to support organizational capacity prior to implementation.[7] • Identification of sources of non-health stakeholder funding can contribute to the success of resource goals.[3] • When national funds were limited, districts were expected to allocate their own funds and resources, limiting implementation.[10] • Limited domestic public health funding and investments were a barrier to implementation.[5] • Lack of operating budgets to support scale-up or address unexpected problems created challenges during implementation.[5] • Insufficient dedicated financial support for the implementation and monitoring and evaluation of the resource impeded implementation.[7] • Lack of government funding to sustain implementation was a challenge.[1]

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*Closely related to and dependent upon funding/financial support

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Local and national data systems Data is available, consistent across all systems, and of high quality. It is collected and reported regularly and completely and is easily understood among all stakeholders to be applied for successful use or implementation of the resource.	• Provide training and capacity building in data collection and use. • Develop tools to support data use. • Develop systems for data review and quality assurance. • Leverage or strengthen national data systems.	• Support for capacity building and implementation of data quality self-assessments was important for implementation.[8] • Review meetings and wall monitoring charts facilitated the use of data for action.[10] • Inconsistent monitoring of program performance or using data for decision-making was a challenge.[8] • Poor quality data collection and reporting at health facilities, including persistent discrepancies between data collected manually and data reported in monthly summary reports, impeded implementation.[8] • Discrepancies between national population figures and local estimates made it difficult for health workers to target interventions.[10]
Sufficient equipment, supplies, and infrastructure There is enough appropriate and high-quality equipment, supplies, and other physical resources to implement the resource as intended.	• Ensure that there is sufficient funding to support necessary equipment and supplies to use the resource.* • Invest in and/or leverage national infrastructure including transportation and information technology.	• Availability and use of supplies were important for implementation.[13] • Adequate infrastructure (e.g., strong internet connection) was needed to communicate challenges and strategies.[6] • Lack of transportation was the most reported challenge to implementation.[13]
Positive team culture There is respect for and confidence in other members of the team who will implement and use the resource, and team members feel part of and supported by their organization.	• Prioritize understanding team culture when planning for resource implementation. • Identify opportunities to strengthen or build a positive team culture. • Include non-clinical staff when building a team culture.	• Collective efficacy emerged as more essential to implementation than self-efficacy.[1] • Individuals articulating respect for fellow colleagues was reported as a facilitator of resource implementation.[1] • It was important for individuals to be confident in colleagues' capacity to contribute equally to patient and community health, regardless of discipline and education level.[1] • Individuals voluntarily identifying with the organization supported resource use.[1]

TABLE 2 CONTINUED ON NEXT PAGE

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Leadership support Leaders of the organization are dedicated to and supportive of implementation of the resource.	• Create an implementation sustainability plan with decision-makers. • Establish organizational leadership's commitment to successful implementation of the resource.	• The level of commitment and seriousness of organizational leadership was important for resource implementation.[1] • It was difficult to sustain the implementation of the resource without a plan involving the decision-makers.[3] • Strong national and health care facility leadership were important for resource implementation.[7]
Political commitment and policy alignment The intentional and sustained actions over time of government body or government personnel towards the success of resource implementation, including legislation, regulations, and rules designed to promote the resource and its use. Political commitment includes buy-in from governmental officials and may involve expressing support for resource use or addressing barriers.	• Identify champions at various levels of government to support uptake and use of the resource. • Ensure implementation and use of the resource aligns with laws, regulations, and policies at all levels of government. • Communicate with political officials to promote strong government leadership and legislation.	• Strong political commitment or buy-in from government bodies or officials helped ensure activities were implemented despite problems (e.g., funding delays).[13] • Coordinating policies at all levels ensured that they were complementary to one another when implementing a resource.[5] • Legal protection and regulatory frameworks were essential for effective resource use and uptake.[5] • Strong national public health legislation and regulations were important factors for successful implementation of a resource.[5] • Misalignment of national legislation, regulations, and policy caused challenges for successful implementation.[5]
Strategic partnerships A relationship between two or more organizations or groups to share resources, information, or personnel to achieve a shared goal of supporting resource use. Strategic partnerships may involve different actors from the public or private sector as well as community representatives and other stakeholders.	• Identify prospective partner organizations or groups that share a common purpose. • Understand and leverage complementary skills, resources, and personnel of key stakeholders across partnerships. • Develop methods to collect stakeholder feedback on resource implementation.	• Successful implementation of programs demonstrated collaboration among multiple sectors.[5] • Coordination among communities, local organizations, and the private sector to mobilize resources was important for implementation.[10] • Understanding community concerns was essential to securing community buy-in for resource implementation.[6]

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