Vaccinating older adults against COVID-19

World Health Organization
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ACRONYMS AND ABBREVIATIONS

AEFIs  adverse events following immunization
BeSD  behavioural and social drivers of vaccination
COVID-19  coronavirus disease
HBRs  home-based records
IEC  information, education and communication
IVB  Immunization, Vaccines and Biologicals
LTC  long-term care
NCD  noncommunicable disease
NGOs  nongovernmental organizations
SAGE  Strategic Advisory Group of Experts on Immunization
UN  United Nations
WHO  World Health Organization
Objectives of this document

The objective of this document is to identify successful strategies, enablers and examples of successful strategies to identify and offer vaccine doses against coronavirus disease (COVID-19) to older adults, especially in low- and middle-income settings.

Target audience

The primary target audience for this document includes national and subnational managers of immunization and other programmes who deliver health and social services to older adults. Global, regional and country level stakeholders and partners (i.e. nongovernmental organizations (NGOs), community service organizations) who support the design, planning, implementation, monitoring and evaluation of COVID-19 vaccinations and care for older adults may find this guidance useful as well.
The COVID-19 pandemic has had a significant impact on older adults (ages 50 or 60 years are commonly used cut-offs for identifying older adults but the appropriate age cut off should be made at the country-level), with the highest proportion of severe disease and death concentrated in this age group (2, 3). Besides these direct outcomes, the sequelae of COVID-19 often result in significant loss of physical and mental capacities and functional ability, requiring additional care (4, 5). Public health and social measures have also led to isolation of older adults and, in many instances, have limited their freedom to go about their day-to-day activities. The World Health Organization (WHO) recommended prioritizing older adults to receive the primary series and booster doses of COVID-19 vaccines (6) (see below for recommendations). Yet reaching this group is difficult in many settings, as national immunization programmes traditionally target infants, children, adolescents and women of reproductive age. In addition, fully reaching the older adult population requires different responses owing to its diversity. For example, access to health care, functional ability levels and health literacy need to be considered.

The COVID-19 pandemic has highlighted issues of ageism evident in the large disparities in access, uptake barriers and existing gaps in health and social services and systems for older adults. Embarking on the United Nations (UN) Decade of Healthy Ageing (2021–2030) (9) – a concerted global effort related to healthy ageing – is urgently needed to improve the lives of older adults, their families and communities. The strategic plan for the decade addresses four areas of action, which include combatting ageism, creating age-friendly environments, delivering integrated care and primary health services oriented towards older adults and providing access to long-term care for older adults who need it. The COVID-19 pandemic has provided an opportunity to build and strengthen health and social services under universal health coverage and within communities that could better serve older adults, and to adopt a life course approach to immunization.

The Immunization Agenda 2030 (10) also highlights the life course approach by recognizing that life-saving vaccines are of benefit across one’s life span. Ideally, immunizations should be a fundamental part of integrated care available to older adults. It is anticipated that COVID-19 vaccines may continue to be delivered as periodic boosters for older adults (6). Moreover, as is done in childhood programmes, any contact with the health system (at primary care and/or hospital level) should be used as an opportunity to vaccinate older adults.

Older adults are a heterogenous group with various levels of physical and mental capacity and health and care needs. While some may have multiple comorbidities and require daily assistance, many live independently and are able to navigate their needs easily. Drawing broad generalizations is challenging. Nonetheless, in order to reach the most at risk, governments must consider the barriers and enablers that could improve access to health interventions, such as immunization, to effectively reach older people.

This guidance document reviews the principles that should be applied in the context of COVID-19 vaccination operations when creating or leveraging existing services for older adults and better integrating older people’s health and care needs into existing services and universal health coverage. The document summarizes the planning to be undertaken to create a successful COVID-19 vaccination platform to serve older adults. Illustrative country examples are also provided.
WHO COVID-19 vaccine recommendations for older adults

In the WHO SAGE Roadmap on uses of COVID-19 vaccines in the context of omicron and substantial population immunity (6) for prioritizing the use of COVID-19 vaccines, WHO advocates for vaccine doses to be offered to those at most risk of severe disease and death due to COVID-19. The high priority group includes older adults, with a coverage target of 100% (11, 12). For each specific emergency use listed COVID-19 vaccine, WHO recommends that a primary series and additional booster doses should be given for optimal protection of older adults (13).

Principles for vaccinating older adults

Older adults are often harder to reach by traditional immunization programmes, as few vaccines are routinely offered to this group beyond seasonal influenza and pneumococcus. In some locations, no immunization programmes are offered to older adults at all, or services may be poorly designed to meet their needs. Additionally, health systems often focus on curative rather than preventive measures such as vaccines. In addition to these system level issues, older adults may have physical and/or cognitive impairments which make them more reliant on caregivers to attend clinics. Because older adults are not routinely engaged or empowered through communication and demand-generation activities (14), they may not have adequate awareness of the vaccines available to them. The products used to disseminate information may not meet the challenges of older adults, which may range from visual impairment, hearing loss or cognitive decline to accessibility to social media or digital tools. In settings where social media and digital tools are used extensively, older adults may not be able to learn more about the benefits of vaccines, access or how to register for vaccination services. In light of these considerations, several overarching principles can guide programmes to reach this vulnerable population (Table 1).

<table>
<thead>
<tr>
<th>Table 1. Principles for vaccinating older adults</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership- and people-centred approach</strong></td>
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<tr>
<td>Involves older people in programme management and working groups.</td>
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<tr>
<td><strong>Inclusiveness</strong></td>
</tr>
<tr>
<td>Involves all segments of society, regardless of age, gender, ethnicity, location or other social category.</td>
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<tr>
<td><strong>Multistakeholder partnerships</strong></td>
</tr>
<tr>
<td>Multistakeholder partnerships are mobilized to share knowledge, expertise, technology and resources and to participate in the delivery of services.</td>
</tr>
<tr>
<td><strong>Leaves no one behind</strong></td>
</tr>
<tr>
<td>Applies to all adults, whoever and wherever they are, targeting their specific challenges and needs.</td>
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<tr>
<td><strong>Intergenerational solidarity</strong></td>
</tr>
<tr>
<td>Enables social cohesion and interactive exchange among generations (including older adults themselves) to support health and well-being for all adults.</td>
</tr>
</tbody>
</table>

Source: Adapted from (7).
Strategies

Regardless of the strategies used, microplanning to reach older adults should consider the following:

- **Identification of the target population:** using processes such as census data, voter registration, government pension plans as well as formal or informal processes such as knowledge from community health workers. Knowing where to find older adults will help delineate the best strategies to reach them.

- **Acceptability:** social customs, religious and cultural norms, trust in public services, high-quality services, health workers and communications, timing, location (safety and reliability), preferences and integration with other services (such as other primary health services).

- **Accessibility (includes availability):** terrain, hours of services, location (such as remotely located and hard-to-reach older age groups), minimizing cost (direct and indirect), marginalized populations (including migrants and tribal groups), rural and remote populations, highly mobile or nomadic populations, conflict-affected areas and fragile contexts (such as natural disasters).

- **Approachability:** behaviour of vaccinators and frontline workers and perceived quality and trust in services and past experiences with health workers.

Examples of strategies that could be used:

- Fixed vaccination sites in health facilities, with a focus on facilities with high usage by older people such as community centres, noncommunicable disease (NCD) clinics and physiotherapy clinics. This approach could also allow for integration with other primary health services.

- Community-based outreach sites, e.g. pharmacy sites, places of worship, community and daycare centres, weekly markets, workplaces (for older adults who work), banks, supermarkets and older people associations.

- Mobile teams (e.g. house-to-house, including long-term care facilities).

- Mass vaccination clinics or periodic campaigns targeting older populations.

COVID-19 vaccination programmes should be integrated into delivery of health care for older adults as much as possible. Periodic booster doses based on age are recommended (6). The potential of complementary delivery strategies, examples of sites as well as some of the different considerations needed for each of the delivery strategies are shown in the table in Annex 1.

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**BOX 1. Examples of integrated strategies used by selected countries**

The immunization programme of the United Republic of **UNITED REPUBLIC OF TANZANIA** partnered with the HIV programme to vaccinate adults living with HIV/AIDS for COVID-19, while other programmes collaborated with physicians treating chronic diseases (e.g. diabetes, hypertension) to provide vaccination during specialist clinic days (Shibeshi M, WHO Member State briefing, unpublished observations, 21 April 2022).

As a part of Vaccine Week in the Americas 2022, **PANAMA** focused on co-administering influenza vaccination along with COVID-19 vaccines to older adults to prevent respiratory illnesses and hospitalizations (15).

**NIGERIA** used a “whole family approach” which combined COVID-19 vaccination with health care services such childhood vaccination, treatment for malnutrition and screening for noncommunicable diseases. Families were able to come to the clinic and receive any of these services that they needed (16).
Increasing demand and vaccine uptake

Understanding behavioural and social drivers (BeSD) of vaccination: To increase vaccine coverage requires an understanding of the reasons why uptake may be low or stagnating, tailored and evidence-based interventions to improve uptake, and monitoring and evaluation to determine the impact and sustainability of interventions. To support an understanding of what drives vaccine uptake, tools and guidance on BeSD of vaccination are available, including population surveys, interview guides and priority indicators to support standardized measurement and tracking (17, 18).

The BeSD tools are accompanied by a framework with four domains of behavioural and social drivers (Figure 1), which are specific to vaccination and potentially modifiable to increase uptake:
1) Thinking and feeling, which includes the cognitive and emotional responses of people to vaccine preventable diseases and vaccines;
2) Social processes, which includes social norms about vaccination and receiving recommendations to be vaccinated;
3) Motivation, which includes the intention, willingness, and hesitancy of people to get vaccinated; and
4) Practical issues, which includes the experiences people have when trying to get vaccinated, including barriers faced, e.g., accessing the vaccination sites or costs of transport to the clinic.

Depending on the specific objectives, context and target population, it may be necessary to add further questions to the existing BeSD survey or in-depth interviews to support an adequate understanding, e.g., to explore social processes, ease of access, or the service experience.

Using data to design and evaluate interventions:
Measures alone do not lead to action, and therefore it is necessary to use findings to design and implement interventions, and to include indicators for monitoring and evaluation. In planning interventions, four broad areas may be considered: community engagement; communication and education; service quality; and supportive policies.

In the implementation process, it is important to collaborate with local partners, experts, community representatives and older people to ensure that strategies are adequately tailored to local needs and to specific characteristics of the prioritized population.

Leverage existing programmes: The applicability of other preventive health interventions, such as NCD screening and influenza vaccination in older adults, can be explored by countries for potential learning. Countries may use community sites close to older adults to reduce travel time, minimize costs and decrease the logistical barriers to attending a clinic. Developing a plan to reach older adults may require conducting surveys (in writing or through interviews) or holding community meetings, focus groups for older persons and so forth to gather preferences on vaccine strategy and sites to maximize uptake.
Examples of communications and demand generation used by selected countries

In **MOZAMBIQUE**, solar-powered radios were distributed by HelpAge International to older adults in rural communities to enable them to receive COVID-19 communication and community news (19).

The **KENYA** Red Cross launched an initiative to make communication more age friendly. The initiative facilitated engagement of adults with sensory or physical disabilities, or with limited social engagement or levels of education in communication campaigns. The campaigns used sign language interpreters, door-to-door visits to households identified as having older residents and outreach to organizations for older adults and adults with disabilities, employing simplified messaging and translation into all languages (19).

In collaboration with the national TV channel in **MAURITIUS**, video clips were broadcast at peak hours to promote COVID-19 vaccination among the population. A telephone hotline and radio programmes were developed to keep older adults continuously informed about COVID-19 (19).

In **SOUTH AFRICA**, older adults could register with the electronic vaccination data system online, via WhatsApp, SMS, telephone or QR code on their phone. Older adults living in long-term care facilities were registered by their facilities and were vaccinated on-site (18).

In the United Republic of **UNITED REPUBLIC OF TANZANIA**, the immunization programme collaborated with HelpAge to leverage their networks to conduct intergenerational dialogue and other activities to provide information, address misinformation and create demand for vaccination among older adults (20).

In **PANAMA**, the Ministry of Health established exclusive vaccination sessions or schedules for older adults in order to ensure that their specific needs and preferences were provided.

In **URUGUAY**, the Ministry of Health implemented several communication strategies specifically designed to reach older adults. These included direct phone calls to older adults for appointments and vaccine reminders, as well as a campaign specifically designed to be in payment centres, a space frequented by older adults in the country.

In **NIGERIA**, the Ministry of Health was able to leverage the polio business case and resources, including vaccinators to provide COVID-19 vaccinations (21).
Engage community partners

Community partners (i.e. community groups, NGOs already working with older adults or working with persons with disabilities as well as new partners such as supermarkets) may help disseminate information, identify where and how to target older adults, help link older adults with vaccination services and provide transportation to vaccination sites. These partners should be included in operational planning and outreach activities to identify information needs and logistical considerations such as accessible locations. Such efforts include planning modifications that may be needed, such as special hours for adults who need extra assistance, extra time before and after the appointment, ample space for those using assistive products (e.g. canes, walkers, wheelchairs), documents in a font size that older adults can read and providing seating and access to toilets and refreshments.

Caregivers (formal and informal) provide necessary support to help older adults or assist people with disabilities with daily activities. Opportunities should be provided for caregivers (i.e. family members, personal care aides, home health care providers and other caregivers) to be vaccinated at the same time as those for whom they provide care. This may facilitate on-site vaccination options for adults who are homebound and reduce the likelihood of wasting vaccine.

**BOX 3.**

Examples of engaging community partners to improve access to vaccination in selected countries

In **RWANDA**, *mutwarasibos* (community leaders) have household registers that allow older adults to be reached for providing food aid, cash transfers, vaccination and communication campaigns (19).

In **GHANA**, older adult care organizations used their own networks to encourage their clients to get vaccinated. The organizations registered their clients for vaccination and also directly provided information to them about the vaccine and its side effects (19).

In **MAURITIUS**, community health workers were involved in reaching out to or registering older adults for vaccinations. The older adults were invited to attend the vaccination centre nearest to their place of residence and were registered before the first dose was given. Clients were given an appointment for the second dose, and reminders were sent to them (19).

In Tamil Nadu, in **INDIA**, with the support of district health departments and the Mahatma Gandhi National Rural Employment Guarantee Act, vaccination has been provided at the worksite so that beneficiaries, including those who are older, do not lose their daily wage (20). HelpAge India provided the transportation (bus) between home and the vaccination centres (20).

HelpAge **UNITED REPUBLIC OF TANZANIA** built the capacity of key stakeholders in older people’s associations to become vaccine champions/advocates. Consequently, cascade training and capacity building were provided by vaccine advocates to older people in their specific regions (20).

HelpAge **UNITED REPUBLIC OF TANZANIA** mobilized home-based care workers and Active Ageing Club members to disseminate COVID-19 vaccine information, and identify and mobilize older people for vaccination (20).
Adverse Events following immunization

Adverse events following COVID-19 vaccination do not appear to be more prevalent or different in older adults compared to other age groups. Nonetheless, countries should have in place a robust system for vaccine safety monitoring and detection of adverse events following immunization (AEFIs). Management of AEFI cases, even while further investigation and causality assessment are ongoing, should be provided. Findings of case management (i.e. clinical diagnosis) feed into the causality assessment process.

AEFI committees may need additional training or members with appropriate expertise to assess adverse events in older adults. Older adults may have comorbidities and generally have higher hospitalization rates, which may need to be taken into account when determining causality.

Recording and monitoring

As with other age groups, recording doses, monitoring vaccine uptake and some flexibility in the information system used to accommodate other vaccines (e.g. influenza) must be part of the process. A home-based record (HBR) should be provided to all individuals who are vaccinated to ensure they know their own vaccination status, and instructions for further doses should be provided. Older adults should also be shown how to access and store their HBR. A reminder and recall system should be set up to assist with completion of a second dose and further booster doses. The record (electronic or paper based) should include at least the following information: date of vaccination, type/brand of vaccine used, number of dose (first, second, booster) and the lot number.

Depending on delivery strategy used and the degree to which integration with other programmes is possible, training on how to correctly record and report vaccination status will be needed. If services are being delivered by programmes other than the national immunization programme, these programme staff will need to be trained how to record and report vaccine doses.

Data that are collected as a part of monitoring activities must be analysed, ideally in a way that disaggregates by age groups (e.g. 5 years of age groups, 60-65, 65-70, etc), sex and other important parameters. Periodic reviews of the data and analysis should be used to create a feedback loop to improve processes, delivery and services offered to older adults.

In summary, older adults are a unique population with needs that differ from those many immunization programmes are accustomed to and have experience with. With careful planning, the success that has occurred with routine childhood programmes can be extended to older adult programmes.
REFERENCES


Annex: Summary of methods

This document was developed by the WHO Department of Immunization, Vaccines and Biologicals (IVB) in collaboration with Department of Maternal, Newborn, Child and Adolescent Health and Ageing based on existing WHO recommendations on COVID-19 vaccines and guidance documents (e.g. *Updated WHO SAGE roadmap for prioritizing uses of COVID-19 vaccines*, *Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines*, all the COVID-19 vaccine-specific interim guidance documents, *UN Decade of Healthy Ageing 2021–2030* and *Decade of Healthy Ageing: plan of action*). Feedback was solicited through a broad consultative and iterative review process. Inputs from partners (e.g. International Federation on Ageing, HelpAge) and subject matter experts at WHO regional offices and headquarters are reflected herein.

We also gathered very short country examples from our regional colleagues and partners to demonstrate how countries have adapted immunization delivery with the roll-out of COVID-19 vaccination to accommodate the needs of older adults and to add to systems already in place to reach older adults. The country examples were chosen based on their relevance to integrated strategies to reach older adults, leveraging community partners, and promoting communication and demand generation.

All contributors, including partners who contributed, were asked to complete declaration of interest forms and were assessed for potential conflicts of interest as per WHO policy. No conflicts of interest related to this work were found.

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Table A1.1. Considerations for different vaccination strategies in older adults

<table>
<thead>
<tr>
<th>Settings&gt;</th>
<th>Fixed health care facilities (e.g. public or private – hospitals, primary care clinics, NCD Clinics, physiotherapy clinics)</th>
<th>LTC facilities (e.g. residential facilities, old-age homes, nursing homes, assisted-living facilities, mental health facilities)</th>
</tr>
</thead>
</table>
| **Delivery strategies**† | • Known location  
• Different care pathway might be required  
• Can integrate into disease and function management care pathway | • Older adults may already be on-site  
• Does not reach older adults within the community |
| **Geographical access** | • May already be accessible by public transit, suitable for wheelchairs or equipped with ramps  
• Signage to vaccination site may need to be in large print | • May be wheelchair accessible  
• May already have signs in large print  
• Residents are likely already familiar with the site |
| **Physical access** | • May need more intensive and targeted mobilization for older adults to attend  
• Engage reception, pharmacy staff and physicians at the health facility to identify vaccination needs and refer older adults to the vaccination site  
• Display of IEC materials related to COVID-19 vaccine at prominent places, and availability of vaccination at the facility | • Client base is well defined to allow focused mobilization  
• Facility staff can assist with communication and demand generation  
• Ministry of health can engage facility staff in vaccination activities on vaccine clinic days |
| **Community mobilization** | • Vaccine storage may be available at some facilities; for others a vaccine distribution plan needs to be prepared | • Preparation of vaccine logistics distribution plan from nearest vaccine store will need to be detailed |
| **Vaccine supply** | • Cold chain is usually available | • Vaccine carriers and ice packs most likely need to be prepared to maintain the cold chain |
| **Cold chain** | • Help to strengthen older adult health services (e.g. screening for NCDs, coadministration with influenza vaccine) | • Help to strengthen older adult health services (e.g. screening for NCDs, coadministration with influenza vaccine) |
| **Integration opportunities** | • Low if supported by health care budget  
• Additional training for health facility staff might be required | • Medium-high (depends whether using existing LTC staff is possible or whether COVID-19 vaccination services can be integrated into existing services)  
• Additional training for facility staff may be required |
| **Cost** | |

† Many countries report using multiple delivery methods to reach older adults; these strategies may therefore be complementary. COVID-19: coronavirus disease; IEC: information, education and communication; LTC: long-term care; NCD: noncommunicable disease; NGOs: nongovernmental organizations.
<table>
<thead>
<tr>
<th><strong>Community outreach</strong> (e.g. markets, places of worship, pharmacies, community centres, social clubs, workplaces, weekly markets and routine vaccination sites)</th>
<th><strong>Outreach</strong> (e.g. house to house and teams for hard-to-reach sparse populations, detention centres, prisons)</th>
<th><strong>Mass campaigns</strong> (i.e. mass vaccination centres set up in stadiums, shopping malls, social or religious gathering places and school gymnasiums or large spaces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Shorter travel to the site within the community</td>
<td>• Mobile vehicles or posts can be positioned closer to where older adults live</td>
<td>• Require travel to site</td>
</tr>
<tr>
<td>• Arrangements may need to be made to ensure accessibility for those with mobility assistive products (e.g. cane, wheelchair)</td>
<td>• Easier access points when using house-to-house visits</td>
<td>• Information on the location needs to be shared with older adults and caregivers</td>
</tr>
<tr>
<td>• Signage needed to direct to vaccination site</td>
<td>• More accessible for those with loss of mobility or disability and who are homebound or bedridden</td>
<td>• Arrangements may need to be made to ensure accessibility for those with mobility assistive products and signage to direct to vaccination site</td>
</tr>
<tr>
<td>• Site may need to be modified to allow for noise dampening and good lighting</td>
<td>• Requires engaging health workers, community mobilizers, NGOs, religious leaders and community representatives to inform and mobilize older adults</td>
<td>• Site may need to be modified to allow for noise dampening and good lighting</td>
</tr>
<tr>
<td>• Requires engaging health workers, community mobilizers, NGOs, religious leaders and community representatives to inform and mobilize older adults</td>
<td>• Displaying IEC materials such as banners and posters helps to generate demand</td>
<td>• Needs strong mobilization</td>
</tr>
<tr>
<td>• Displaying IEC materials such as banners, and posters helps to generate demand</td>
<td>• Having the same outreach locations as for other vaccinations may make mobilization easier than a new site would</td>
<td>• Engage local newspaper, radio, FM and TV channels for awareness</td>
</tr>
<tr>
<td>• Having the same outreach locations as for other vaccinations may make mobilization easier than a new site would</td>
<td>• Challenging to know the exact number of older adults who will attend outreach sessions</td>
<td>• Displaying IEC materials such as banners, posters and leaflets may help to generate demand</td>
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<tr>
<td>• Challenging to know the exact number of older adults who will attend outreach sessions</td>
<td>• Preparation of vaccine logistics distribution plan from nearest vaccine store will need to be detailed</td>
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<tr>
<td>• Preparation of vaccine logistics distribution plan from nearest vaccine store will need to be detailed</td>
<td>• Vaccine carriers, cold boxes and ice packs must be prepared to maintain the cold chain</td>
<td>• Vaccine carriers, cold boxes, and ice packs are needed</td>
</tr>
<tr>
<td>• Vaccine carriers and ice packs must be prepared to maintain the cold chain</td>
<td>• Co-delivery with short-duration interventions possible (i.e. NCD screening)</td>
<td>• Temporary vaccine storage at a large site may be needed</td>
</tr>
<tr>
<td>• Co-delivery with short-duration interventions possible (i.e. NCD screening)</td>
<td>• Co-delivery with routine vaccination</td>
<td>• Integrate with other health services (e.g. health check-ups, NCD screening) and campaigns (e.g. influenza vaccine), whole family care (see box 1)</td>
</tr>
<tr>
<td>• Co-delivery with routine vaccination</td>
<td>• Co-delivery with other home interventions such as NCD screenings and home-based long-term care that include other family members (neonatal, pregnancy care) – i.e. whole family care</td>
<td></td>
</tr>
<tr>
<td>• Medium-high (depends whether using existing outreach sessions that are already planned and funded)</td>
<td>• Generally high (but for small and hard-to-reach populations may be more cost-effective)</td>
<td>• Generally high (but may be more cost-effective for small and hard-to-reach populations)</td>
</tr>
<tr>
<td></td>
<td>• Additional budget for per diems, transport, demand generation, etc.</td>
<td>• Additional budget for set up of new vaccination site, per diems, transport, demand generation, etc.</td>
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