

Summary of Key Evidence Related to Zero Dose and Primary Health Care

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As part of Gavi 5.0's ambitious agenda to “leave no one behind” on the path to achieving the 2030 SDGs, Gavi has commissioned the International Vaccine Access Center (IVAC) to produce evidence-based and policy-relevant knowledge products relevant to Gavi's equity approach in wider political and policy spaces. **This knowledge summary is the fourth in a series of six (6) documents which aim to provide a snapshot of recent key evidence related to a specific topic or area of interest. This document draws upon peer-reviewed literature to illustrate how primary health care can strengthen the immunization equity agenda.** Presented here are the results of a search conducted through November 2022. Key findings are briefly described below while the related advocacy brief provides more detailed information and context.

Introduction

Vaccination is a cornerstone of primary health care (PHC) and a health intervention recognized as key to achieving the ambitions of the Sustainable Development Goals (SDGs) as well as Immunization Agenda 2030 targets. Immunization coverage is often used as an indicator for monitoring the coverage of PHC services and measuring progress of Universal Health Coverage (UHC) as part of the third SDG to “ensure healthy lives and promote well-being for all at all ages”^{1,2}. Additionally, immunization services have been found to strengthen key building blocks of the PHC system such as the supply chain, data monitoring, disease surveillance, human resources for health, health information systems, and community outreach^{3,4}. Access to vaccines is arguably part of a right to life⁵.

PHC aims to provide accessible, affordable care to the whole person as well as the whole of society, making it an important lever for advancing health equity⁶⁻⁸. Key components of PHC include operating at the community level and seeking to address the health problems of all people living in that community⁷. Strong PHC programs engage with and empower communities by promoting access to trusted providers, including community health workers (CHWs)^{7,9,10}. For vaccination programs to be successful, community engagement is critical to ensure that children are taken to where they can receive immunizations—or immunizations may be brought to children in the community—and community outreach is supported by CHWs or other trusted community members. This requires linkages with health facilities to ensure access to supplies and to the facility-based health workforce^{2,10}. Populations in the hardest-to-reach areas typically have the least contact with formal health systems, resulting in reduced access to health services and high rates of morbidity and mortality¹⁰. Families that have been left out of essential health services and interventions are found to be at higher risk of having zero-dose children, which makes this population an important target for both immunization and PHC programs¹¹.

KEY DEFINITIONS

Zero-dose children are those who have not received any routine vaccine. For operational purposes, Gavi defines zero-dose children as those who have not received their first dose of diphtheria-tetanus-pertussis containing vaccine (DTP1). Tracking the complete lack of DTP helps to identify children with limited access to primary health care since it is offered almost exclusively through routine immunization touchpoints with the health system¹².

Primary Health Care (PHC) is defined by WHO and UNICEF as “a whole-of-society approach to health that aims to ensure the highest possible level of health and wellbeing and their equitable distribution by focusing on people’s needs and preferences (as individuals, families, and communities) as early as possible along the continuum from health promotion and disease prevention to treatment, rehabilitation and palliative care, and as close as feasible to people’s everyday environment”⁶.

Universal Health Coverage (UHC) ensures all people, everywhere, can get the quality health services they need without financial hardship. Strong primary health systems will be critical for achieving UHC^{7,13}.

Sustainable Development Goals (SDG) include 17 goals set forth by the United Nations that aim to address global challenges including poverty, inequality, climate change, environmental degradation, peace, and justice¹. Although not legally binding, countries are expected to take ownership and establish a national framework for achieving these goals by 2030.

Key Barriers for Immunization & Access to Essential Health Services

Approximately 730 million people around the world lack access to essential health services¹⁴. Children missed by vaccine services often live in areas and communities with limited access to PHC, and they often face systemic social and economic barriers to accessing essential health services¹⁵. Communities in urban slums, remote rural settings, and conflict zones are recognized as particularly vulnerable¹⁶. An analysis of PHC and vaccination data from 92 LMICs found that zero-dose children and their families were up to 46% less likely to receive PHC interventions—including antenatal care services, institutional delivery, care-seeking for childhood illness, and having access to handwashing facilities in the home¹². The authors found that this pattern held both across wealth quintiles within a country, and also across countries’ income groups.

Caregivers have reported similar barriers to accessing both immunization and essential health care services: poor roads, costly travel, difficulty providing care for other children at home, perceived poor quality of care at health facilities, and lack of trust in providers^{6,17}.

During the COVID-19 pandemic, pandemic control measures have negatively impacted both access to vaccinations and the delivery of essential health services, which has exacerbated pre-existing health inequities^{18,19}. At the end of 2021, nearly two years into the pandemic, 92% of countries still reported disruptions to their essential health services²⁰. The number of zero-dose children has risen from 9.3 million in 2019 to 12.5 million during the pandemic²¹. Without urgent remedial measures, the impact of

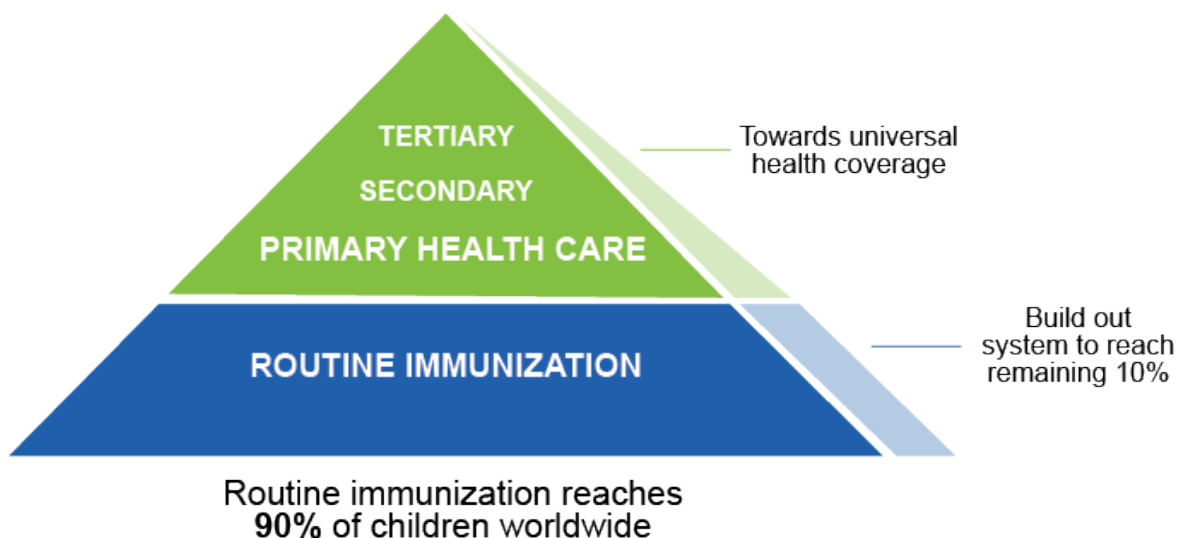
this drop in routine vaccine coverage could be felt for a generation. Millions of children could grow up unprotected against deadly diseases that vaccines have largely been keeping at bay.

Summary and Conclusions

As world leaders and decision makers face an increasingly resource-constrained world due to the intersecting impacts of COVID-19 with other global challenges such as climate change, debt, and geopolitical crises, investing in PHC and vaccination programs to promote health and economic security is all the more important today²².

Immunization offers opportunities to give communities access to a range of health services many times throughout their lives. Today, routine immunization reaches 90% of the world's children – more than any other health intervention – and is the only intervention that brings families into contact with the health system five or more times during the first year of a child's life³. Immunization can therefore serve as the base for the PHC pyramid and is a critical first step for reaching families in vulnerable and missed communities, in turn contributing to achieving UHC³.

Furthermore, immunization programs have positive spillover effects on the delivery of essential health services and serve as an entry point to the health system for many families in low-resource, hard-to-reach areas^{3,4}. This creates an opportunity for service integration, which improves the prospect of sustained UHC⁸. Evidence from the pandemic suggests that integrated service delivery across health system building blocks can help sustain routine immunization services, offer an opportunity for catch-up programs, and promote health system resiliency during health emergencies²³⁻²⁵. Integrated services, including vaccination campaigns, should be tailored to fit the local context and address the physical, social, and economic barriers that caregivers face to accessing vaccines for their children^{6,17}. These integrated services should include a community mobilization component and engage local community members to build families' trust in the health system, improve linkages with health facilities, and bolster demand for services^{10,18,26}. Together, immunization services and PHC are key to prevent future disease outbreaks; support surveillance; and improve prevention, preparedness, and response to health emergencies⁷.



Adapted from Gavi, 2019³

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