Despite a worldwide decline in deaths of mothers, newborns, and children over the past three decades, still more than 5 million children died before reaching their fifth birthday in 2019—nearly half in just the first month of life. Nearly 300,000 mothers die annually in childbirth or pregnancy. Even before the COVID-19 pandemic, progress toward global goals to save the lives of women and children was lagging by around 20 percent, according to a new report from Every Woman Every Child. The COVID-19 pandemic will likely exacerbate these inequities.

As COVID-19 spreads, many places are seeing essential health services disrupted as resources are diverted to pandemic response efforts, health centers are overwhelmed, and patients avoid seeking care out of fear of contracting the disease. Urgent action is needed to minimize disruptions to maternal, newborn, and child health (MNCH) services and to ensure these programs are strengthened even as the world fights COVID-19.

The good news is that the vast majority of maternal, newborn, and child deaths are preventable. To inform efforts to accelerate effective and equitable coverage of lifesaving MNCH interventions that are integrated into primary health care systems, PATH undertook a rapid but rigorous analysis of the status of access, uptake, implementation, and coverage of nine proven interventions. While these are not the only interventions required to improve women’s and children’s health, they serve as insightful examples for the unfinished agenda of scaling up lifesaving tools and approaches. Our analysis, conducted September through December 2019, leveraged publicly available data from 81 countries monitored through the Countdown to 2030 mechanism. These countries account for 90 percent of all child deaths and 95 percent of all maternal deaths worldwide. We also conducted in-depth interviews with global and national experts in seven focus countries.

Despite limitations in data availability and quality, we were able to identify more than 11,000 data points and create 14 interactive dashboards to visualize the status of these interventions along the pathway to scale-up (available at bit.ly/mnchassettracker). This brief summarizes key findings and offers policy recommendations for global and national decision-makers.

Findings

Based on our assessment, we grouped the interventions into three categories, or ‘archetypes’, based on common features and barriers to scale-up. Table 1 presents the barriers and proposed actions to overcome them for each category and for specific interventions.
<table>
<thead>
<tr>
<th>New and/or donor-dependent interventions</th>
<th><strong>Barriers</strong></th>
<th><strong>Proposed actions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoxicillin dispersible tablet for childhood pneumonia</td>
<td>Limited policy adoption; top-down focus of donors and partners leading to limited country ownership; lack of global coordination.</td>
<td>Focus on global, national, and subnational advocacy consensus. Transition from external support and build country ownership.</td>
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<td><strong>7.1% chlorhexidine for umbilical cord care to prevent newborn infections</strong></td>
<td>Nearly one-fourth of countries do not have guidelines. Inconsistent availability within countries.</td>
<td>Adopt and disseminate guidelines. Address procurement and regulatory issues.</td>
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<td>Community regimen for treatment of possible serious bacterial infection</td>
<td>New intervention—only 50 of 76 countries have adopted a policy and only 18 have fully integrated the intervention into maternal, newborn, and child health policies.</td>
<td>Focus on integrating guidelines and training health care workers. Explore promising approaches such as postnatal care visits.</td>
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<td><strong>Complex interventions, and those for specific cases</strong></td>
<td>Weak health system infrastructure; suboptimal training and lack of supervision; data gaps.</td>
<td>Strengthen implementation, delivery systems, and use of key training approaches and data.</td>
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<tr>
<td>Magnesium sulfate for hypertensive disorders of pregnancy</td>
<td>Health systems issues and low end-user confidence limit demand and timely use. Included on most Essential Medicines Lists (109 of 128), but implementation lags due to complex dosing and administration regimens, inconsistent supply and distribution, and lack of adequate diagnostic tools at delivery level.</td>
<td>Adopt and disseminate clear and consistent training and guidelines. Support development of simple and user-friendly formulations. Develop holistic strategies focused on early screening.</td>
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<tr>
<td>Tools for neonatal resuscitation</td>
<td>Insufficient equipment due to low funding and poor forecasting. Poor health worker training and retention of skills. Only 2 of the 7 focus countries have routine mentoring in place.</td>
<td>Prioritize improved mentoring of facility-level perinatal quality improvement teams and budget for equipment and training.</td>
</tr>
<tr>
<td>Available—but not equitable—intrventions</td>
<td>Uneven coverage across geographies and populations; poor product quality, use, or adherence rates.</td>
<td>Invest in more granular data to target inequities. Focus on product quality and innovation.</td>
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<tr>
<td>Iron folic acid to prevent maternal nutrient deficiencies, related birth defects, and low-birthweight babies</td>
<td>Despite near-universal policy adoption, adherence to full dosage is low due to inconsistent antenatal care attendance and inadequate quality of counseling and program monitoring.</td>
<td>Improve reach and quality of antenatal care, targeted and tailored by context. Simultaneously invest in better products and formulations.</td>
</tr>
</tbody>
</table>
Policy and program recommendations

PATH recommends the following actions for policymakers and other stakeholders at the global, national, and subnational levels to help achieve effective and equitable coverage of the nine interventions.

Global agenda

Continued efforts are needed to ensure MNCH interventions remain at the forefront of the global public health agenda, especially as countries work to maintain essential health services during the COVID-19 crisis and beyond. Where there are significant efforts, coordination is key.

- **World Health Organization and other normative agencies:** Align momentum around key global agendas focused on quality improvement, small and sick newborns, nurturing care, family-centered care, and respectful maternity care. Work toward integrated measures of these efforts, which also align with universal health coverage. Address outstanding needs for norms or coordination on specific interventions—such as integration of indicators for kangaroo mother care, alignment of training efforts for neonatal resuscitation within newborn care, harmonization of misoprostol guidelines, and storage labeling for oxytocin.

- **Governments:**
  - Leverage the Global Financing Facility to ensure health system strengthening efforts are evidence-based, have a clear theory of change, and are rigorously monitored and evaluated with a focus on continuous quality improvement.
  - **All stakeholders:** Reflect on how MNCH services have been adapted during the COVID-19 pandemic and explore which adaptations should be continued to help advance people-centered primary health care.

Sustainable financing

Many MNCH programs are overly reliant on donor funding and are not sustainable.

- **Governments:** Develop and implement strategies for sustainable financing of integrated MNCH services with the aim of providing all interventions at scale. Consider applying tools such as roadmaps and costed implementation plans, which are proven effective for individual interventions but should be tested across integrated MNCH plans.

- **Civil society organizations:** Engage in data-driven advocacy to hold health systems accountable for preventable maternal, newborn, and child deaths. This includes advocating for integrated MNCH strategies that are costed and fully implemented and ensuring that newer interventions receive the attention they deserve within those programs.

Data

To ensure investments and program decisions are made using the latest evidence, MNCH programs need a culture of data use and adaptive management techniques.

- **Governments:** Strengthen capacities to gather the data needed to support higher-quality clinical care. Identify individual-level risk factors that contribute to missed opportunities for effective coverage, as is done quite effectively for immunization. Explore translating data use and adaptive management techniques from HIV and immunization to MNCH.

- **Donors and civil society organizations:** Provide technical assistance to governments for adaptive management and inclusion of relevant data in health management information systems.

Supply chain and procurement

Successful adoption of MNCH interventions requires an efficient, well-functioning supply chain and accessible, available products at the point of use. Lack of adequate, consistent funding for maternal and newborn commodities is especially challenging.

- **Governments:** Support supply chain logistics and monitoring, including creating data systems to improve forecasting and monitoring of stock at distribution facility and end-user levels.

- **Governments and donors:** Incentivize manufacturers to increase production or expand private-sector distribution of products such as chlorhexidine and amoxicillin dispersible tablets (DT).

- **Civil society organizations:** Support local leaders to develop sustainable strategies for national and subnational budgeting and forecasting of MNCH commodities and equipment. Advocate for and provide technical support around improvements in regulatory processes to promote registration and procurement of quality-assured commodities.

Nurses scan child health cards to verify which vaccinations are required using tablets and an electronic immunization registry at the Ngarenaro Health Center in Arusha, Tanzania. Photo: Bill & Melinda Gates Foundation/Riccardo Gangale.
Program and service delivery

Across interventions, outdated guidelines are a recurring barrier to scale-up, as is a lack of provider confidence—particularly around interventions used only rarely, such as magnesium sulfate (MgSO4). Attention must be paid to updating guidelines and ensuring they are disseminated widely.

- **Governments:** Support efforts to update and align existing treatment guidelines, clinical protocols, and job aids with current best practices and global guidance and recommendations. To ensure new guidelines are thoroughly disseminated, identify implementation champions and technical assistance networks. Invest in subnational, nontraditional partners who can help translate policies into action. In addition, wherever possible, link specific interventions to integrated service delivery and platform strengthening—for example, strengthening the quality of Integrated Management of Childhood Illness implementation at national and subnational levels; emphasizing amoxicillin DT as the antibiotic of choice for childhood pneumonia; promoting MgSO4 in the context of improved screening, management, and referral for pre-eclampsia and eclampsia; and strengthening providers’ counseling skills around iron folic acid (IFA) in the context of improved antenatal care.

- **Governments and implementors:** Prioritize and strengthen mentoring and supportive supervision to strengthen provider skills and confidence in diagnosis, timely care, and case management. Engage the private sector for support and technical assistance in settings with high care-seeking rates in that sector.

Innovation

For well-established interventions in particular, such as oxytocin and IFA, and where specific product characteristics are the primary barriers, innovations may spur wider coverage and uptake.

- **Governments:** Prepare to support uptake of new medicines, tools, and approaches by streamlining regulatory processes and adopting policies and guidelines that prioritize innovations that have shown promise.

- **Donors:** Invest in research and development to advance new formulations and presentations, such as oxytocin in pre-filled, auto-disable devices to ease its use at births in peripheral facilities or at home; time-temperature indicators on oxytocin to flag when it is exposed to heat during the supply chain; alternative formulations of IFA to improve absorption; and user-friendly dosing regimens of MgSO4.

- **Civil society organizations:** Identify and assist efforts to increase the capacity of local champions to promote promising innovations and models.

As the world races to stop COVID-19, we must protect MNCH services to minimize the morbidity and mortality caused by service disruptions. By continuing to prioritize smart investments and interventions, we can not only maintain services—but also strengthen them. By learning from system adaptations made during the pandemic, we can make progress toward more people-centered primary health care and better protect women, newborns, and children through the COVID-19 crisis and beyond.