

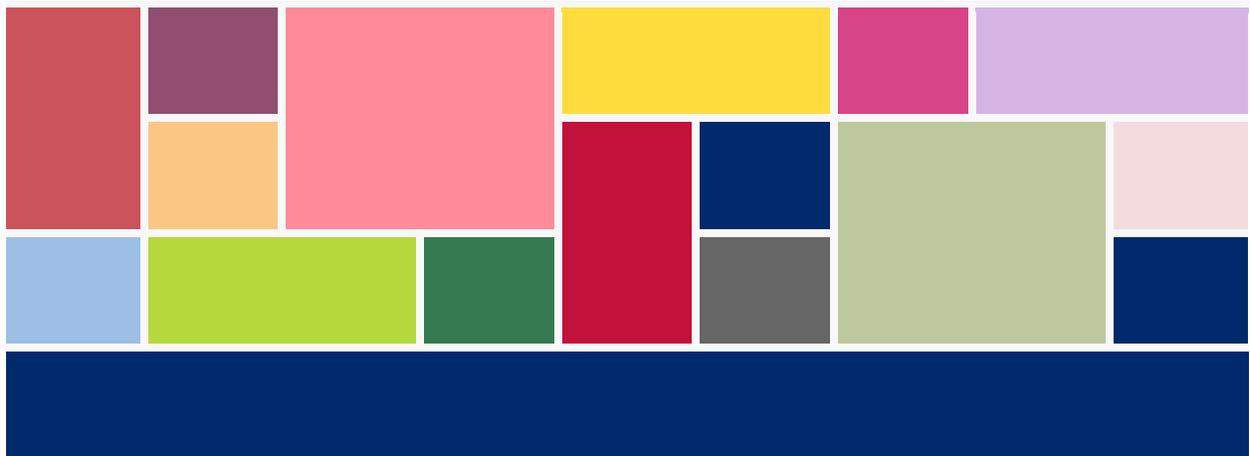


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Maternal and Child
Survival Program

Mapping Global Leadership in Child Health

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Acknowledgments

The Maternal and Child Survival Program (MCSP) is a global, United States Agency for International Development (USAID) Cooperative Agreement to introduce and support high-impact health interventions with a focus on 24 high-priority countries with the ultimate goal of ending preventable child and maternal deaths within a generation. The program is focused on ensuring that all women, newborns, and children—especially those most in need—have equitable access to quality health care services. MCSP supports programming in maternal, newborn and child health, immunization, family planning and reproductive health, nutrition, health systems strengthening, water/sanitation/hygiene, malaria, prevention of mother-to-child transmission of HIV, and pediatric HIV care and treatment. Visit www.mcsprogram.org to learn more.

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Abbreviations

AFRO	African Regional Office
ALMA	African Leaders Malaria Alliance
APR	A Promise Renewed
ARI	acute respiratory infection
AU	African Union
BASICS	Basic Support for Institutionalizing Child Survival
BMGF	Bill & Melinda Gates Foundation
C-IMCI	Community Integrated Management of Childhood Illness
CARMMA	Campaign on Accelerated Reduction of Maternal, Newborn, and Child Mortality
CCM	community case management
CDD	control of diarrheal disease
CHAI	Clinton Health Access Initiative
CHERG	Child Health Epidemiology Reference Group
CHW	community health worker
CIDA	Canadian International Development Agency
CMH	Commission of Macroeconomics and Health
CSO	civil service organization
DFATD	Department of Foreign Affairs, Trade and Development
DFID	Department for International Development
DPT	diphtheria-tetanus-pertussis
DPWG	Diarrhea Pneumonia Working Group
ENAP	Every Newborn Action Plan
EPCMD	Ending Preventable Child and Maternal Deaths
EWEC	Every Woman Every Child
G8	Group of Eight
GAPP	Global Action Plan for the Prevention and Control of Pneumonia
GAPPD	Integrated Global Action Plan for the Prevention and Control of Pneumonia & Diarrhea
GATS	General Agreement on Trade in Services
GF	Global Fund
GFATM	Global Fund to Fight AIDS, TB, and Malaria
GFF	Global Financing Facility
GHP	global health partnership
GPEI	Global Polio Eradication Program
HiB	<i>Haemophilus influenzae</i> type b
HMM	home malaria management
HSS	health systems strengthening
HSS/E	health systems strengthening and equity
IDA	International Development Association
IHME	Institute for Health Metrics and Evaluation
iCCM	integrated community case management
IMCI	integrated management of childhood illness
LMIC	low- and middle-income countries
M&E	monitoring and evaluation
MCH	maternal and child health
MCHIP	Maternal and Child Health Integrated Program
MCSP	Maternal and Child Survival Program
MDGs	Millennium Development Goals
MH	maternal health
MNCAH	maternal, newborn, child, and adolescent health
MNCH	maternal, newborn, and child health

MOH	Ministry of Health
NGO	nongovernmental organization
NORAD	Norwegian Agency for Development Cooperation
NPO	nonprofit organization
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
ORS	oral rehydration salts
ORT	oral rehydration therapy
PEPFAR	President's Emergency Plan for AIDS Relief
PMI	President's Malaria Initiative
PMNCH	Partnership for Maternal, Newborn, and Child Health
R&D	research and development
RBM	Roll Back Malaria
RMNCAH	reproductive, maternal, newborn, child, and adolescent health
RMNCH	reproductive, maternal, newborn, and child health
SDGs	Sustainable Development Goals
SSA	sub-Saharan Africa
SUN	Scaling Up Nutrition
SWAPs	sector-wide approaches
SWOT	strengths, weaknesses, opportunities, and threats
TA	technical assistance
U5M	under-5 mortality
U5MR	under-5 mortality rate
UHC	universal health care
UN	United Nations
UNFPA	UN Population Fund
UNSG	UN Secretary-General
USAID	United States Agency for International Development
WV	World Vision

Executive Summary

The aim of this study was to better understand both the evolution of child health as a global health issue since the year 2000 as well as its network of stakeholders and leaders. Building on this understanding, we explore how leadership might be strengthened and child health repositioned by the community to attain better outcomes in the current time period. For the study, we reviewed published literature and other reports on global child health policy, child health programs, funding, and global health partnerships. We also conducted over 30 in-depth interviews of child health experts and stakeholders from donors, development partners, and nongovernmental organizations. Data were analyzed by evaluation question and aligned with a framework on the effectiveness of global health networks first proposed by Shiffman.¹

The Future Environment

Effective strategizing for the advancement of child health over the next several years is at a critical juncture. There are several important features of the evolving global context that emerged from interviews and documents:

- The level of uncertainty for development support is high in the near term, due to the major shift in global goals and strategies, the refugee crisis in Europe, other humanitarian crises including fragile states, and impending changes in leadership of institutions key for child health.
- The implications of the shift to the Sustainable Development Goals (SDGs) for health and/or children are still emerging, but priorities, political commitment, and likely funding will be more broadly distributed and possibly with less clarity of purpose. If any of these resources are “zero-sum,” child health (other than immunization) is likely to be working with less.
- The World Bank has heightened its presence in reproductive, maternal, newborn, child, and adolescent health (RMNCAH) with the Global Financing Facility (GFF). There is political reliance on the GFF to finance and rationalize financing of child health, especially those components not financed through GAVI or the Global Fund. However, there is a high level of uncertainty about its potential effectiveness.
- The high-level core architecture for child health (and RMNCAH more broadly) is emerging. It will be very important to track the place and priority of child health within this architecture.

Conclusions

Improved child health remains an important aspiration at the global level, but it does not currently hold a position of prominence nor can it count on sufficient commitment to meaningfully advance or transform the agenda to reach the vision for 2030. This time period is a turning point and provides a good opportunity for child health advocates to make changes that enhance progress.

Child Health Issue Characteristics

Child health has been a central pillar of global health for many years and is still an important part of the vision for the future. Children as a group are valued, and this should continue to resonate publicly; but this strength has not been tended to adequately.

During the Millennium Development Goals (MDGs) era, the reduction of child mortality was widely recognized as a stunning success, but this has come at the cost of the perception that the job has been finished. The truth is that there are still many preventable deaths of children, and inequalities are pervasive; but this is not broadly recognized outside the child health community.

¹ Shiffman, Quissell, Schmitz, et al. (2015).

Globally, it is believed that immunization and malaria programs have had more impact than pneumonia and diarrhea interventions. In the first decade of the 2000s, the child health community placed a big bet on the integrated management of childhood illness (IMCI) as the best approach to the management of sick children. However, while IMCI was conceptually sound, problems emerged with the complexity and scale of implementation needed. This hindered the spread of the pneumonia and diarrhea interventions that might have prevented more deaths and, along with other factors, contributed to the current gaps in coverage.

Child Health Network and Actor Features

Leadership is essential for maintaining and rebuilding the momentum of child health. People interviewed for this study uniformly reported that for the past 20 years (since James Grant's tenure at UNICEF), no effective, individual global champion for child health has emerged. Further, it is not clear that new effective champions are developing from the next generation of child health proponents. Similarly, in the past 15 years, there has been weak or disinterested leadership exhibited by global organizations with mandates for child health.

With what appears to be a more mindful and decisive shift of locus of health development action to countries, country leadership—which has always been important—is now critical. High-level political decision makers in countries, who may or may not have the requisite technical background, are central to achieving impact in child health. The future is not about others doing more in countries, but countries directing and doing more themselves with the resources that can be brought to bear.

At certain time periods during the last 15 years, there was momentum for child health in pursuit of MDG 4: Reduce Child Mortality. However, this momentum has not transitioned through to the SDGs. Perhaps no health issue has yet transitioned, but the child health community urgently needs to find effective ways of mobilizing support that builds on the SDG concept and focuses attention on children for the next 5–10 years. A Promise Renewed (APR) (and Ending Preventable Child and Maternal Deaths [EPCMD] for USAID, internally) has helped consolidate strategy for some, but its potential role and future seem limited.

Child health has become increasingly fragmented and siloed as a field and within organizations. It has been divided into diseases, population subgroups, and intervention packages that rarely come together and are often juxtaposed. This contributes to competition and is reinforced, sometimes unintentionally, by the decisions and actions of donors and development partners in supporting subgroups. Similarly, child health has become less visible within key organizations. It is increasingly separated from maternal and newborn health, especially with the prevailing focus on childbirth and the time around delivery. In part, this fragmentation explains the lack of a unified and compelling child health vision.

Since the 1980s, there have been affinity or working groups that have brought together experts and practitioners around specific technical topics for child health—for example, the integrated community case management (iCCM) Task Force and the Diarrhea and Pneumonia Working Group (DPWG). These have been convened by multiple organizations and have served to pool information; build consensus on evidence, guidelines, and measurement; publish information; and sometimes coordinate action. These groups have shown mixed effectiveness and have generally not served to leverage their influence across disciplines or raise the profile of child health. It is important that expectations of influence be matched to their purpose.

In the post-MDG world, child health needs to be reframed. Future child health framing should start with a holistic approach to all aspects of child health (newborns and infants and children together) and contain a more explicit expression of equity, because without it mortality will not reach targets. Health systems and platforms need to be addressed, focusing on commodities, health workers, and quality, including all levels

from the community to the hospital and the linkages between them. Flexibility will be a necessary feature of health systems so that delivery can be rapidly adapted to local contexts to respond to need.

The greatest challenge with reframing is one of communication and resonance with audiences that wield or will wield influence and power. Ending preventable deaths, on which the community now relies, is not sufficient because it appears, based on feedback collected for this study, to lack compelling resonance.

Child Health Policy Environment

There were consonant expectations of what should be addressed in child health driven by a common, measurable goal (MDG 4), unified by the Bellagio Child Survival Group and pinpointed in the *Lancet* in 2003. This was later reinforced by Every Woman Every Child (EWEC) and APR, although there were variable expectations and fragmented support for how to deliver proven interventions that met child health needs. Now, post-MDGs, it is not clear that there is a holistic view of strategies to address priorities and provide support for child health programs, despite published syntheses on current disease burdens and the unfinished agenda.

In the early part of the decade after 2000, polio eradication and well-funded global partnerships like GAVI competed for child health resources, and there is worry that they may capture a disproportionate portion of resources in the next five years. Development assistance for health has increased since 2000 for newborn and child health, although it has not increased as sharply as for immunization and polio. Since 2009, newborn and child health funding has grown faster than other health programs such as those for HIV, malaria, or tuberculosis (TB), but from a relatively lower base. This demonstrates that important financial commitment exists for child health even though the future is less certain. Combined with the potential for the GFF to influence spending in countries, there may be a window of opportunity to improve child health support; but it will behoove the child health community to track what happens closely and respond quickly.

As the world and global health turn forward to 2030, this is a time of high uncertainty for child health. Such times may be viewed both as a threat and as an opportunity. Either way, what will be required is a community more highly attuned to windows of possibility, the will to take advantage of them, and the structure to collaborate.

Recommendations

What should the global child health community do to make sure that the full range of child health issues are at the forefront of the global health landscape?

Reframing Child Health and Communicating It

How should child health be framed, both strategically and substantively, to reflect the realities of 2016?

Recommendation 1: With the shift to the SDGs, child health should be deliberately reframed so that it emphasizes the value of children, a more holistic approach including “newborns and infants and children” as one, and a clear aim for equity.

In addition to the reframing, it is equally important that resources be applied to crafting how the framing is communicated more effectively than the current messaging. Communications probably need to evoke the value of children as a driver for ending preventable death.

Reestablishing Leadership

Who has the stature to lead, and what does the global child health community need to do (and avoid) to support this leadership?

Recommendation 2:

- a) The principal global partners in child health need to come to agreement on and then designate and support a lead organization to consistently provide overall messaging for child health.
- b) They also need to seek and nurture over time one or several credible champions who will speak powerfully for child health on the global stage.

The organization could be drawn from any of the major ones highlighted later, but it needs to have legitimacy, be positioned in the emerging architecture, and be able to be heard by all actors. Once designated, it needs to be decisive in its prioritization of child health and other organizations need to be clear in their public support. Similarly, child health must have new champions at high levels. Without this, commitment to child health will continue to falter.

Reversing Fragmentation and Coordinating Effectively

How should child health stakeholders (organizations and initiatives) align and advance collaboratively toward goals?

Recommendation 3: Key stakeholders need to create and implement a shared strategic approach for:

- a) Raising the visibility of child health as a whole rather than in subcomponents
- b) Ensuring a strong child health voice in Strategy 2.0, SDG3 monitoring, and the GFF
- c) Bridging child health components of existing strategies across institutions in such a way that country action is more likely

In addition, investments should support collaboration and explicitly dis-incentivize fragmentation within child health.

There are multiple strategies that incorporate child health that were recently launched globally (EWEC 2.0, UNICEF, World Health Organization [WHO], EPCMD, etc.). All of these strategies embrace a continuum of care, some more broadly than others; so the challenge is to promote the common core for child health with a recognizable and compelling voice. It is not yet clear what such a strategic approach should look like or what actionable milestones are really needed (analogous to what the Every Newborn Action Plan [ENAP] is for newborn health), but it starts with child health advocates coming together to create a way forward. That way forward should build on what has been learned from the Call to Action, APR, and similar efforts in maternal and newborn health. New child health framing might also suggest new or re-emerging alternatives.

Recommendation 4: Focus on a few key coordinating mechanisms for child health and support their performance appropriate to objectives, roles, and participants. Close those that do not provide enough value at both global and country levels.

There are multiple coordinating mechanisms and venues for child health at all levels. Some are given—the Partnership for Maternal, Newborn and Child Health (PMNCH), GAVI, Global Fund, EWEC, and so on. For these, the child health community should assess potential benefits and costs, then work with them accordingly. Similarly, technical or thematic affinity groups may be useful for learning but should focus on a clear or limited purpose with right-sized support. There is likely a need to revitalize a small, cross-organization group of committed, high-level child health advocates to re-establish a strong voice in this space.

The stakeholder environment for global health is more crowded and complex than it was five years ago, and there are many coordination mechanisms at multiple levels. Going forward, the most important place to get coordination right is at the country level.

Data and Accountability

How will the child health community know there is progress and hold stakeholders accountable?

The Countdown reporting and accountability process worked reasonably well to build commitment to child health during the MDGs. There are three linkages in the SDG architecture that the child health community will need to make to continue to leverage this function. The first is the Independent Accountability Panel within the PMNCH that replaces the Commission on Information and Accountability. The second will be the next version of a Countdown-type mechanism that is under development now. The third is the Monitoring & Evaluation Reference Group hosted by WHO, which is likely to focus on measurement of maternal and newborn health in the near term.

Recommendation 5: Ensure that child health data and information are well represented, packaged, and reported within the context of the emerging evaluation groups.

Country-Level Focus

By far, the strongest finding that emerged from this study was acknowledgment of the shift of locus for transformation and sustained action from the global to the country level. While there have been many statements over the years and more effort recently to ensure country partnership, country leadership, and country investment, there appears to be more commitment to making it happen. The success of the GFF depends on it. The country should be part of the reframing of child health.

Recommendation 6: Reframe child health with the country at the center and engage differently with countries with weaker systems and leadership to sustainably improve child health. Invest in tracking and learning from the process.

It is apparent that countries with strong leadership will themselves direct how child health will improve and how global or regional partners will engage with them to do it. This does not appear to be a matter of contention, and donors appear to be increasingly willing to support strong country leadership. The challenge is how best to address countries with weak leadership, which continue to be numerous. Development partners will need to explicitly and in coordination with each other determine whether investing in stronger country ownership and national health systems warrants the risk of slower progress in achieving health targets. This is a fundamental policy decision that must be reached with a clear understanding of specific country realities and should not be applied as a blanket policy across all countries. The reality is that some countries will respond to this stimulus by moving to meet the challenge, albeit slowly, while others may use flexibilities to act on agendas far removed from the SDG child health goals. Investing in tracking and learning about how and why this happens will be critical. This process is likely to be the single largest challenge facing the global child health support community over the next 15 years.

Introduction and Study Background

The aim of this study was to better understand both the evolution of child health as a global health issue since the year 2000 as well as its network of stakeholders and leaders. Building on this understanding, we explore how leadership might be strengthened and child health repositioned by the community to better attain outcomes in the era of ending preventable deaths and the Sustainable Development Goals (SDGs). The study was funded by USAID and conducted by a three-person team guided by an advisory committee of representatives from USAID, UNICEF, WHO, the Bill & Melinda Gates Foundation, and the MCSP.

Study Questions

- What are the current global leadership groups, initiatives, and forums for all elements of child health? By whom are these currently led? How are these currently led and coordinated?
- What were the major lessons learned about other past and current global health leadership efforts that might inform moving the child health agenda moving forward?
- What strategies were employed to move the child health agenda forward? What factors shaped the movement of this agenda? How did the strategies and factors (e.g., using health-related MDGs, SDGs, IMCI, iCCM, and pneumonia-diarrhea as “tracer” themes) interact over time to move the agenda forward?
- What overall financial resources have been made available for child health since the year 2000?
- How can global child health leadership be structured to best support the improvement of child health outcomes going forward? How could or should global child health forums relate to, engage, and work with regional institutions and countries?

Methods and Analysis

The study employed two methods of data collection including desk review and semistructured in-depth interviews. Core areas of child health (IMCI-iCCM, MDGs-SDGs, pneumonia-diarrhea) were reviewed to document programs and results over the time period 2000 to 2015, and a stakeholder analysis was conducted.

The desk review of published literature included global child health policy, child health interventions and programs with an emphasis on immunization, MDG 4–SDG 3, IMCI–iCCM, pneumonia-diarrhea, child health service delivery strategies, and reviews of other global health partnerships and networks. Data were also extracted from child health–related organization and initiative websites and from existing health financing databases. Over 120 published references were reviewed and approximately 40 websites visited.

A series of 33 in-depth interviews were conducted with professionals knowledgeable about child health globally or about sub-Saharan Africa contexts (for interview instrument, see Appendix B). Potential respondents were suggested by advisory committee members, child health–related working group membership lists, and other organizations. The final list was selected to represent type of organizational affiliation, qualification, area of expertise, and length of time engaged with global child health. Interview data were entered, coded, and excerpted in Dedoose, a web-based qualitative data analysis platform.²

² Dedoose Version 6.1.18 (2015).

Table 1: Number of interviewees based on type of organization

Type of organization	Number interviewed (33)
Multilaterals and global partnerships	10
Bilateral organizations	6
Foundations	4
Academic institutions	1
Nongovernmental organizations	6
Private sector	1
Sub-Saharan Africa region	5

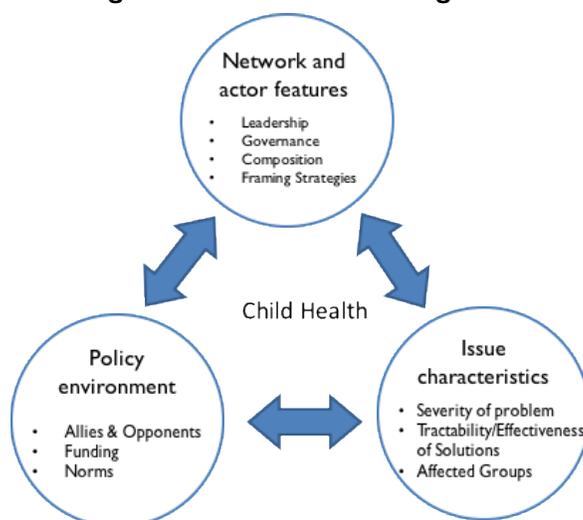
Excerpts were analyzed by code and aggregated into themes. Tracer interventions were assembled into timelines or chronologies (2000–2015) using data from both the desk review and interviews. A strengths, weaknesses, opportunities, and threats (SWOT) analysis was done for stakeholders organized into two groups including organizations and initiatives/forums. Individually named leaders were also tallied.

The findings for the child health financing section primarily rely on Institute for Health Metrics and Evaluation (IHME) data, with disaggregation based on data availability. Based on a review of existing data sources, the IHME dataset was selected as it provided the most comprehensive data over the time period of interest. IHME data for child health include newborn health and immunization. Where possible, immunization funding data have been reported separately, but the data do not allow complete disaggregation. Newborn funding was too difficult to disaggregate systematically, so it is not possible to distinguish relative changes in neonatal versus postneonatal funding.

Data from all sources were used to triangulate answers to study questions and aligned with a framework on the emergence and effectiveness of global health networks to better understand child health networks and their influence.³ This framework is illustrated below; qualitative data were coded and literature data aligned to the subcategories for network and actor features, policy environment, and issue characteristics. More information on the methodology can be found in Appendix A.

³ Shiffman, Quissell, Schmitz, et al. (2015).

Figure 1: Framework on the emergence and effectiveness of global health networks



Source: Shiffman, Quissell, Schmitz, Pelletier, et al. A framework on the emergence and effectiveness of global health networks. Oxford University Press: Health Policy and Planning, August 29, 2015, p.5.

Table 2: Network emergence and effectiveness are more likely if . .

Issue Characteristics	
Severity	Problem is perceived to have high mortality, morbidity, or cost
Tractability	Solutions are perceived to exist and are not controversial
Affected groups	Group is easy to identify and viewed sympathetically
Network and Actor Features	
Leadership	Capable, well-connected, respected champions exist
Governance	There are appropriate governing structures able to facilitate collective action
Composition	Diverse actors are involved and well linked (creativity)
Framing strategies	Issue is positioned so that it resonates, especially with political elites
Policy Environment	
Allies/opponents	Groups interests are aligned
Funding	Donor funding is available and applied
Norms	It is an issue that many expect will be addressed

Findings from the study are organized into the characteristics of child health as an issue; how child health has been framed in the past 15 years; how MDGs, IMCI, and pneumonia-diarrhea programs affected momentum; what helped or hindered from the perspective of study participants, leaders, and stakeholders; how efforts were affected by coordination, political commitment, and funding; and what initiatives represent the best way forward. If the source is from an interview, it is put in italics and a blue text box and is coded by organization type. The report draws assumptions from the literature review, interviews, and other research to produce broad recommendations to global stakeholders and the child health community as a whole.

Limitations

This study should be considered a first step in developing a deeper understanding of child health leadership, networks, and prominence. A significant gap is that it was not possible under the time

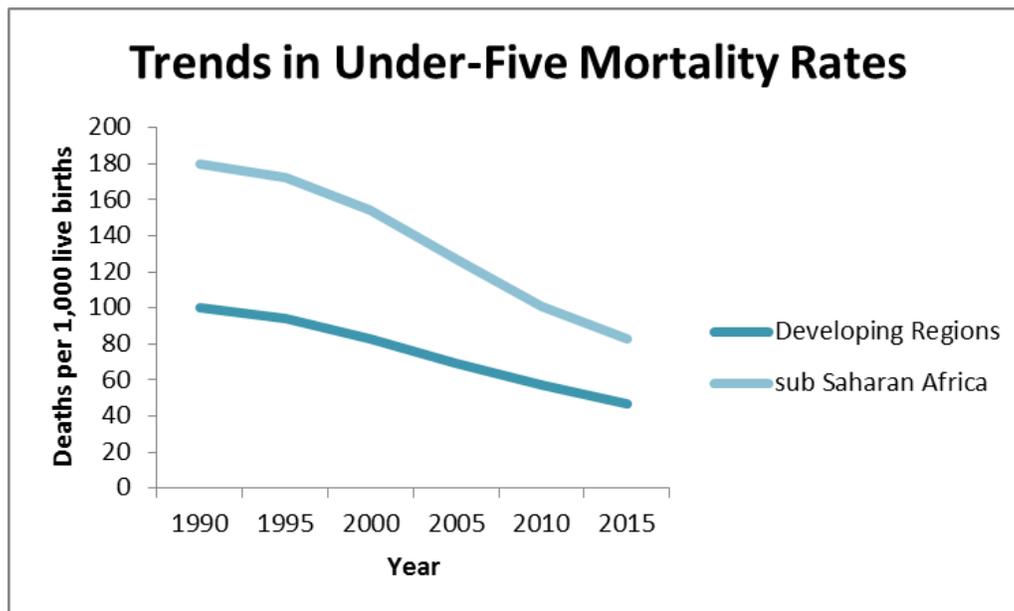
constraints to interview country-level stakeholders who may be the most important part of the child health network, especially going forward. Only a limited perspective emerged from the sub-Saharan Africa regional level, given the small number of interviews possible, and without country perspective there was insufficient information to form conclusions about the region. Similarly, there was little information captured about the private sector. Most of the interviews were conducted with people at upper-mid levels of organizations. This may limit the study’s high-level policy or political perspective, especially at the global level. Within the study constraints, it was not possible to preview early conclusions or recommendations with expert groups or to conduct follow-up interviews to more deeply consider framing issues or the role of power.

Findings: Child Health Issue Characteristics

Severity of the Child Health Problem

The decline in child mortality since 1990 has been a remarkable success story. Globally, from 1990 to 2015, the number of children under five who died in a year dropped from 12.7 million to 5.9 million, even though the number of children in this age group increased 4.3% in the same time period. The under-five mortality rate (U5MR) dropped 53% and the annual rate of decline accelerated from 1.8% (1990–2000) to 3.9% (2000–2015). Sixty-two of 195 countries achieved MDG 4, although disparities remain such as for sub-Saharan Africa, which continues to have the highest U5MR in the world (Figure 2). In contrast, neonatal mortality has declined much more slowly, from 36 to 19 deaths per 1,000 live births between 1990 and 2015 (Figure 3), and represents 45% of global child mortality now (Figure 4). Neonatal mortality was reduced by 47% in this time period while postneonatal mortality declined 58%. However, it is important to note that in sub-Saharan Africa, 60% of child mortality still happens in the postneonatal period and is largely preventable.⁴ In sub-Saharan African countries with the highest number of under-five child deaths (Nigeria, the DRC, and Ethiopia) non-newborn deaths represent 67% of all under-five mortality (Figure 5).

Figure 2: U5MR for developing regions and SSA, 1995–2015



⁴ UNICEF. Levels and Trends of Child Mortality: Report 2015. IGME. UNICEF, September 2015, p. 1.

Figure 3: Neonatal mortality rate for developing regions and SSA, 1995–2015

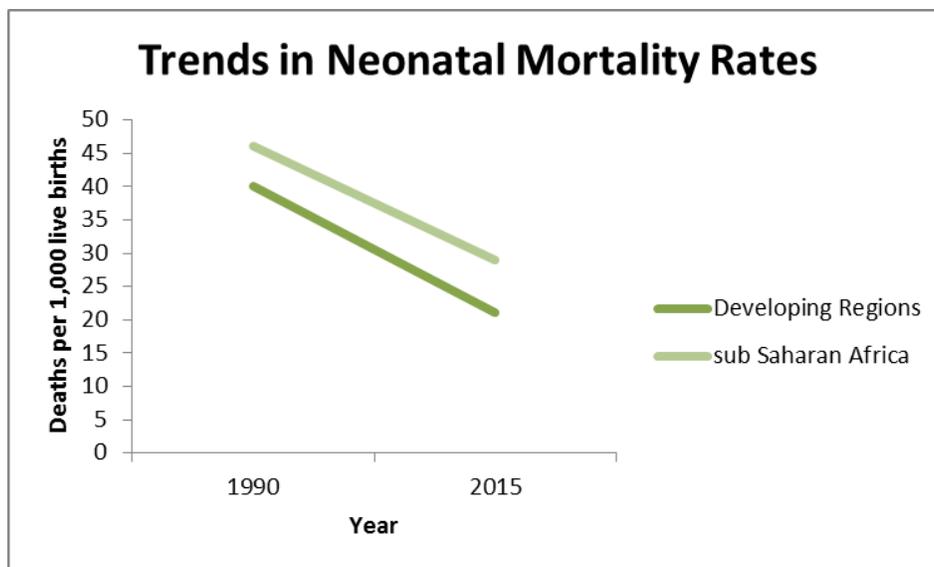
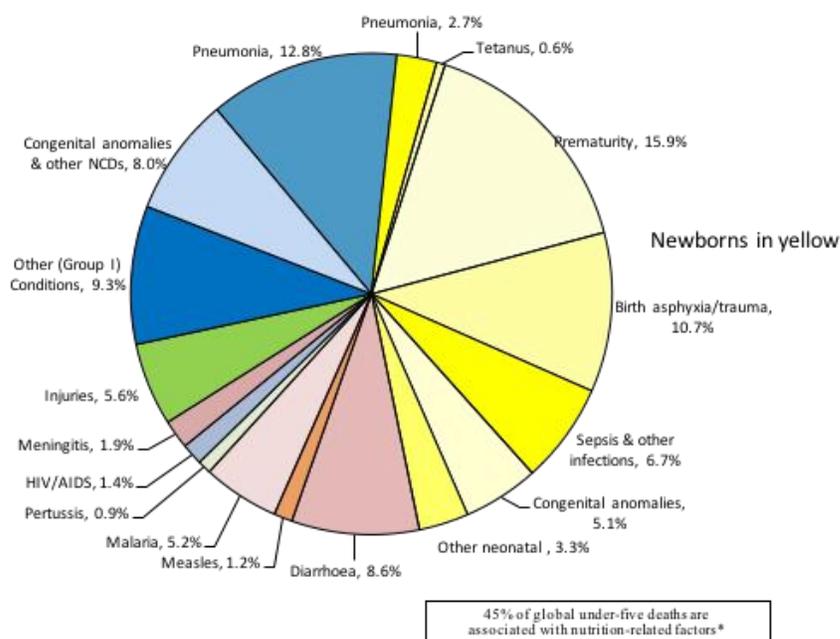


Figure 4: Causes of death for children under five years, 2015



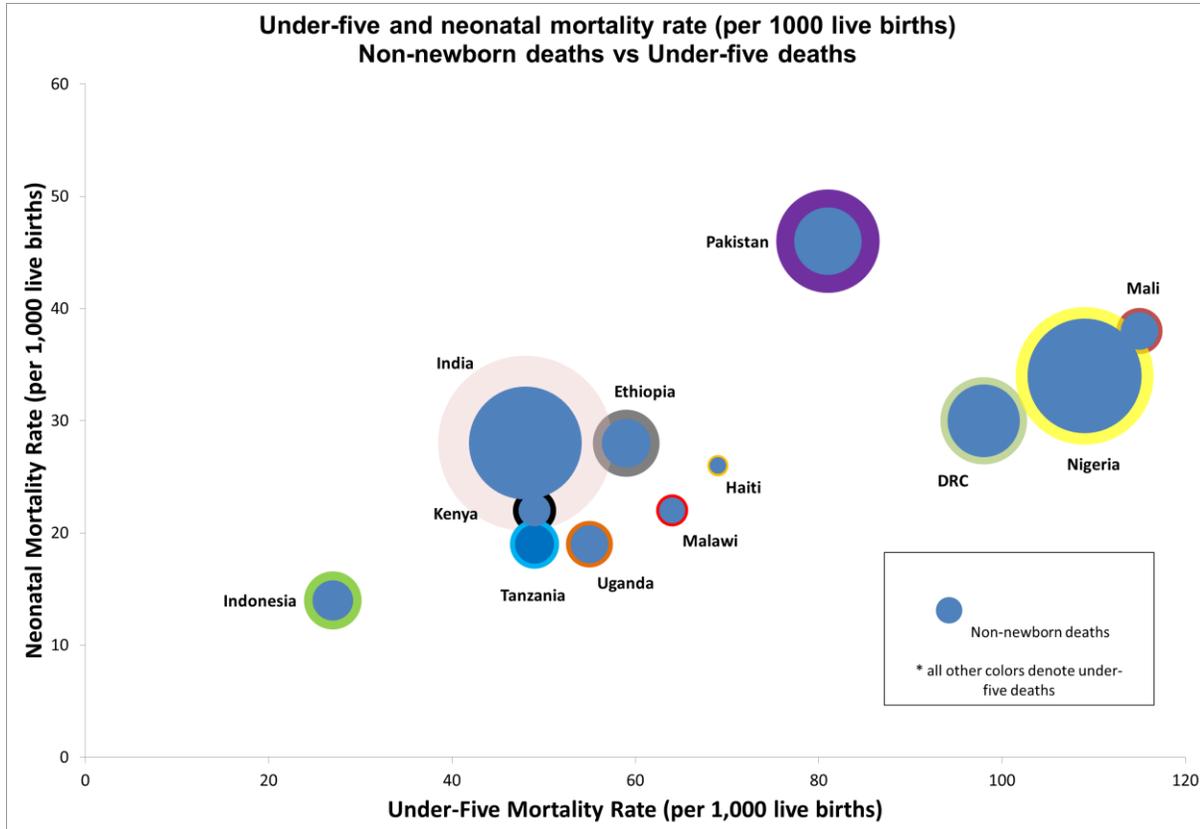
Sources: (1) WHO. Global Health Observatory (<http://www.who.int/gho/childhealth/en/index.html>)
 (2) *For undernutrition: Black et al. Lancet, 2013

As substantial progress in reducing child mortality was achieved in the last decade, differences in equity of progress between and within countries became more apparent. Dimensions of these inequities are complex and can include economic status, geographic location, parents’ education level, urban or rural residence, ethnic group, and gender. For example, almost 9 out of 10 deaths to children under five occur in low- and lower/middle-income countries, and children from the poorest households in those countries are 1.9 times more likely to die than children from the richest households.⁵ Children thus continue to die in large numbers from preventable causes, more so if they are disadvantaged by the conditions in which

⁵ UNICEF (September 2015).

they live. Attention to this must be maintained, especially if the SDG under-five mortality target of 25 per 1,000 live births is to be attained by 2030. “Child survival should remain at the heart of global health and development goals.”⁶

Figure 5: Under-five and neonatal mortality rate (per 1,000 live births) and non-newborn deaths vs. under-five deaths (note that the size of the bubbles is proportional to the number of deaths)



Perceptions of Severity of the Child Health Problem

Perceptions of the impressive decline in child mortality overshadow concerns looking forward. The size and rates of reduction that were experienced since 2000 have contributed to a sense that the job is done and whatever is needed will continue on its own.

There is a complacency that we’ve done the job with child health and that we need to move on to newborn health and maternal mortality and family planning. (Foundation, global)

This perception is reinforced by a growing sense of urgency that the health of newborns must be addressed to have overall mortality impact for children. The newborn health network has been very effective at raising attention, although resources it has garnered may not be sufficient to address the problem.⁷ Through the ENAP process and as part of SDG 3 elaboration, this attention has been further narrowed to the time around delivery, shifting attention away from child health-oriented platforms of care delivery to maternal health-oriented platforms.

⁶ Bryce, Victora, and Black (2013).

⁷ Shiffman (2015).

Imbalances are driven by groups—we'll get our agenda served through women. So that's the first day of life, but it is completely inadequate. We are still in this situation where there is not very holistic thinking about child health. (Academic, global)

There also appears to be a lack of understanding or sense of urgency about common child illnesses that are killers, especially pneumonia and diarrhea. While proven interventions exist for both, coverage of effective treatments (oral rehydration salts [ORS] and zinc for diarrhea, antibiotics for pneumonia) have increased only slowly, especially at the national scale. Finally, nutrition has begun to be more seriously addressed as a major contributor, but resources still lag as the numbers of children at risk increase.

People to this day are amazed that pneumonia is the single largest infectious disease killer. (Multilateral, global)

The inequity of intervention coverage and outcomes was frequently identified as a major challenge to further progress in child health. What quickly became clear from respondents is that “equity” and the problems that are assumed to cause it are viewed differently by stakeholders. For example, some measure “equity” by geographic access to health care; others use household economic status or social marginalization or vulnerability. Despite the fact that measures for child health under SDG 3 include reporting by wealth quintiles, there is no common articulation of aim or strategy for equity that would guide programs or policies.

We talk about the issue of equity and it's well documented that some segments of society are much more apt to be users . . . but we don't seem to have very clearly articulated strategies for reaching those other groups; and even if we do, we don't have good data for knowing whether or not we are achieving it. (NGO, global)

Effectiveness of Solutions (Tractability)

Over the past 25 years, considerable evidence on the effectiveness of child health interventions has been generated.⁸ These proven, low-cost interventions have been standardized and adapted to countries, and efforts have been made to deliver them either vertically or in packages in facilities and at the community level.

A turning point was marked in 2003, when the *Lancet* published the first child survival series that synthesized and communicated the effectiveness of these interventions to policy makers and technical leaders. As a result, the child survival community coalesced around a common approach aimed at increasing the coverage of high-impact interventions in countries. As noted in one study, “The series sought to call the UN agencies to task by highlighting evidence that progress in reducing child mortality had slowed and in some cases reversed . . . the *Lancet* 2003 series aimed to make child survival an international health priority once again and attract the resources needed to accelerate the reduction of child mortality.”⁹

The evidence base pulled together in the Lancet child survival series really helped to focus people's priorities on those interventions that were shown to be effective. (Multilateral, global)

In 2005, building on the *Lancet* series, the Countdown to 2015 was set up to serve as an independent accountability mechanism for monitoring country progress on MDGs 4 and 5. Since then, the Countdown has compiled mortality and high-impact intervention coverage data for about 75 countries on a biannual

⁸ Black, Morris, and Bryce (2003).

⁹ Díaz-Martínez, Elisa, and Elizabeth D. Gibbons. “The Questionable Power of the Millennium Development Goal to Reduce Child Mortality.” *Journal of Human Development and Capabilities* 15, no. 2–3 (July 3, 2014): 203–17. doi:10.1080/19452829.2013.864621.

or annual basis. These data have been used to demonstrate progress and advocate for prioritization and resources. In 2015, the Countdown reported on the broad patterns that emerged from looking at changes in coverage during the MDG era:

- “Key malaria and HIV interventions began at low coverage and increased markedly.
- Some interventions with high coverage in 2000 increased only modestly, partly because there was limited scope for increase (antenatal care 1 visit, three vaccines [DPT, HiB, measles]). However, a substantial proportion of the gap was closed for these interventions.
- All other interventions studied had coverage below 60% before 2009 and increased 10 percentage points or less (family planning, antenatal care 4+, skilled birth attendants, exclusive breastfeeding, case management of diarrhea and pneumonia.)”¹⁰

Other observers went on to say, “These patterns suggest that rapid coverage increases are possible when interventions are prioritized and sufficiently funded, as for malaria or HIV. However, there was very limited progress for interventions that require multiple service contacts along the continuum of care or access to care 24/7, particularly during pregnancy and childbirth, and for the management of childhood diarrhea and pneumonia.”¹¹

As the global dialogue has moved from MDGs to SDGs, there has been more consideration of distal determinants of child mortality and multisectoral contributions to improved health. Some argue that gains in child survival were really driven by economic growth and that attention should focus there.

For those countries who reached MDG 4 in the middle of 2014, looking at what has contributed to U5MR—half of that was the impact of specific interventions but the other half was all kinds of other things. For example, education, infrastructure, water, sanitation and women’s empowerment. (Foundation, global)

Perceptions of Effectiveness of Solutions

Perceptions of the effectiveness of solutions to reduce child mortality align with available data. Respondents identified immunization and malaria interventions as extremely effective at scale. Immunization has moved quickly because of the addition of new vaccines, and the widespread distribution of bed nets for the prevention of malaria has led to high levels of use. The organizations or alliances that lead investment and programming in both of these areas—GAVI, the Global Fund, and to some extent Roll Back Malaria (RBM)—are seen as the most effective among global institutions.

But it was really the vaccines and the bed nets that were driving a lot of that success, which means that institutions like GAVI and the Global Fund have really contributed massively to child health gains under the MDGs. (Multilateral, global)

Interventions that address childhood pneumonia and diarrhea are viewed as having been only modestly effective, although there are data demonstrating important reductions in cause-specific mortality for both.¹² There have been multiple approaches to service delivery starting with vertical programs before 2000, followed later by integrated strategies such as IMCI, iCCM, and Integrated Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPPD). Case management or treatment interventions that require increased community demand, skilled health workers, and functional logistics

¹⁰UNICEF and WHO (2015).

¹¹ Díaz-Martínez, Elisa, and Elizabeth D. Gibbons. “The Questionable Power of the Millennium Development Goal to Reduce Child Mortality.” *Journal of Human Development and Capabilities* 15, no. 2–3 (July 3, 2014): 203–17. doi:10.1080/19452829.2013.864621.

¹² UNICEF (September 2014).

systems for necessary supplies have proven to be difficult to scale up and thus failed to provide access to quality care in many countries. There were reports of confusion over multiple initiatives, frameworks, and branding of approaches that may get in the way of implementation.

Importance of Children as an Affected Group

Over the past 15 years, perceptions of the importance of child health have waxed and waned. In the 1980s and 1990s, there was strong leadership and commitment to child survival from the child survival revolution to universal child immunization to the “twin engines” of immunization and ORS for diarrhea. In 2000, this was followed by the MDG declaration that was then further elaborated to MDG goals and targets by 2002. These included MDG 4, “to reduce child mortality,” with the target of reducing the under-five mortality rate by two-thirds between 1990 and 2015.

While child health was featured prominently in the MDGs, goal and target setting was not especially inclusive and coincided with a strong shift of UNICEF leadership toward child rights and away from traditional, technical health priorities. In the same time period, global attention was drawn to immunization and HIV/AIDS with the launch of GAVI in 1999, the Global Fund in 2002, and the President’s Emergency Plan for AIDS Relief (PEPFAR) in 2003. The Bush administration, for example, did not actively engage with the MDGs early on.

This began to change, as noted earlier, with the 2003 *Lancet* child survival series. In the mid- to late part of the decade, the huge disparities in child mortality across the world were considered politically unacceptable, and bilateral development agencies provided more support for immunization, ORS, and management of sick children.

After the introduction of the Countdown, attention also focused on measurement of progress toward MDG 4, and whether countries were “on” or “off” track. At this time, many countries were “off-track” and there was fear that the world would not come close to reaching MDG 4. Along with the G8 Muskoka Initiative announced in 2010,¹³ the Countdown helped propel the movement into Every Woman Every Child (EWEC) and the 2010 Global Strategy for Women’s and Children’s Health.¹⁴ In 2012, the Call to Action¹⁵ to end preventable child deaths was made and was followed by APR.¹⁶ This elevated the importance of child health and helped to consolidate country child health strategies, although these initiatives brought no new resources.

And I think when we came up for air again in 2010 . . . what emerged as rebalancing was maternal and child health—the so-called neglected MDGs. That again had broad political appeal. (Multilateral, global)

Levels of development assistance funding provide another perspective on perceptions of the importance of child health at the global level. From 2000 to 2014, development assistance for health in newborn and child health increased from \$2.2 billion to \$6.6 billion. Even if immunization and polio are removed from these figures, newborn and child health funding increased by 44%.

We will move forward—the world will not lose its political commitment to child survival. Not the least of that is that countries have made progress—we did pretty darn good reducing mortality by 50% so let’s keep doing it. It feels good. (Academic, global)

¹³ Additional funding commitments of \$7.3 billion for 5 years.

¹⁴ United National Secretary-General. 2010. The global strategy for women’s and children’s health. WHO website. http://www.who.int/pmnch/knowledge/publications/fulldocument_globalstrategy/en/. Accessed June 2, 2016.

¹⁵ USAID (June 2012).

¹⁶ UNICEF (September 2012).

Findings: Framing of Child Health

After the millennium and the launch of the MDGs, improving child health was framed in terms of tackling the leading child killers including pneumonia, diarrhea, malaria, and vaccine-preventable diseases. This was reinforced by the use of the three MDG targets of U5MR, infant mortality rate, and measles vaccination coverage, in contrast to the more complex and holistic framing of child health under the earlier World Summit for Children. The framing, in terms of child death, was thought to be effective because there was a defined starting point (even if retrospective) and most importantly a measurable target of reducing child mortality by two-thirds. From 2000 to 2015, there was increasingly frequent tracking of progress (“on track” or “off track”). The Countdown strengthened this framing by publishing and comparing country progress, highlighting gaps.

Even more so since 2010, when we said that we were behind the MDGs, it really helped focus people’s minds and brought the issue to the fore. It forces us to look at the numbers and look at the target, and where we are from the target. (Multilateral, global)

While the perception was that MDG 4 and the specter of dying children helped build commitment, there are differences of opinion over whether it helped mobilize resources.

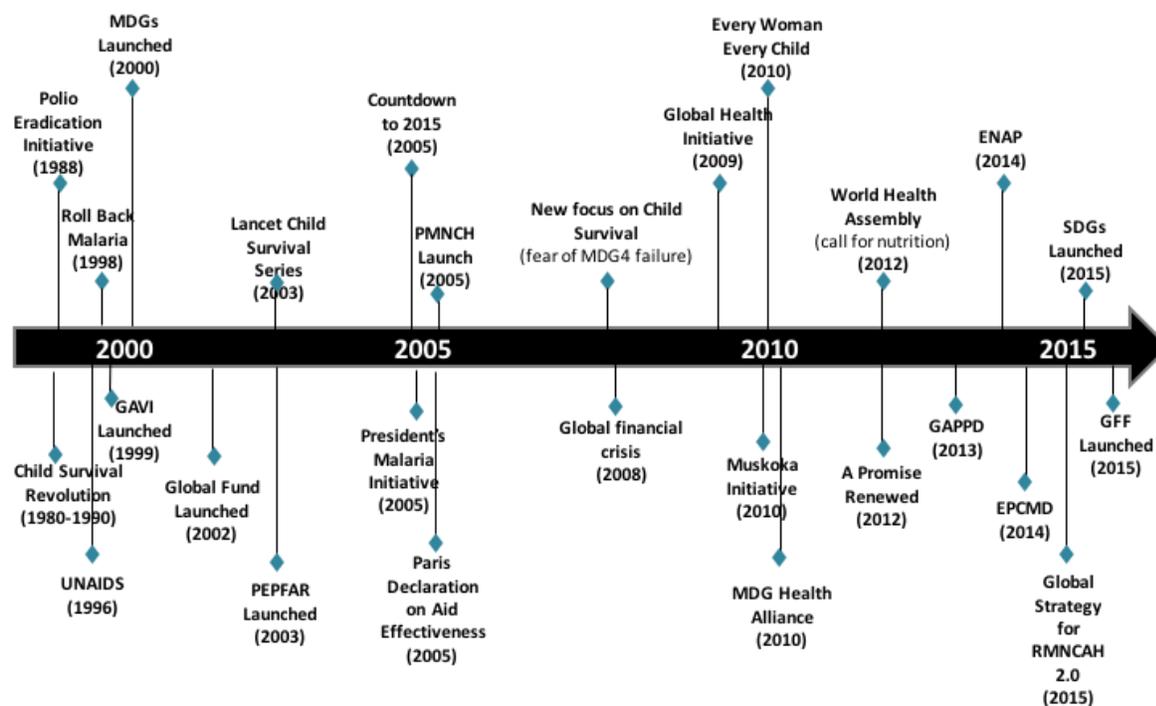
We thought that by bringing up the case of how many children were dying and why they were dying, we would be able to influence the resource allocation in country but that was not the case. (Multilateral, regional)

As EWEC and then APR were launched, the framing of child health shifted from addressing killers to ending preventable child deaths. “Preventable” implied that health conditions are known and that they can be taken care of with proven interventions. It also created a sense of obligation to deliver those interventions. The “unreached” are the target and the aim is to get to them and to reap the benefits of existing interventions. This framing builds on the success of mortality reduction and is a call to action.

Findings: Momentum for Child Health

A timeline of key events and turning points for child health is illustrated in Figure 6. This provides the context for understanding the strategies and factors that enabled or hindered momentum and the prominence of child health as seen through the lenses of global goals (MDGs and SDGs), IMCI and iCCM programs, and pneumonia and diarrhea programs.

Figure 6: Timeline of key events and turning points for child health



MDGs and SDGs

Although they had their successes and failures, the MDG process and MDG 4 created momentum for child health. Saving children's lives was just, politically appealing, feasible, and with a measurable target. When combined with Countdown, progress was visible. The UN secretary-general championed the MDGs and development partners engaged with the process, providing funds, expertise, and intervention specifics. There were times when progress to achieve MDG 4 floundered, lacking strong global leadership and overshadowed by the introduction of disease-specific programs with advocates of their own. Since 2000, MDG 4 became more prominent twice, once with the *Lancet* series 2003 and also at the time when EWEC was launched in 2010. After this point, efforts were refocused on the MDG 4 endgame with considerable publicity for those countries reaching child mortality goals early. However, the persistence of child mortality in some countries and regions in 2015 did not appear to heighten specific global interest or stimulate action afterward. Rather, further progress was expected to depend on improving broader programs for maternal, newborn, and child health.

As the MDGs came to a close and work began on the SDGs, momentum for postneonatal child health lagged. The SDGs have a much broader development perspective, and only one goal relates directly to health and well-being. This goal covers reproductive, maternal, newborn, child, and adolescent health, making child health less individually prominent and perceived as "better off" in terms of progress. On the other hand, the SDGs also address underlying contributors to child death, several of which may be more critical to improving survival given changing epidemiology and cause of death structure. Now, globally preterm birth complications are the leading cause of death, with pneumonia second, and intrapartum complications third (Figure 4).¹⁷ Combined with the fact that better equity is needed to lower mortality rates, it is likely to be necessary to go beyond the vertical disease control strategies that were more successful in child health under the MDGs.

¹⁷ Liu, Oza, Hogan, et al. (2015).

IMCI and iCCM

IMCI, launched in the late 1990s, was designed to address the five main causes of child mortality and to transform the system of care for sick children. By mandate, UNICEF, WHO, and the World Bank were positioned to help develop implementation at community, facility, and health system levels, respectively. However, leadership changes and other priorities intervened, and IMCI was moved forward primarily through formal guidelines and training. This led to ineffective community approaches early on, few health system strengthening interventions, and a gold standard clinical algorithm that often proved impractical in the field. Furthermore, interventions for pneumonia and diarrhea that had been partly successful when vertically implemented appeared to lose ground. IMCI was consistently identified by study respondents as the biggest disappointment in child health over the last 15 years.

[Some] treatment approaches . . . had good grounding in science and evidence but really didn't prove to be as powerful because programs were weak—poor training, supervision, management of drugs. IMCI and to some degree iCCM look great on paper but functionally they are not working well. (Academic, global)

In countries, structural constraints worked against improved IMCI including staff availability, turnover, poor supply of drugs, and competing services in busy clinics. Growing out of the realization of how difficult and expensive scale-up was going to be, donor fatigue ensued and was reflected in diminishing resources over time. Nonetheless, more than 100 countries adopted IMCI policies, most of which still exist today.

We spent far too long designing customized national level guidelines for every country, which was probably the right thing to do. But then we would spend years and tens of millions of dollars in workshop after workshop training nurses and doctors who didn't need to be trained. (NGO, global)

One consequence to the challenges of IMCI was the development of iCCM. iCCM targets a subset of the most important IMCI interventions (case management of pneumonia, diarrhea, and malaria) and was put together in a simpler package more suitable to community health systems. When supported by an existing community platform and strong country leadership and resources, it has extended its reach. The iCCM community has been able to leverage other sources of support, especially from the Global Fund under the New Funding Model. However, while it may be a more effective solution for childhood illness, it is perceived in some places as donor driven and doesn't seem to have lent new momentum to child health at a political level.

Pneumonia and Diarrhea

In the 1980s, the promise of ORS was used successfully by James Grant, visionary leader of UNICEF, and others to mobilize political will and substantial resources supporting over 100 country programs; a few demonstrated substantial declines in child mortality. However, starting in the mid-1990s through the first decade of the 2000s, progress came to a standstill. Demand for ORS in communities stagnated because it did not meet expectations for a rapid cure. The growth of other priorities such as malaria, HIV/AIDS, and immunization diverted attention; diarrhea case management was absorbed into IMCI that then operated at much smaller scale; and targeted funding disappeared.¹⁸

Over time, more optimal ORS formulations were developed, and in 2004 WHO and UNICEF recommended the addition of zinc to prevention and treatment protocols. The Global Zinc Task Force, established in 2005, set out to accelerate the adoption of zinc in high-burden countries and succeeded in attracting some political will, although the availability of zinc has been slow to materialize. In 2006, in an

¹⁸ Santosham, Chandran, Fitzwater, et al. (2010).

attempt to revitalize diarrhea programs, WHO, UNICEF, USAID, and Johns Hopkins University released detailed guidelines for countries, but progress still continued at a slow pace and use rates stagnated. In 2011, the DPWG brought together efforts for both disease conditions and to support the expansion of programs in 10 high-burden countries.

Acute respiratory infection (ARI) programs were initiated in the 1990s based on evidence from research studies done earlier that childhood pneumonia could be assessed and treated with antibiotics in community settings. However, compared with the early years of control of diarrheal diseases (CDD) programs or immunization programs, they were slow to be adopted or scaled. Initially, countries thought programs would be too difficult and too costly, given the need for antibiotics and well-supervised health workers. Large-scale implementation of antibiotic treatment, especially at the community level, raised concerns of appropriate use and antibiotic resistance. Programs proceeded slowly, rarely at scale. In 1995, with the absorption of pneumonia into IMCI, attention and resources waned, as was the case with diarrhea. For years, pneumonia was the leading cause of child death but was nearly invisible.

In the early to mid-2000s, child survival publications and mortality estimates raised the importance of pneumonia and the potential impact of effective interventions. At this time and in parallel, GAVI and the Gates Foundation provided support for the development of new vaccines that would prevent pneumonia (pneumococcal/HiB). GAVI funded the PneumoADIP and the HiB Initiative aimed at country adoption of the new vaccines. This combined effort provided new, strong momentum for pneumonia and helped reactivate the network of pneumonia proponents.¹⁹

However, for treatment interventions, interest didn't begin to re-emerge until 2006, when WHO and UNICEF released "Pneumonia: The Forgotten Killer of Children." This momentum became more apparent in 2009 with the development of the WHO/UNICEF-led Global Action Plan for Pneumonia (GAPP) that engaged countries through informal consultations—and with iCCM there were efforts to expand access. At the global level, there has been increased advocacy for policy and resources by more formal groups such as the Global Coalition Against Child Pneumonia.

The network of pneumonia actors was brought into the DPWG, and in the last two years, action plans for both groups have been merged into the WHO- and UNICEF-sponsored GAPPD. GAPPD integrates prevention and treatment for children and is conceptually elegant, but it is generally considered too complex to be operationally useful.

GAPPD is an interesting framework and right way looks at prevention and treatment holistically but it went nowhere. (Bilateral, global)

In 2015, pneumonia and diarrhea still caused 16% and 9% of deaths of children under five, respectively, and most of this burden is concentrated in 15 countries. There has been progress in mortality reduction in the past 15 years despite lack of cohesive political momentum, but substantial needs remain. It is not clear yet if combined diarrhea-pneumonia efforts will build stronger support.

I think there has been modest success in some of the treatment aspects of programs including pneumonia and diarrhea. I wish there were more but it is part of the unfinished agenda. It needs some combination of quality care in facilities and pushing further into communities in a good number of countries. (Academic, global)

¹⁹ Berlan (2015).

Findings: Factors That Affected Momentum

The following sections summarize the themes that emerged from interviews about cross-cutting factors that affected the importance, positioning, and progress of child health.

Contextual Factors: Competing Priorities

There is ample evidence on what interventions reduce child mortality under what epidemiologic and system conditions. This information should underpin the priorities of country health programs but often does not; this has been a consequence of donor-driven agendas or local political decisions (e.g., polio eradication, HIV funding in very low prevalence countries, building hospitals). In some places, it has slowed progress with preventable child mortality.

Most concern was raised about the polio eradication endgame and legacy transition, especially in sub-Saharan Africa. Disease eradication and elimination initiatives have captured the attention of politicians and funding agencies, and the needs of the endgame may easily override the attention required to strengthen the health systems that support child health more broadly. In addition, high levels of resources support extra staff in large countries—in Nigeria, Ethiopia, DRC, and Chad—WHO employs 2,000 polio staff. Simplistic notions of transferring the attention of these assets when they are no longer needed for polio begs the question of whether they are fit for the needs of health systems or child health programs and how they would be funded. Lastly, approximately 90% of WHO’s Regional Office for Africa biennial immunization budgets for more than a dozen years have come from polio finances. It is unclear how this might transition and what will be lost for child health if it does not.

In the past 15 years, child health has competed for resources with large, vertically funded programs such as immunization, malaria, and HIV/AIDS. All three are also important contributors to child health, but resources were often ring-fenced and controlled such that they couldn’t be used for related conditions or population groups. At best, this was a missed opportunity and at worst it was competitive. A coherent strategy for the whole child has no owner and is lacking in relation to other areas of child health.

A problem that the global community created, and the US government particularly contributed to, is putting massive money into single pipelines, like PEPFAR. GAVI was funneling all the money into vaccines. So we had these vertical programs and when you get to the country level, you have a lot of money going into single areas; and the broader health system really struggled. (Multilateral, global)

It’s the same with donors. We have segregated out components of child health. We haven’t been able to mobilize around comprehensive child health. (Bilateral, global)

The most uncertain threats to momentum for child health involve contextual changes that have or are expected to have large effects on public support and levels of development aid. In 2008, when the financial crisis occurred, fewer resources were immediately available at multiple levels, the appetite for new initiatives waned, and interest in health systems strengthening was tabled. Similarly, the current refugee situation in Europe has diverted attention and aid budgets from the countries in that region into crisis management.

Health System Platforms and Scaling Up

During the 1990s, interventions for child health were labeled, managed, and implemented in a vertical, disease-specific fashion (CDD, ARI, immunization, and vitamin A supplementation). IMCI attempted to

integrate service delivery but floundered. Despite the fact that integration is considered important and studies show improved efficiency, most programs have been financed vertically, driving parallel support systems, redundancies, and missed opportunities.

Weak community participation and low demand for formal health care have been a barrier to improved and sustained improvements for children's health. Community support of, demand for, and satisfaction with core child health interventions often has not been the focus of implementation. Over the past 15 years, the engagement of communities has at times been undervalued, as with early IMCI efforts that assumed that increasing the availability of care in facilities would be enough or with polio eradication efforts that relied on regular, massive campaigns rather than routine service utilization to sustain high coverage. At other times, community demand factors have been acknowledged but not swiftly addressed, as with perceptions early on that ORS did not cure diarrhea. For some, community engagement remains one of the most important areas needing attention in order to accelerate improvements in child health.

There is a need to go beyond the health facility and move into the community. It is easier to establish scheduled activities like immunization campaigns or routine immunization services compared with routine health services needed to provide appropriate and quality care to sick children. (Multilateral, global)

One of the most significant challenges to child health has been the difficulty in scaling up what works. There have been successes such as immunization and malaria prevention. However, achieving highly effective coverage of other child health interventions requires the funding and political will for building robust input systems (supplies, human resources), improvement in management (information, supervision, quality), and demand creation.

There are proven interventions that would improve pneumonia case management at the facility level as well as at the community level that are not being scaled up; so that is a missed opportunity there in terms of child health programming. (NGO, global)

Country Ownership and Leadership

The presence of strong country leadership has contributed to improvement in child health outcomes, and conversely the absence of committed leaders or weak leadership contributes to lack of progress. Weak leadership in countries can be overcome by externally driven and funded activities, but they are much less likely to be sustained over time as resources fluctuate or new external priorities arise. In the future, country leadership will be even more critical as the locus for improving outcomes is expected to shift decisively to country action.

In Africa, we have been complacent as a region. Political leadership didn't realize what was at stake in the MDGs. One great success is that 10 countries have achieved MDG 4 and another 15 countries reduced mortality. We could have achieved better, but others didn't internalize and focus on interventions seriously. (Multilateral, region)

The Success of Child Health

The success of mortality decline over the past decade and, especially during the run-up for MDG 4, clearly provided momentum to child health. Positive results built support but paradoxically have also become a barrier to address the unfinished agenda. The data available for accountability may have helped propel child health forward but they have not secured a continued commitment to reach those that haven't been reached.

Findings: Stakeholders, Initiatives, and Coordination

Organizations

The organizations identified as active in global child health over the past 15 years are illustrated in the word cloud in Figure 7. The size of the name reflects the frequency with which it was identified as an important actor by study respondents. The most prominent organizations are UNICEF, USAID, WHO, the Bill & Melinda Gates Foundation, the World Bank, GAVI, and the Global Fund. These were followed by a second-tier group that includes PMNCH, Norwegian Agency for Development Cooperation (Norad), the Department of Foreign Affairs, Trade and Development (DFATD), and the Reproductive, Maternal Newborn and Child Health (RMNCH) Trust Fund. As a group, NGOs are also important, although no single NGO stood out. The African Union was prominent in regional interviews.

Figure 7: Word cloud showing organizations identified in interviews as active in global child health



Despite their importance, the level and style of leadership that was exercised by these organizations varied over time. **UNICEF** has the longest-standing mandate for child health, especially under the leadership of James Grant in the 1980 and 1990s, who emerged as the most important champion during interviews with stakeholders. UNICEF lost its eminence once new directors moved into broader child rights and other fields, as global partnerships like GAVI and the Global Fund with specific purposes grew. Similarly, **WHO**, with its important normative and technical mandate, was active, but the turnover of leaders and internal reorganizations of child health sections worked against a strong presence. With funding scarce and overwhelmingly earmarked to projects, child health has not stood out.

UNICEF has been a much weaker leader than it should have been over the last 15 years. There are of course exceptions but it has not been the dramatic transformational leadership that we have seen before. (Foundation, global)

Is it an important part of WHO's role? I also think that the merging they've done of maternal as well as child in the same place risks that all will be dominated by maternal and newborn. (Academic, global)

Earlier in the MDG era, **USAID** was an active leader, providing support and funding for child survival through its country missions, NGOs, and centrally funded projects. As commitments to global partnerships such as GAVI, the Global Fund, and polio eradication were made, as well as disease-specific initiatives such as PEPFAR and the President's Malaria Initiative (PMI), support for child health goals was diminished and fragmented. More recently, maternal and newborn health have coalesced and appear to have a stronger voice within USAID. However, in 2012, along with UNICEF and others, USAID tried

to refocus attention on child health with Ending Preventable Child and Maternal Deaths (EPCMD): A Promise Renewed.

Obviously USAID has been a very strong voice for child survival. (Multilateral, global)

What's disappointing about donors in general and USAID in particular is that they are not driving a discussion at the global level about child health. (Bilateral, global)

The **Bill & Melinda Gates Foundation** has become a major force in global health through high levels of funding and the use of its powerful voice. Child health—related needs and interventions are a high priority—particularly polio eradication, immunization, malaria, nutrition, and newborn health—and funding spans the spectrum from discovery to delivery. However, the organizational and strategy structure of those areas relevant to children are spread out inside the foundation in disease, population, service delivery, and country subgroups. This appears to be a barrier to more holistic work and makes it difficult for outsiders to know how to collaborate.

What is the Gates Foundation trying to achieve? Talk about coherence and strategic focus. Seems hard to understand what are its priorities. But certainly they are a very important voice and presence and source of funding. (NGO, global)

The **World Bank** has played a major role in financing health and development in countries for decades. However, they have risen to new prominence with their role in hosting the new GFF.

GAVI has made major contributions to saving children's lives, albeit tightly focused on immunization. As an alliance, it has deep buy-in from organizational members and working arrangements with other key actors that leverage their comparative advantage (e.g., UNICEF's country presence, WHO technical resources, NGOs community orientation). Through a targeted health systems strengthening agenda, GAVI is broadening the use of its platform in countries to support other child health interventions, but this appears to be at the margins.

GAVI was an effective global intervention. It consolidated funds, raised a lot more money, set out a systematic approach to countries, [developed] transition plans, and created incentives so that countries could adopt new vaccines with reduced prices. (Multilateral, global)

The Global Fund is a large and influential financing organization that supports disease-specific programs that also serve children in countries (malaria, HIV/AIDS, TB). More recently, it has implemented a new funding model that provides support to health systems strengthening in addition to control of these diseases. As part of the model, there have been specific efforts to incorporate iCCM into Global Fund country plans.

The new funding model has really helped [stakeholders] think about systems strengthening, linkages across programs. One of the new strategy objectives is really supporting integration of vertical programs in MCH. (Multilateral, global)

PMNCH was originally established to bring together separate global partnerships and constituencies under a model of the continuum of care. It was slow to develop and define its role in advocacy and coordination, but it has been active in broadening the stakeholder field and gathering input into global strategies and the SDGs. It will continue to convene stakeholders and will host the new accountability mechanism for SDG monitoring. However, questions about the organization's strategic position and capacity remain. They are perceived as having a heavy focus on maternal and newborn health to the exclusion of child health.

I think the whole establishment of the PMNCH [focused on] integrated care as an agenda. This was quite an important achievement to bring the agenda together. (Bilateral, global)

I think PMNCH should have been a unifying platform but it's not strong. It's not helped for child survival as much but it has for the continuum of RMNCH. (Foundation, global)

Initiatives and Groups

In addition to organizations, there have been a set of important initiatives or groups that have played roles in moving child health forward. Initiatives vary by purpose, the breadth of their work, the level at which they work, and the range of participants. Some of them have purposely time-limited mandates. Initiatives are illustrated below. The size of the names reflect how frequently they were identified by study respondents.

Figure 8: Word cloud showing initiatives/groups identified in interviews as active in global child health



EWEC was launched to mobilize commitments and action across public and private sectors to end preventable deaths of women, adolescents, and children. It elevated attention to maternal, newborn, and child health (MNCH) to diplomatic levels, and its first strategy helped galvanize movement to achieve MDGs 4 and 5. An independent review committee was commissioned to monitor progress. EWEC has been an integral part of the SDG process and led the development of Global Strategy 2.0, which will continue to coordinate and guide partners to reach RMNCAH objectives. While child health is addressed in the strategy, it employs a continuum of care approach; thus it is unclear how much attention it will receive. However, EWEC is the central umbrella for commitments to child health.

Working for that strategy in the beginning set off a strong EWEC and a sort of focusing on having that very deliberately at the UN Secretary-General level. We were working on the advocacy aspect. And doing this in a very political way but at the same time having technical work to accompany it. With all the partners involved. (Bilateral, global)

The **GFF** is a key financing platform for EWEC's global strategy launched last year. It is intended to help bring additional resources and build financial sustainability for RMNCAH by enabling smart financing in countries (more efficient investments in high-impact interventions), by leveraging more domestic financing, and by ensuring harmonization and alignment with country-led plans and investment cases.

The first countries have just been approved, so while there is great optimism that this model will succeed in supporting RMNCAH more effectively, there is also skepticism that it will succeed with investment cases and bringing new resources. It is highly dependent on country leadership, donor willingness to harmonize, and private sector engagement.

One aspect of it is to try to have an impact on the smarter use of resources or to aid in scaling up efforts. To make sure countries that will graduate from aid in the coming years and will not fall back in terms of achievements and results and child health is central to that. What efforts can be made at this stage to prevent that from happening? The obvious is domestic resources and responsibility of governments. (Bilateral, global)

The GFF is not very relevant. I think the hype greatly exceeds its actual potential. (Multilateral, global)

Child Survival Call to Action, APR, and EPCMD

In 2012, the Child Survival Call to Action was convened by the US, Ethiopian, and Indian governments, and several summits were held to rejuvenate a global child survival movement. This led to hundreds of governments and organizations signing a pledge to stop women and children from dying of preventable causes (APR). UNICEF has led the APR initiative with USAID and WHO as key partners. The APR has had two goals: one was to achieve MDGs 4 and 5 by 2015; and the other, in keeping with SDG 3, is to sustain progress until no mother, newborn, or child under five dies from preventable causes. Some people questioned the need for the Call to Action targeting children at a time when framing of global RMNCH health problems moved toward the continuum of care. However, APR helped countries consolidate child health strategies, although it brought no new resources. In 2014, building on APR, USAID developed the EPCMD initiative. This has included a global strategy, USAID missions' plans for key countries, and reporting frameworks.

With the Call to Action, I think we just needed at that point to reinforce that [child survival] agenda and reinforce our interest in it. In some ways APR as a movement has had some impact on the country level; it's refocused attention on U5MR. (Bilateral, global)

APR didn't bring enough partners; it was too much of UNICEF and USAID. Also not enough additional resources were brought in. (Multilateral, region)

The **Countdown to 2015** is a multidisciplinary collaboration that was intended to provide independent evidence of progress toward MDGs and for accountability of countries and development partners. In addition to developing methods for measurement, it provided critical, comparable evidence that visibly demonstrated achievements (or lack thereof) to policy makers and technical leaders. For SDGs, a Countdown-type mechanism is likely to be more decentralized with a regional locus and more country capacity building, such that evidence will be more rapidly and effectively applied.

There was a lot of attention brought to country leaders on their performance around the MDGs. The country-specific report cards and data sheets and helping to really pioneer use of that kind of regular routine updated tracking at country level on a bunch of specific things. I don't think at the global level itself accountability was that effective. Some of the things Countdown pioneered such as the continuum of care, simple indicators, data from a wide variety of sources—these have been more widely adopted. (Multilateral, global)

DPWG and the iCCM Task Force

By the beginning of 2000, technical working groups relevant to child health began to emerge. Often these were for disease-specific interventions, but they also included groups focused on more cross-cutting themes such as community health workers. Two groups that have been the most active are the DPWG and

the iCCM Task Force. Participants of both include UNICEF, WHO, USAID, other bilateral aid agencies, foundations, and NGOs or NGO networks such as the CORE Group. The iCCM Task Force grew out of a series of technical review meetings that were held as community case management (CCM) gained momentum. Sharing of guidelines, experiences, tools, and studies across countries and researchers has been valuable, and ultimately secretariat support was established with USAID funding through the Maternal and Child Health Integrated Program (MCHIP)/MCSP. Led by a steering committee, it has helped harmonize iCCM approaches and provided some visibility at the global level. Some subgroups have been able to address specific bottlenecks or constraints to programs. The knowledge management platform for the task force, CCMCentral.com, provides access to a wide range of iCCM program materials and is an important forum for global stakeholder technical discussions. However, it does not appear to promote priority attention to child health at higher political or diplomatic levels. Also, linkages with countries are not well developed, limiting learning and effective dissemination.

The DPWG, established in 2011, provides technical assistance, resource mobilization, and evaluation support to 10 countries to improve coverage of diarrhea and pneumonia treatment, and it convenes the group for child health commodities under the UN Commission on Lifesaving Commodities (UNCoLSC). Other technical groups that have supported or advocated for diarrhea and pneumonia work include the Global Zinc Task Force (technical, policy, good manufacturing practice), the Mining Compact for Child Health (sustainable markets for zinc, scale-up partnerships), and the PneumoADIP and HiB Initiative (vaccines). The singling-out of pneumonia and diarrhea, whether through groups or meeting events, has been important to retaining some level of attention.

The DPWG is reported to be an effective mechanism for information sharing among technical stakeholders, but there have been variable results in strengthening and scaling treatment programs in the focus countries. Despite the enthusiasm of participants, many report that this type of coordination does not lead to real alignment of policies and interventions, as partners follow their own interests and priorities and respond to their own funding streams. There is a sense that there is little impact on country-level coordination, and fragmentation is visible at both global and country levels.

Sometimes there are so many partners, and this has been a concern especially in country where different partners are asking for different things to be done in different ways with different priorities, Sometimes the countries get overwhelmed. The countries have their country plans, but they end up implementing their partner or funder plans. (Multilateral, region)

Leaders

Individuals were sometimes identified as leaders in the field of child health. Thirteen names were mentioned but each by only a few people. The UN secretary-general was the most frequently identified, mainly in relation to EWEC and its strategies. There is concern that with Secretary-General Ban Ki-Moon's replacement, RMNCAH will not be a priority. Most of the other people are associated with organizations that work in development (multilaterals, bilaterals, academic institutions), and one held elected political position. What is overwhelmingly clear is that child health has no obvious, public champion and has not had one since James Grant. Further, it does not appear that champions are emerging from the next generation.

There is the people factor – you can achieve so much if you have the right people...it's a very thin field. How do we build a new generation of child survival people? This is really important. (Foundation, global)

A Note on the Lancet

As noted earlier, the *Lancet* has played an important role in communicating information and bringing high-level attention to child health, among other global health issues. The role seems to be one of creating a space for experts to synthesize and comment on evidence, publicizing evidence more broadly in

development circles and with political leaders, using the editorial function to advocate for things that advance the cause, and following up on reporting on progress and accountability. There is some worry that this voice is being used too frequently on many issues, thereby lessening its influence.

For leadership, I find it interesting that the Lancet has jumped into a relative leadership vacuum to really give some very provocative and compelling series on issues that are almost setting the global debate . . . which is an odd leadership role to step into, but I think it's been very important. (Foundation, global)

Coordination of Work in Child Health

The level of coordination of stakeholders and programs in child health has varied considerably over the past 15 years. At the time of commitments made to the MDGs in 2000, there was a clear results focus and common norms, but most key organizations pursued their own interests. In 2003, the *Lancet* series was a turning point for commitment to child health that was followed by greater coordination, although usually around diseases (e.g., malaria) or interventions (e.g., immunization, IMCI). In this same time period, big global health partnerships or alliances were established and began to evolve, especially GAVI (1999) and the Global Fund (2002). These partnerships brought member organizations together at the global level (in boards and working groups) with requirements for coordinating mechanisms at the country level led by governments (interagency coordinating committees and country coordinating mechanisms). Both GAVI and the Global Fund have large, dedicated funding streams, explicit goals, and tight mandate boundaries. GAVI, in particular, has established clear roles and expectations for global and country partners.

First there is a working group at GAVI and a board, and it forced the community to come to agreement including the donors, the foundations, and UNICEF, to adopt common positions over time. When you get to that level these require institutional buy-in past grand statements. (Multilateral, global)

Towards the end of the decade (2010), in an effort to accelerate progress toward MDGs 4 and 5, EWEC brought more stakeholders together under a broader strategy umbrella that was centered at high diplomatic levels (the UN secretary-general). EWEC gathered commitments from organizations, employed accountability mechanisms to confirm progress, and held annual events that brought public, private, and charitable sectors together. Coordination continued to be focused on diseases or interventions within existing partnership organizations, technical working groups (e.g., DPWG, iCCM Task Force) and global action plans (e.g., ENAP, GAPPD, Global Vaccination Action Plan). Coordination mechanisms also expanded to include cross-cutting topics such as the supply of commodities for children (e.g., UNCoLSC/RMNCH Trust Fund), and data (e.g., Child Health Epidemiology Reference Group). In some instances, organizations developed joint work plans or statements and donors funded organizations purposely to enhance joint work and better coordination. Despite the drive for the MDG targets in 2015 and the launch of EWEC, which might have continued to unify stakeholders, a wide range of agency-owned topic-specific initiatives emerged instead (e.g., APR, FP2020, ENAP).

We saw that targeted funding of institutions to work together was important. It gave them the possibility of working together more closely. (Bilateral, global)

EWEC provides a large umbrella under which many different initiatives fall; but I think regardless there is still a lot of disconnect and vertical initiatives. (Foundation, global)

As the MDGs came to closure, a more inclusive consultative process broadened the group of constituents that developed the SDGs and EWEC's Global Strategy 2.0. In part, this was intended to provide a better basis for coordination. The GFF was established to strengthen financing, but also with the intent of using country investment cases to drive closer alignment at country level. The PMNCH provides the venue for seeking voices of many stakeholders. While the architecture is in place, uncertainty remains high. The size and complexity of the partner environment has increased. Large numbers of branded and possibly

competing initiatives still exist and are causing fatigue. There is jockeying for visibility that is perceived to occur between partner organizations, especially UNICEF and USAID.

At the global level in child health, there is a much more diverse set of people. Clearly there has been a privatization of health influence. In the old days, it was WHO and UNICEF. Now it's much more complicated with a lot of actors. (Multilateral, global)

Since then I think a rather confusing period in global health governance has arisen. Different donors in the global scene are trying to capture leadership for different parts of the agenda—EWEC with the UNSG and smaller donors like Norad, APR with USAID, FP2020 with DFID, and GAVI keeping its own agenda. You actually have a whole bunch of global voices saying pay attention to my problem—my agency is leading. What looks like coherence isn't. (Multilateral, global)

Today, child health is highly fragmented and siloed in the global arena, within stakeholder organizations, and at the country level. Most coordination that has happened in child health has been within disease or intervention boundaries. The best example of effective coordination at all levels is GAVI, which provides access to vaccines, and country commitment and ownership of these programs is high. Coordination for other intervention areas exists but tends to operate mainly for technical purposes and at the global level. The network of experts and policy makers that came together around the *Lancet* 2003 series continued to generate evidence and improve measurement, including through the Countdown, but didn't influence coordination around the child as a whole.

Within key organizations, child health is also siloed under disease areas or buried within broader MNCH groups. Child health staffing has been limited compared with immunization or polio and more recently maternal and newborn health. In part, this reflects funding availability.

Going forward, there was broad agreement that the most important aim for coordinating child health is to do it well at the country level. Experience has shown that countries with strong leadership are able to gather, align, and coordinate donor funding around their own national program, as evidenced in Rwanda and Ethiopia. In countries with weak leadership, they are not well coordinated and development partners have much higher visibility promoting their own interests. There are other challenges to making coordination work such as variable donor funding cycles and multiple requirements for program documentation that can have high transaction costs for governments. Global-level development partners may ask that coordinating bodies be set up separately to consider specific topic areas. It is hoped that the GFF investment cases will be an effective mechanism for improving coordination around a consolidated country plan, but this is expected to take support, time, trust, and compromise.

The countries can be asked to set up three or four different coordinating mechanisms all around one aspect of child health. So it is quite frustrating at the country level to deal with this as well as very time consuming. (Multilateral, global)

It's another organization to work with for development aid (GFF) and we are working toward strengthening the issues around coordination. Working to support national plans so that we don't continue to fragment and support only particular issues in MCH. (Bilateral, global)

Certain practices appear to support better coordination. Having comparable data for all countries available, tied to accountability, helped bring countries and the global-level community into dialogue. The development of joint strategies and work plans among organizations and governments generated common commitments that worked, especially when there was targeted funding that allowed organizations to play complementary roles. Consultation early on in the process of developing goals, strategies, or roadmaps

tended to build buy-in. Relying on more than one venue or mechanism (although not too many) offered alternative linkages and reinforcement.

I think we have tried as hard as we can to see things together and to open spaces where we can work together. It is still challenging. (Bilateral, global)

It is not clear how organizational behavior that constrains coordination in child health will be addressed or who will do it, as there is little leadership at the global level to bring the community together.

Findings: Political Commitment and Funding

Political Commitment

The World Summit for Children and the MDGs (MDG 4, specifically), established the formal space for commitment to child health. While countries publicly agreed to work toward the MDGs, political commitment for child health did not begin to strengthen until in 2003, when the technical network coalesced. Afterward, political commitment was still variable but grew, associated with accountability efforts. The technical network or parts of it went on to work with countries on Countdown case studies, measurement systems, intervention packages (e.g., iCCM), and documenting evidence for newborn health. These had variable effects on political commitment within countries.

The financial crisis of 2008 and the increasing importance of global partnerships (GAVI, Global Fund, RBM) and their funding needs may have contributed to a gap or slowing of commitment for traditional child health interventions. This was not addressed until 2010, when prospects for MDG 4 looked poor and EWEC and its first strategy were set up as an umbrella for MNCH. EWEC highlighted diplomatic engagement and broadened the community of those committed, but it was only loosely coupled with the child health priority activities of the traditional stakeholders. Several other initiatives or groups were established to accelerate or strengthen child health progress and linked to the EWEC framework. The most successful of these included the RMNCH Trust Fund (UNCoLSC).

Child health has not had the political will or resources at the global or country level. (Bilateral, global)

The global health initiative environment was crowded as the MDG era came to a close and remained dominated by vertical intervention actors and programs. Political commitment was reportedly higher for immunization and malaria and increased for maternal and newborn health. As the broader SDGs were developed, the target indicators for SDG 3 are intended to focus attention on child mortality as well as maternal mortality and family planning. Even though the child health technical network advocates for attention to ending all preventable deaths of children under five years, the newborn health network is far more visible. WHO, UNICEF, and USAID promote broader child mortality goals and high-impact interventions within their own new strategies (aligned with EWEC). However, it is not yet clear whether this will be accompanied by increased political commitment to child health, and it may remain uncertain for some time.

Within the SDGs there continues to be a strong political commitment; it [child health] is an important part of the SDGs and there is the vision of ending preventable maternal and newborn death in the next 15 years. (NGO, global)

I think the child health community does have the challenge of making sure that the top prioritization of child health does not get watered down in a very large development agenda. (Foundation, global)

The GFF targets RMNCAH financing and, under the World Bank’s overarching work, there may be an opportunity to enhance political commitment to child health and address the unfinished agenda in countries (through investment cases) and globally.

Situate the RMNCH agenda within the universal health care agenda and make the case that the way or the path to universal health coverage must be through getting essential services (not just health care but multisectoral) for RMNCH. (Multilateral, global)

In order to strengthen political commitment to child health in the future, how it is described and promoted matters. Some believe that the community should build on what has succeeded in the past: reporting results in mortality terms. Others suggest that this is not enough and being able to persuasively report investment impact or return on investment will be increasingly important in the SDG environment.

It is important to continue to talk about what we do and have done that has worked because there are still a lot of people who think child survival money is bad after good. We have to find a way to communicate more effectively around impact on those countries and people who have not been reached. (NGO, global)

Conclusions: Advancing Child Health

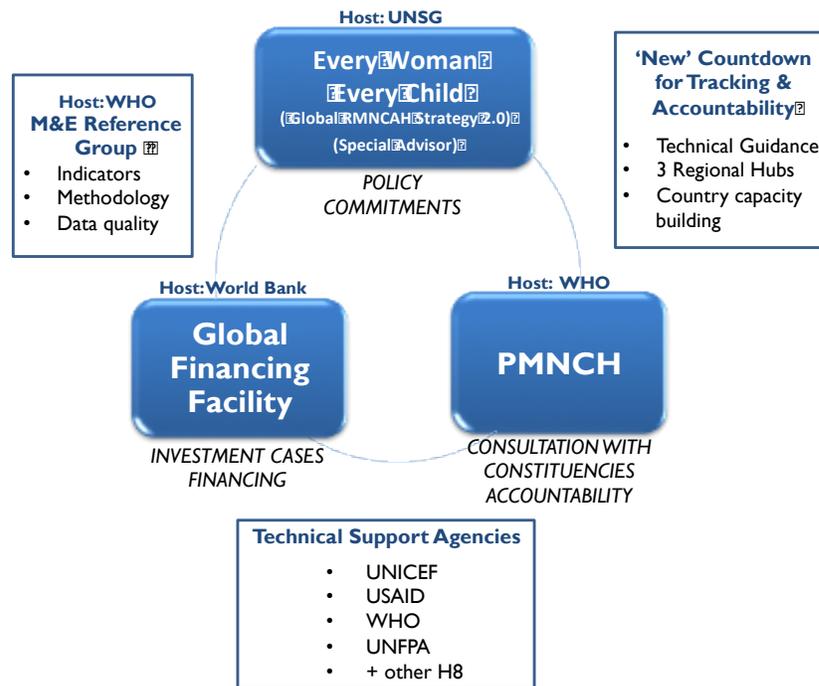
The Future Environment

Effective strategizing for the advancement of child health over the next several years is at a critical juncture. There are several features of the evolving global context that are important to consider that emerged from interviews and documents:

- The level of uncertainty for development support is high in the near term, due to the major shift in global goals and strategies, the refugee crisis in Europe, other humanitarian crises including fragile states, and impending changes in leadership of institutions key for child health, especially the United Nations, WHO, and the US government.
- The implications of the shift to the SDGs for health or children are still emerging, but priorities, political commitment, and likely funding will be more broadly distributed and possibly with less clarity of purpose. If any of these resources are “zero-sum,” child health (other than immunization) is likely to be working with less.
- The four indicator targets for SDG 3 have been designed to capture and ensure the prominence of maternal, newborn, and child mortality and family planning within the goal of health and well-being. There is a risk that relying on U5MR alone will not ensure continued attention to the unfinished agenda for postneonatal child health. Disaggregation of postneonatal mortality rates in relation to burden is likely to be helpful.
- The Global Strategy 2.0 for RMNCAH signals a change from earlier strategies, in its broader and integrated approach and its increased emphasis on scaling up, equity, and country locus. It is not clear how well “survive, thrive, transform” will drive focus on outcomes as the MDGs did. This, and the continuation of earmarked funding, may lead to more, not less, fragmentation as agency priorities are carved out.
- The World Bank has heightened its presence in RMNCAH with the GFF. There is political reliance on the GFF to finance and rationalize financing of child health, especially those components not financed through GAVI or the Global Fund. However, there is a high level of uncertainty reported about its potential and actual effectiveness or how long it will take to have an impact in countries.
- The high-level core architecture for child health (and RMNCAH more broadly) is emerging as in Figure 9. It will be very important to track the place and priority of child health within this

architecture. Without proactive monitoring and follow-up action, the child health community may lose positioning or miss opportunities for advancement.

Figure 9: Organizational and initiative architecture for leadership in global child health



Effectiveness of Child Health Networks

Improved child health remains an important aspiration at the global level; but it does not currently hold a position of prominence nor can it count on sufficient commitment to meaningfully advance or transform the agenda to reach the vision for 2030. This time period is a turning point and provides a good opportunity for child health advocates to make changes that enhance progress.

Child Health Issue Characteristics

Child health has been a central pillar of global health for many years and is still an important part of the vision for the future. Children as a group are valued and this should continue to resonate publicly, but this strength has not been tended to adequately. The child health community's attention has been focused elsewhere, and it appears that they may have lost connection with the most basic underpinning of the child survival revolution's political power.

The reduction of child mortality during the MDG era has been widely recognized as a stunning success, but this has come at the cost of the perception that the job has been finished. The truth is that there are still many preventable deaths of children and that inequalities are pervasive, but this is not broadly recognized outside the child health community. Under-five child mortality in sub-Saharan Africa is much higher than in the rest of the world, and 60% of it still occurs in the postneonatal period, for which there are well-proven, effective solutions that are not getting to people. A striking preponderance of these deaths are readily preventable with low-cost interventions.

Globally, it is believed that immunization and malaria programs have had more impact than pneumonia and diarrhea interventions. In the first decade of the 2000s, the child health community placed a big bet on IMCI as the best approach for sick children, but it floundered. While IMCI was conceptually sound, problems emerged with the complexity and scale of implementation needed. These problems and the push

for IMCI persisted, consuming resources, but most importantly without the self-correcting mechanisms that might have redirected efforts into more effective adaptations or approaches earlier. With the exception of the development of preventive vaccines, pneumonia and diarrhea programs suffered the most.

Child Health Network and Actor Features

Leadership is essential for maintaining and rebuilding the momentum of child health. People interviewed for this study uniformly reported, that for the past 20 years (since James Grant at UNICEF), no effective, individual global champion for child health has emerged. Further, it is not clear that new effective champions are developing from the next generation of child health proponents. Similarly, in the past 15 years, there has been weak or disinterested leadership exhibited by global organizations with mandates for child health. These gaps were felt the most strongly for UNICEF, WHO, and PMNCH, whose leaders appeared to focus on other priorities in the post-2000 decade.

With what appears to be a more mindful and decisive shift of locus of health development action to countries, country leadership—which has always been important—is now critical. High-level political decision makers in countries, who may or may not be technical also, are central to achieving gains in child health. The future is not about others doing more in countries, but countries directing and doing more themselves with the resources that can be brought to bear.

At certain time periods during the last 15 years, there was momentum for child health in pursuit of MDG 4. Starting with a child survival network (the first Bellagio Group) and continuing with the Countdown and EWEC, child health was raised up, contributing to successful mortality decline. However, this momentum has not transitioned through to the SDGs. Perhaps no health issue has yet transitioned, but the child health community urgently needs to find effective ways of mobilizing support that builds on the SDG concept and focuses attention on children for the next 5–10 years. APR (and EPCMD for USAID internally) has helped consolidate strategy for some, but its potential role and future seems limited.

Child health has become increasingly fragmented and siloed as a field and within organizations. It has been divided into diseases, population subgroups, and intervention packages that rarely come together and are sometimes juxtaposed. This contributes to competition and is reinforced, sometimes unintentionally, by the decisions and actions of donors and development partners in supporting subgroups. Similarly, child health has become less visible within key organizations. It has been lost within PMNCH, and periodically within UNICEF and WHO, and is structurally divided in the Bill & Melinda Gates Foundation and USAID. It is increasingly separated from maternal and newborn health, especially with the prevailing focus on childbirth and the time around delivery. Few spaces appear to exist in which MNCH is brought together. In part, this fragmentation explains the lack of a unified and compelling child health vision.

Since the 1980s, there have been affinity or working groups that have brought together experts and practitioners around specific technical topics for child health. These have been convened by multiple organizations and have served to pool information, build consensus on evidence, guidelines, and measurement, publish information, and sometimes coordinate action. More recent examples include the DPWG and the iCCM Task Force. These groups have shown mixed effectiveness and have generally not served to leverage action across disciplines or raise the profile of child health. But these groups are focused on narrow goals, and it is important that expectations of influence be matched to these goals.

In the post-2015 environment, child health needs to be reframed to speak to new strategies, actors, and opportunities. The environment will be shaped by new organizational strategies (e.g., UNICEF, USAID, WHO), the Global Strategy RMNCAH 2.0, the SDG 3 statement, and its four absolute targets: 12% (reduction in neonatal mortality rate); 25% (reduction in U5MR); 70% (reduction in maternal mortality rate); 75% (increased access to family planning). All of these strategies continue to highlight ending preventable child deaths and some seek to promote child well-being more broadly in the context of UHC.

There is consensus on how child health should *not* be reframed. Given changes in child health such as the structure of causes of death and individual risk or needing to reach the hard to reach, quick fixes and magic bullets will not work. Similarly, very vertical or piecemeal approaches or interventions will be inefficient and insufficient to sustain health services and benefits at scale, implying integration.

Future child health framing should start with a holistic approach to all aspects of child health (newborns, infants, and children together) and contain a more explicit expression of equity, because without it mortality will not reach targets. Health systems and platforms need to be addressed, focusing on commodities, health workers, and quality, including all levels from community through hospital and the linkages between them. Flexibility will be a necessary capability of health systems so that delivery can be rapidly adapted to local contexts to respond to need. And with more forward scanning, systems can be adjusted or redesigned in a more mindful and responsive way.

The greatest challenge with reframing is one of communications and resonance with audiences that wield or will wield influence and power. Ending preventable deaths, on which the community now relies, is not sufficient because it appears, based on feedback collected for this study, to lack compelling resonance.

Child Health Policy Environment

There were consonant expectations of what should be addressed in child health driven by a common, measurable goal (MDG 4), unified by the Bellagio Child Survival Group, and pinpointed in the *Lancet* in 2003. This was later reinforced by EWEC and APR, although there were variable expectations and fragmented support for how to deliver proven interventions that met child health needs. Now, post-MDGs, it is not clear that there is a holistic view of strategies to address priorities and provide support for child health programs despite compelling synthesis and publication on current disease burden and the unfinished agenda.

Child health stakeholder and organizational interests have been aligned around various and diverse components of child health. In particular, GAVI and its work with childhood immunization was identified as the most highly aligned and therefore most successful in recent history. While GAVI and its process adds high value to child health outcomes, it doesn't lend power to other child health components (e.g., treatment) nor to the whole child more generally.

As noted earlier, organizations have also tried to align interests around technical themes such as pneumonia or iCCM or around subgroups such as newborns. In the case of technical working groups, there is sharing but not enough work at leveraging influence for added value. Some pointed to actions demonstrating that rather than group action, individual organization agendas were forwarded.

Perhaps most concerning for the future is that after 2010, a surfeit of big and small initiatives in child health began to appear. These were usually branded by agencies and credit was claimed by those agencies. This sometimes led to partners jockeying for positioning as successful leaders or doers, with the jockeying visible and counterproductive to the larger effort. Looking underneath some of this behavior, there are core norms and values for child health on which there is agreement and mutual respect was reported. Understanding how to build on this core for more cohesive action would likely be more effective.

In the early part of the decade after 2000, well-funded global partnerships like GAVI and polio eradication competed for child health resources, and there is some worry that they may capture a disproportionate portion of resources in the next five years. Development assistance for health has increased since 2000 for newborn and child health, although it has not increased as sharply as for immunization and polio. Since 2009, newborn and child health funding has grown faster than other health programs such as HIV, malaria, or TB but from a relatively lower base. There are also strong sources for these funds in government (UK, US) and large foundations (Gates). This demonstrates that important

financial commitment exists for child health even though the future is less certain. Combined with the potential for the GFF to influence spending in countries, there may be a window of opportunity to improve child health support, but it will behoove the child health community to track what happens closely and respond quickly.

As the world and global health look forward to 2030, this is a time of high uncertainty for child health. Such times may be viewed both as a threat and as an opportunity to momentum. Either way, what will be required is a community more highly attuned to windows of possibility, the will to take advantage of them, and the structure to collaborate.

Recommendations

What should the global child health community do to make sure that the full range of child health issues are at the forefront of the global health landscape?

Reframing Child Health and Communicating It

How should child health be framed, both strategically and substantively, to reflect the realities of 2016?

Recommendation 1: With the shift to the SDGs, child health should be deliberately reframed so that it emphasizes the value of children, a more holistic approach including “newborns and infants and children” as one, and a clear aim for equity.

In addition to the reframing, it is equally important that resources be applied to crafting how the framing is communicated more effectively than the current messaging. Communications probably need to evoke the value of children as a driver for ending preventable death.

Re-establishing Leadership

Who has the stature to lead, and what does the global child health community need to do (and avoid) to inculcate and support this leadership?

Recommendation 2:

- a) The principal global partners in child health need to come to agreement on and then designate and support a lead organization to consistently provide overall messaging for child health.
- b) They also need to seek and nurture over time one or several credible champions who will speak powerfully for child health on the global stage.

The organization could be drawn from any of the major ones highlighted earlier, but it needs to have legitimacy, be positioned in the emerging architecture, and be able to be heard by all actors. Once designated, it needs to be decisive in its prioritization of child health, and other organizations need to be clear in their public support. Similarly, child health must have new champions at high levels. Without this, commitment to child health will continue to falter.

Reversing Fragmentation and Coordinating Effectively

How should child health stakeholders (organizations and initiatives) align and advance collaboratively toward goals?

Recommendation 3: Key stakeholders need to create and implement a shared strategic approach for:

- a) Raising the visibility of child health as a whole rather than in subcomponents
- b) Ensuring a strong child health voice in Strategy 2.0, SDG 3 monitoring, and the GFF

c) Bridging child health components of existing strategies across institutions in such a way that country action is more likely

In addition, investments should support collaboration and explicitly dis-incentivize fragmentation within child health.

There are multiple strategies that incorporate child health that were recently launched globally (EWEC 2.0, UNICEF, WHO, EPCMD, etc.). All of these strategies embrace a continuum of care, some more broadly than others, so the challenge is to promote the common core for child health with a recognizable and compelling voice. It is not yet clear what such a strategic approach should look like or what actionable milestones are really needed (analogous to what the ENAP is for newborn health), but it starts with child health advocates coming together to create a way forward. That way forward should build on what has been learned from the Call to Action, APR, and similar efforts in maternal and newborn health. New child health framing might also suggest new or re-emerging alternatives.

To help ensure that investments do not reinforce fragmentation in child health, there are design and learning steps that should be taken right away. This could be as simple as assessing unintended consequences of a project or a meeting or establishing broader linkages at the outset. Current investments must be assessed through the lens of their contribution or status as barriers to whole child health.

While there are identifiable child health proponents, there does not appear to be a clear network or core group that has taken on the mandate to propel child health forward together. However, the charge to such a group is to carry this recommendation forward.

The stakeholder environment for global health is more crowded and complex than it was five years ago and there are many coordination mechanisms at multiple levels. Going forward, the most important place to get coordination right is at the country level.

Recommendation 4: Focus on a few key coordinating mechanisms for child health and support their performance appropriate to objectives, roles, and participants. Close those that do not provide enough value at both global and country levels.

There are multiple coordinating mechanisms and venues for child health at all levels. Some are given—the PMNCH, GAVI, Global Fund, EWEC, and so on. For these, the child health community should assess potential benefits and costs, then work with them accordingly. Similarly, technical or thematic affinity groups may be useful for learning but should focus on a clear or limited purpose with right-sized support. At this point in time, there may not be an existing venue or mechanism that would allow development of a strategic approach by child health leaders and advocates. Then the question becomes whether one can be repurposed, or one formalized from something less formal, or whether it is necessary to create a new space—either formal or informal—for the core network.

During the study, the problem of required but ineffective coordinating mechanisms at the country level was raised multiple times. Countries will differ in terms of what works, but rather than continue a façade with a mechanism, stakeholders should endeavor to make it permissible to abandon those that don't work and try something different, preferably building on existing platforms.

Data and Accountability

How will the child health community know there is progress and hold stakeholders accountable?

The Countdown reporting and accountability process worked reasonably well to build commitment to child health during the MDGs. There are three linkages in the SDG architecture that the child health community will need to continue to leverage this function. The first is the Independent Accountability Panel within the PMNCH that replaces the Commission on Information and

Accountability. The second will be the next version of a Countdown-type mechanism that is under development now. The third is the Monitoring & Evaluation Reference Group hosted by WHO, which is likely to focus on measurement of maternal and newborn health in the near term.

Recommendation 5: Ensure that child health data and information are well represented, packaged, and reported within the context of the emerging evaluation groups.

Country-Level Focus

By far, the strongest finding that emerged from this study was acknowledgment of the shift of locus for transformation and sustained action from the global to the country level. While there have been many statements over the years and more effort recently to ensure country partnership, country leadership, and country investment, there appears to be more commitment to making it happen. The success of the GFF depends on it. The country should be part of the reframing of child health.

Recommendation 6: Reframe child health with the country at the center and purposely engage differently with countries with weaker systems and leadership to sustainably improve child health. Invest in tracking and learning from the process.

It is apparent that countries with strong leadership will themselves direct how child health will improve and how global or regional partners will engage with them to do it. For example, Ethiopia used its existing costed plan for the GFF investment case. This does not appear to be a matter of contention, and donors appear to be increasingly willing to support strong country leadership. The challenge is how best to address countries with weak leadership, which continue to be numerous. Development partners will need to explicitly and in coordination with each other determine whether the challenge of helping to encourage the development of stronger country ownership and national health systems warrants the risk of slower progress in achieving health targets. This is a fundamental policy decision that must be reached with a clear understanding of specific country realities and should not be applied as a blanket policy across all countries. The reality is that some countries will respond to this stimulus by moving to meet the challenge, albeit slowly, while others may use flexibilities to act on agendas far removed from the SDG child health goals. Investing in tracking and learning about how and why this happens will be critical. This process is likely to be the single largest challenge facing the global child health support community over the next 15 years.

Appendix A: Methodology Details

Detailed Methodology: Qualitative Case Study of Global Leadership in Child Health

Study Questions, Definitions, and Boundaries

- (1) **What** are the current global leadership groups, initiatives, and fora focusing on all elements of child health? (Please think of technical areas including infections, nutrition, prevention, and protection. Please think of systems areas including financing, quality, metrics, and accountability.) **Who** currently leads the leadership groups, initiatives, and fora? **How** are these currently led and coordinated?

Groups: global partnerships, multilaterals, bilaterals, foundations, nongovernmental organizations (NGOs), for-profit and nonprofit private sectors, and individuals

Fora: meetings and events

Initiatives: formal endeavors intended to improve child health

- (2) **What were the major lessons learned about past and present global health leadership efforts? (not related to child health; summarized from the literature)**

What worked in what context and in what time frame? (Successes)

What did not work in what context and in what time frame? (Challenges)

Why?

- General global health governance
- Maternal health
- Newborn health
- Immunization (GAVI)
- HIV, TB, and malaria (Global Fund)
- Nutrition (Scaling Up Nutrition)

- (3) **What strategies were employed to move the child health agenda forward? What factors shaped the movement of this agenda? How did the strategies and factors interact over time to move the agenda forward?**

[Will cover:

What has been learned from previous efforts to coordinate or provide global child health leadership?

What aspects or dynamics of child health make global leadership challenging?]

In order to trace child health strategies, actions, and results in depth, and in the time available to do this exercise, we will use four tracer topics. The history of these topics is not mutually exclusive; we expect to see interactions both within and between these topics.

- Child mortality in Millennial Development Goal era and the Sustainable Development Goal era
- Integrated Management of Childhood Illness and integrated community case management (iCCM)

- New vaccine introduction in an immunization program (pneumococcal vaccine)
- Diarrhea and pneumonia

Strategies: Policies, plans of action, and actions and their results

Factors: Shiffman and Smith’s framework

Category	Factor (none necessary or sufficient)
Actor power	1. Policy community cohesion
	2. Leadership
	3. Guiding institutions
	4. Civil society mobilization
Ideas	5. Internal frame
	6. External frame
Political contexts	7. Policy windows
	8. Global governance structure
Issue characteristics	9. Credible indicators
	10. Severity
	11. Effective interventions

- Describe the overall financial resources required for each step in the timeline present in the data summaries

(4) How can we structure global child health leadership to best support improvement in child health outcomes? How could or should global child health fora relate to, engage with, or work with regional institutions and countries?

Data Collection Methods and Organization

(1) Conduct a desk review.

Published and gray literature search

Organization and agency websites

Identify financial references through consultation with an expert (Maternal and Child Survival Program)

- Set up stakeholder, strengths, weaknesses, opportunities, and threats (SWOT) table (for leaders, groups, current initiatives).

Stakeholder group	Strengths	Weaknesses	Opportunities	Threats

- Strengths: In what areas do the leader, group, and initiative excel?
- Weaknesses: What liabilities do the leader, group, and initiative have? What activities do the leader, group, and initiative perform poorly?

- Opportunities: What favorable circumstances or situations do the leader, group, and initiative present?
- Threats: What potential challenges do the leader, group, and initiative present?
- Set up chronologies from documents.

Example

iCCM

	1980s	1990s	2000–2005	2006–2010	2011–2015	2015 to present
Structure						
Actors						
Policies and guidelines						
Activities and key events						
Challenges						
Solutions						
Results						

- Summarize lessons learned using examples unrelated to child health.
Summary with narrative and a table
- Provide financial data.
http://www.healthdata.org/sites/default/files/files/policy_report/2015/FGH2014/IHME_PolicyReport_FGH_2014_0.pdf
High-level summary with a table and graphs

(2) Conduct individual, in-depth interviews (approximately 30).

- Select respondents that include a mix of child health experts or decision makers.

Type of organization	Area of expertise	Background perspective
Multilateral Bilateral Foundation Academic institution NGO or technical assistance agency Private Government	Maternal, newborn, and child health Nutrition Infectious disease Systems (quality, supply, metrics) Social and behavioral change communication and community Financing Policy advocacy	Health care provider Public health professional Economist Systems

See file: CH Mapping Interviews Questionnaire version 1 (Appendix B)

- Transcribe and code interviews using the Dedoose software.
 - First level to child health strategy themes to place information into chronologies
 - Second level to Shiffman Framework
- Orient SWOT forward toward strong leadership for improved outcomes.
 - Strengths: How can a stakeholder’s strength help achieve objectives?
 - Weaknesses: Will the stakeholder’s weaknesses hurt or help in achieving the objectives?
 - Opportunities: Will an alliance with this stakeholder help achieve objectives?
 - Threats: How can the stakeholder’s threats be minimized?

(3) Data consultation (individual and possibly groups)

- Confirm chronologies, including Shiffman factors and forward-looking SWOT, with key informants as feasible.
- Review initial findings with the Advisory Committee (January 2016).

Interview List

Table 3: Number of interviewees based on type of organization

Type of organization	Number interviewed (N=33)
Multilateral and global partnership	10
Bilateral organization	6
Foundation	4
Academic institution	1
NGOs	6
Private sector	1
Other interviewees from sub-Saharan Africa region	5

Appendix B: Instrument

Maternal and Child Survival Program Global Child Health Mapping In-depth Interview Guide

Date:

Name, title, and affiliation of respondent:

Main areas of expertise:

Interviewer:

Introduction

Thank you very much for setting aside time to talk with me today.

The Maternal and Child Survival Program (MCSP), funded by the United States Agency for International Development (USAID), is mapping global leadership and coordination of child health to better understand how the global leadership for child health has evolved and identify opportunities for enhancing outcomes now that the effort to achieve the Millennium Development Goals has ended. You are being interviewed because you and your organization are important stakeholders in the child health community.

This is a confidential interview. All identifying information will be removed, and any information or examples we discuss, and quotes that might be used in the study report, will not be attributed to a specific person or institution. You are free to not respond to any of our questions or to stop the interview at any time.

The interview will take about an hour.

[If needed: To make sure I capture all of your feedback, is it all right with you if I record this interview?]

Before I begin, do you have any questions?

Questions

We would like to understand your perspective on the major strategies and events that helped or constrained achieving improved child health globally. For the purposes of this study, we would like to focus on the past 15 years (since about 2000) and on the health of children under 5 years of age.

- 1. In the past 15 years, how have you engaged in child health?** (*Probe: Do you have any areas of specialization? Clarify regional role, if any.*)
 - a. For which organizations have you worked during this time?**

Note to interviewer: For Question 2, if the respondent has a role in an African region, ask for both the global level and for the sub-Saharan Africa (SSA) region.

2. **What do you think were the most important global successes for child health?** *(For respondents from Africa: What were the regional successes in Africa?)*
 - a. **What were the biggest disappointments?** *(Probe: What were missed opportunities, if any?)*

Events and Strategies

Instruction to the interviewer: Ask the general question, then follow up for more specific examples, if any, in one area relevant to the respondent's background (e.g., Millennial Development Goals (MDGs) and Sustainable Development Goals (SDGs), Integrated Management of Childhood Illness (IMCI) and integrated community case management (iCCM), immunization, or pneumonia and diarrhea). Ensure that present day is included.

3. **Reflecting over the time period from 2000 to now, what were the major strategies and events that advanced the child health agenda and helped achieve results?** [...that advanced iCCM, pneumonia and diarrhea, etc.]
4. **What were the major barriers or bottlenecks that critically challenged progress?** *(Probe for African region interviews: What were they in the African region?)*
5. **Who were the important leaders (people or organizations) advancing the child health agenda?** *(Probe: iCCM Task Force, Diarrhea and Pneumonia Working Group) (Probe for African region interviews: Who were they in the African region?)*
 - a. **What did [the leader] do that was important?**
 - b. **How did the key stakeholders for child health work together? How effective was this coordination?**

Factors

Instructions to interviewer for Question 6: Use the key strategies or events reported by the respondent in the previous question (e.g., for strategy 'x' ...).

6. **How did the [strategy or event] affect the political commitment for advancing child health?** *(Probe for what affected priorities, policies and programs, and resources.)*
7. **How would you describe global political commitment to child health now and in the context of SDGs?** *(Probe: How is it prioritized relative to other global health issues?) (Probe for African region interviews: How would you describe this in the African region?)*
 - a. **Why is it at this level?**
 - b. **What needs to be done to raise political commitment to child health?**

Stakeholders

8. **Who are the current influential stakeholders in child health at the global level? How are they influential?** *(Probes: What are they doing to support child health? Have they raised any concerns? (Probe for African region interviews: Who are the current influential stakeholders in the African region?)*
 - a. **How does child health fit into your organization's priorities?**

9. What is the nature of the current working relationship between [stakeholder] and other key stakeholders?

The Future

10. What is your vision of success for child health 5–10 years from now?
11. What are the three most important things that should be done to more rapidly achieve that vision?
12. How would you strengthen the collaboration among organizations, groups, and partnerships to get these things done? (*Probe about collaboration between global and regional levels.*) (*Probe for African region interviews: How would you strengthen the collaboration between global and regional and regional and country levels?*)
13. Is there anything else you would like to add? Is there anything you would like to ask us?

Thank you for your time.

Appendix C: Desk Review of Lessons Learned

Global Health Partnerships Summaries

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
I	Buse and Harmer (2006)	Seven habits of highly effective global public-private health partnerships: Practice and potential	<ul style="list-style-type: none"> • African Comprehensive HIV/AIDS Partnership • Alliance for Microbicide Development • Aeras, Global TB Vaccine Foundation • European Malaria Vaccine Initiative • Foundation for Innovative New Diagnostics • Global Alliance for the Elimination of Lymphatic Filariasis • Global Alliance for Improved Nutrition • Global Alliance for TB Drug Development • Global Alliance for Vaccines and Immunizations • Global Fund to fight AIDS, TB, and Malaria • Global Health Council • International AIDS Vaccine Initiative • Institute for One World Health • International Partnership for Microbicides • International Trachoma Initiative • Mectizan Donation Program • Microbicides 	<ul style="list-style-type: none"> • Getting specific health issues onto national and international agendas • Mobilizing additional funds for these issues • Stimulating research and development (R&D) • Improving access to cost-effective health care interventions among populations with limited ability to pay • Strengthening national health policy processes and content • Augmenting health service delivery capacity • Establishing international norms and standards 	<ul style="list-style-type: none"> • Global health partnership (GHP) alignment is 'out of sync.' GHPs are inherently issue-specific and quick-results oriented, making it difficult for them to follow and align their assistance with the national priorities of recipient countries. • GHPs are not representative of their stakeholders: Many GHPs fail to give legitimate stakeholders a voice in decision-making on the respective governing bodies • Poor governance: Many GHP fail to clearly specify partners' roles and responsibilities. Furthermore, there is often inadequate performance monitoring, oversight of corporate partner selection (conflict of interest), and lack of transparency in decision-making. • Vilification of the public sector: There has been a diminished sense of the 'public' nature of global public health initiatives. • Inadequate finance: There is a tendency for GHPs to lack the necessary resources to carry out planned activities or to fund the true costs of activities. • Poor harmonization: GHPs have failed to harmonize their procedures and practices with one another and with other donors. This leads to duplication in planning, monitoring and evaluation (M&E), finance management, and parallel systems for service delivery. • Inadequate incentives to partner- 	<ul style="list-style-type: none"> • GHPs need to embrace aid modalities (national ownership, etc.) to integrate efforts with the national planning process and minimize transaction costs. • Strive for a more balanced representation of stakeholders in governing bodies. • Need to reassess the idea that market-based approaches are more efficient than public sector approaches. • GHPs need to improve their oversight. • Partnerships need to be adequately resourced. • Partner organizations need to address the particular demands that partnerships place on participants.

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
			<ul style="list-style-type: none"> Development Program • Micronutrient Initiative • Medicines for Malaria Venture • Pediatric Dengue Vaccine Initiative • Roll Back Malaria (RBM) • Stop TB • Vaccine Fund 		<p>facing staff: The organizational commitment and loyalty employers' demand of their staff—often explicitly forbidding staff to have outside interests, particularly if there may be apparent, potential or real conflicts of interests.</p>	
2	Buse and Tanka (2011)	Global public-private health partnerships—lessons learned from 10 years of experience in evaluation	<ul style="list-style-type: none"> • RBM 2004–2008 • Global Fund to Fight AIDS, TB, and Malaria (GFATM) 2002–2007 • International AIDS Vaccine Initiative (IAVI), 2003–2007 • Global Alliance Vaccine Initiative (GAVI Alliance), 2000–2005 • International Partnership for Microbicides (IPM) • The Stop TB Partnership (Stop TB), 2001–2006 • Medicines for Malaria Venture (MMV) • Global Alliance for the Elimination of Leprosy 	<ul style="list-style-type: none"> • Creating novel institutional spaces for more inclusive global health governance through innovative shared decision-making, risk sharing, and knowledge and resource pooling • Forging consensus on policy, strategy, programmatic responses, and international norms and standards, including norms with which intergovernmental organizations increasingly align • Positioning health and specific health issues at the core of national and global development agendas • Increasing the visibility of and mobilizing unprecedented resources, including demand-driven donor support for neglected health issues through powerful advocacy, communications campaigns, and innovative financing mechanisms • Expanding the availability of and access to free or 	<ul style="list-style-type: none"> • Identify and play to the partnerships' comparative advantage: GHP must be able to demonstrate that the joint work uniquely positions it to address an unfilled yet critical gap. GHP must define its value through goals and its distinct contribution and comparative advantage to achieve those goals. • Adequately resource partnership secretariats: The size of the secretariat is a critical factor in determining its success given its role to coordinate partners. • Practice good management: Nearly all evaluations found deficiencies in GHP management. As GHPs grow, professional management structures and strategies become increasingly critical to optimize partner performance, monitoring, and accountability. • Practice good governance: Boards should be representative of stakeholders. Transparency helps to highlight gaps, facilitates the receipt of input and feedback from partners, and promotes efficiency in service delivery. A formal system of partner accountability is needed to effectively communicate roles, objectives, and responsibilities. • Acknowledge and respect partners' 	<ul style="list-style-type: none"> • Need more sustained critical reflection and independent evaluation to achieve optimal results given the level of resources that collaboration demands. • Need to discuss the benefit of opening up spaces for public debate of evaluation findings. • Apply lessons learned more widely across and within partnerships.

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
				<p>reduced cost, quality-assured medicines and vaccines, particularly for neglected diseases, in low- and middle-income countries through the mobilization of R&D, large scale funding, improved distribution networks and revisions to international trade and intellectual property regulations</p> <ul style="list-style-type: none"> • Strengthening health systems and national health policy processes, although not uniformly or sufficiently systematically • Transforming the way many international health organizations fulfil their mandates, particularly through pressure to improve transparency and accountability and to minimize duplication of activities 	<p>diverse interests: Lack of understanding or appreciation of the pressures and incentives faced by partners is a significant barrier to collaboration.</p> <ul style="list-style-type: none"> • Ensure operations impact positively on national and local systems: GHP needs to increasingly differentiate its approaches in specific countries and needs to focus more on capacity-building. • Strive for continuous improvement: GHP should regard itself more as a learning process rather than an organizational structure. 	
3	Caines (2004)	Assessing the impact of global health partnerships		<p>Some GHPs are trying to define their added value more precisely, which include:</p> <ul style="list-style-type: none"> • Harnessing high-quality talent from disparate sources; • Enhancing the capability of partners through coordination and consensus building; • Ensuring resource knowledge management, identifying funding gaps and priorities, mobilizing resource, and funding additional support to countries for supplies and 	<ul style="list-style-type: none"> • GHPs are generally seen as having a positive impact. GHPs are seen as a fruitful way to foster research and development for diagnostics, drugs, etc. • The proliferation of multiple GHPs runs the risk of overwhelming country capacity and a health system that is weak. Thus, governance needs to be addressed as well as the performance of impact assessments. • GHPs need to tighten focus on securing propoverty and gender-related objectives. GHPs should play a role in advocating for and stimulating appropriate policies and approaches. • Resource availability raises key issues about sustainability, predictability, and 	<p>Recommendations (for Department for International Development [DFID]):</p> <ul style="list-style-type: none"> • The developing nature of the GHP approach provides an additional rationale for periodic monitoring and evaluation, not only of individual GHPs but, more crucially, of the GHPs' collective impact, especially at country level. • Donors such as DFID who support both GHPs and direct national and sector budget aids should lobby for funding GHPs (GFATM and GAVI) to provide monies within sector-wide approaches (SWAps) or basket-fund frameworks, where these exist. • DFID should encourage relevant

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
				operational costs; <ul style="list-style-type: none"> • Innovating in processes and actions, and creating synergy between new developments and implementation; and • Providing consistent high-profile advocacy and broadly spread communications. 	macroeconomic stability. <ul style="list-style-type: none"> • The complexity of GHPs raise concerns about institutional issues at the global level. Thus, there is a need for increased transparency, representation of partners and stakeholders on governing bodies, and the performance of achievement assessments. Governance mechanisms at the country level should also be assessed. 	GHPs to work with country partners to harmonize multiple HIV/AIDS GHP programs (where they exist in country) as well as seek to influence directly all those concerned in the initiatives. <ul style="list-style-type: none"> • Strategic, operational, and business plans that clearly define roles and responsibilities of all major partners should be developed and periodically reviewed as a criterion for DFID engagement with particular GHPs. DFID should advocate for and participate in promising initiatives to consolidate work planning among GHPs.
4	Lu et al. (2006)	Effect of GAVI on diphtheria, tetanus, and pertussis vaccine coverage: an independent assessment	GAVI		<ul style="list-style-type: none"> • For countries with higher than 65% diphtheria-tetanus-pertussis (DPT) vaccine coverage, GAVI spending had no positive effect on vaccine coverage, but, for countries with a baseline lower than 65%, GAVI contributed to increased coverage. • It is estimated that GAVI spends USD 8.40–20.00 per child for immunization. • Country behavior, with respect to receiving GAVI funds, was likely affected by the prospect that reward payments would begin in the 4th year of the projects. • Public-private partnerships can help reverse negative trends in public health. • It is too early to determine if the effort will be sustainable by replacing GAVI funding with national expenditures. • Current and future success of GAVI are linked to the capacity to measure the output of immunization programs through changes in coverage. 	Performance-based disbursements should be carefully analyzed in the coming years so that more countries can be observed during the reward phase of GAVI funding.
5	McCoy et	The Bill & Melinda Gates	The Bill & Melinda Gates	<ul style="list-style-type: none"> • Despite a long history of 	<ul style="list-style-type: none"> • Size of individual grants varied 	<ul style="list-style-type: none"> • Explore governance by looking at

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
	al. (2009)	Foundation's grant-making program for global health	Foundation (BMGF)	<p>private, philanthropic global health funding, the influence made by BMFG is on a different order than what has been seen through the efforts of other private donors in the field.</p> <ul style="list-style-type: none"> • The amount spent on global health by BMFG was almost as much as the World Health Organization's annual budget (about USD 1.65 billion). • Such spending is evident in malaria research, which has tripled due to the influence of BMGF. 	<p>substantially, and 65% of funding was shared by 20 organizations; the largest amount of funding was awarded to nongovernmental organizations (NGOs) and nonprofit organizations.</p> <ul style="list-style-type: none"> • Other major recipients included public awareness and advocacy organizations. • BMGF Also funded several think tanks or policy research institutes. • Government agencies and for-profit companies were infrequent recipients of BMGF grants. • From 1998–2007, 75% of all global health funding was allocated to six categories: HIV/AIDS, malaria, vaccine-preventable diseases, child health, TB, and tropical and neglected diseases. • BMGF has helped promote the emergence of loose, horizontal networks where it is unclear who is making decisions and who is accountable to whom. • BMFG's emphasis on technology can detract attention from social determinants of health while promoting an approach to health improvement that is highly dependent on clinical technologies. 	<p>the effect of BMGF on World Bank, World Health Organization (WHO), and other key GHPs.</p> <ul style="list-style-type: none"> • Further research is needed to assess the cost-effectiveness of BMGF's approaches, strategies, and investments for improving the health of the poor.
6	BMGF and McKinsey & Company (2005)	Global health partnerships: Assessing country consequences			<p>Gains made by GHPs may have come at a cost because of the introduction of vertically oriented resources into a horizontally organized health system. This, paired with resource strained environments, leads to two likely consequences for countries:</p> <ul style="list-style-type: none"> • Countries struggle to absorb resources from GHPs because they are not provided with adequate support (technical and other) to effectively implement programming; and • Because GHPs often bypass country 	<p>GHPs need to ensure that their grants are accompanied with adequate resources by:</p> <ul style="list-style-type: none"> • Allowing countries to lead discussions on optimal timing, pace, and scale of new technology adoption and policies; • Allowing countries to include overhead costs in grants to provide implementation support; • Providing searchable database of technical assistance (TA) solutions and providers; and • Providing administrative support for

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
					<p>processes that are already in place, countries are burdened with parallel and duplicative processes from multiple GHPs.</p> <ul style="list-style-type: none"> • GHPs have not adequately or effectively communicated with countries and partners. They do not adequately support shifts in policy and technology or provide adequate implementation assistance. • GHPs have created too many country coordination forums, which are inadequately structured, thereby rendering them generally ineffective. • The GHP's 'one size fits all' approach does not recognize country diversity, thereby causing GHPs difficulties when dealing with system-level issues. • Communication is poor, and partners are often unclear about their roles and responsibilities. 	<p>coordinating mechanisms.</p> <p>GHPs should design their processes and systems to complement those that countries already have in place by:</p> <ul style="list-style-type: none"> • Being flexible with countries that demonstrated good track records; • Collaborating with other GHPs to ask countries for one, unified, and multiyear health sector plan; and • Creating a single, unified mission and a single, unified report in each disease area to reduce the burden on country officials. <p>GHPs should create a minimum set of communication norms.</p>
7	Sidlibe et al. (2006)	The Global Fund (GF) at five: what next for universal access for HIV/AIDS, TB, and malaria?		<ul style="list-style-type: none"> • In its first 5 years, the GF for AIDS, TB, and Malaria had the ability to make grants in nearly all developing countries, had the operational capacity to move swiftly and transparently in approving proposals, engaged in direct involvement with civil society, and had the capacity for critical introspection, which led to country-level success. 	<ul style="list-style-type: none"> • Maintaining sustainable funding is likely to be an issue for GF. It currently has difficulties meeting the more modest resource requirements derived from historic levels of new grant approvals and renewals. • Beyond cash contributions, the private sector should be encouraged to provide services in kind to GF, such as costing forecasts, risk assessments, and information technology support. • Governments and civil society organizations of developing countries will need to be more involved in the process of fundraising. • GF must seek creative and proactive public demands for the money it raises; countries need to be part of the negotiation process. • GF's speedy allocations and disbursement of resources can be 	<ul style="list-style-type: none"> • GF needs to carefully and creatively reconsider its strategy for mobilizing sustainable resources of funding. • GF must lobby countries more actively to contribute more funds indirectly (reducing taxes) or directly. • Countries will need to find technical assistance for developing and implementing GF grants. • It is unclear, but GF may need to set up its own technical assistance facility. • GF's efforts may be better placed in strengthening leadership and relationships at the country level. • GF needs to address concerns voiced by countries that performance-based financing is a punitive mechanism. • GF should attempt to design the framework and necessary performance metrics to evaluate its

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
					<p>attributed to GF's decision to stay out of implementation efforts.</p> <ul style="list-style-type: none"> • The capacity of many traditional providers is not equal to the scale of financial resources currently available for operation, and, thus, the complexity of TA has increased. • There is debate over whether GF should focus on health system strengthening. • GF has two key efforts: improve the size and effectiveness of funds and harmonize and align with national plans and priorities; and ensure long-term credibility by further engaging countries in mobilizing their own funds. 	own performance.
8	Hoffman et al. (2015)	Mapping global health architecture to inform the future			<ul style="list-style-type: none"> • Majority of actors identified in global health system are NGOs, but the largest actor is in the form of public-private partnerships. • US is the most popular location for global health actor headquarters (namely New York City and Washington, DC). • Over 60% of global health actors list improving health as their primary intent. • The creation of new global health actors has occurred in waves: 1940–1959, 1970–89, and 1990–2009. • WHO continues to play a major leadership role in the stewardship of global health, which is being challenged by an ever-shrinking budget. • Few global health actors are involved in cross-sectoral advocacy. This is likely to become more in the post-2015 era due to an increasingly interconnected global community. • Global health actors are involved in sharing intellectual property and in harmonizing norms, standards, and guidelines. • Global health actors are increasingly more involved in the management of externalities. • The number of global health actors engaged in direct country assistance has increased since the 1990s, in accordance with the increase in funding. 	
9	Moon et al. (2010)	The global health system: Lessons for a stronger institutional framework		<ul style="list-style-type: none"> • Previously, global agenda-setting took place within the framework of UN with input from a few foundations and national governments. • In the past, international resources flowed primarily 	<ul style="list-style-type: none"> • Coordination is essential, but few organizations wish to be coordinated because of the loss of autonomy and associated costs. • There is a current governance gap within the existing system; there are no clear norms for how resources 	<ul style="list-style-type: none"> • Investments in human capital are essential but take many years to generate fruitful results. This long-term commitment of UNICEF, UNDP, World Bank, and WHO is key. • There is a need for greater training

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
				<p>through bilateral or multilateral donations and WHO.</p> <ul style="list-style-type: none"> • GFATM attempts to lighten the burden on national health systems by reporting requirements and lack of coordination among multiple donors. This lack of coordination has been exacerbated by a recent increase in the number of players in the global health system. 	<p>should be allocated across different health needs.</p> <ul style="list-style-type: none"> • Long-term sustainability of funding is dependent on: demonstrating results; making financial arrangements more politically acceptable; developing innovative financing mechanisms; which are less vulnerable to the politicized budgeting processes. • There has been a resurgence in R&D targeted at developing new tools for health needs. • Significant improvements in health outcomes (in some countries) can be attributed to leadership, community involvement, district-level focus, use of data to set priorities, and the prioritization of equitable access. • Despite the increase in funds to expand programs, there is little spent on operational research and determining what works where. • Effective M&E requires that efforts achieve technical credibility, maintain legitimacy, and produce knowledge that is salient for end-users. • No single actor can or should set the agenda for action in global health. • Sustainability depends on strengthening national health systems. • Proliferation of global actors threatens to weaken health systems by placing additional reporting burdens on them. • It is critical to support research that provides the evidence and knowledge base for prioritization, resource allocation, and the development and evaluation of new tools and interventions. 	<p>in lab sciences, health economics, management, program evaluation, and implementation research.</p> <ul style="list-style-type: none"> • There should be a greater emphasis on building the capacity of researchers and research organizations in developing countries. • A comprehensive, operational and policy research agenda is needed to fully understand those policies or practices that best strengthen national health systems. • There needs to be sufficient investment in M&E, and M&E should be an integral part of all program planning.
10	Mokoro Limited	Independent comprehensive evaluation	Scaling Up Nutrition (SUN)	SUN added value with its objective to enable the	<ul style="list-style-type: none"> • The picture is mixed in terms of SUN's direct effect on national-level 	

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
	(2014)	of the scaling up nutrition movement		<p>environment, which included:</p> <ul style="list-style-type: none"> • Aligning stakeholders for the rapid scale-up of selective evidence-based policies and interventions that enhance nutrition and joint action; and • Facilitating and convening of stakeholders to broker interactions within and across SUN countries and networks. <p>SUN added value with its practice of sharing, which included:</p> <ul style="list-style-type: none"> • Identifying and sharing evidence-based good practices to enable the prioritization of actions and resources; and • Promoting women's empowerment and emphasizing gender approaches to undernutrition that enable a transformative effect on sustainable nutrition security. <p>SUN added value through its aligned actions, which included:</p> <ul style="list-style-type: none"> • Accepting and implementing mutual accountability on behalf of intended beneficiaries; and • Tracking and evaluating performance to provide better understanding of impact drivers. 	<p>nutrition policies and plans. Some areas show SUNs relatively minimal traction on policy change while other cases clearly highlight the attention SUN has brought to nutrition and its influence on the adoption of approaches.</p> <ul style="list-style-type: none"> • SUN's movement has a strong focus on being country-centered. It emphasizes support for government-led plans and has deliberately avoided being prescriptive about the structure or the content of those plans. • In terms of organization and governance, there is a case for a smaller executive body that might be more effective and efficient in holding parties accountable. <p>Required support to SUN countries</p> <ul style="list-style-type: none"> • Advocacy and convening stakeholders • Technical support • Standard-setting and monitoring • Financial support 	

No	Author and date	Title	Global health partnerships (GHPs) assessed	Contributions	Challenges and lessons learned	Next steps and recommendations
				SUN added value through increased resources, which included: <ul style="list-style-type: none"> • Advocating to increase political commitment and mobilizing resources that enable the scale-up to improve nutrition. 		

Appendix D: Integrated Management of Childhood Illness (IMCI) and Integrated Community Case Management (iCCM)

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
Leadership in Child Health (Weak, Strong Leadership, and Champion)	<ul style="list-style-type: none"> • Child survival revolution (CSV) • Launched by UNICEF (Jim Grant) • Average number of under-5 deaths fell from 117 per 1,000 in 1980 to 93 per 1,000 in 1990 • Mid 1990s: gains in child survival slowed or reversed. 	<ul style="list-style-type: none"> • Integrated Management of Childhood Illness (IMCI): lack of coordination and leadership • UNICEF passed leadership to Bellamy (the community IMCI [C-IMCI] component didn't happen.) • World Health Organization (WHO) changed leadership and only focused on the 14-day training course, and World Bank was not effective. • Lancet: call for true leadership; called governments, Ministry of Health, multilateral and bilateral technical assistance partners to make child survival a priority (also research institutes, etc.) (2003) • Child health needs better leadership, improved coordination, and increased funding (2004) • UNICEF did not assume leadership of child survival, especially child health. (2004) 	<ul style="list-style-type: none"> • UNICEF (weak leadership) in the previous 10 years • WHO takes the lead and supports the child survival partnership, forum for coordinated child survival and child health activities 	<ul style="list-style-type: none"> • WHO and UNICEF joint statement on ICCM (2012) 		
Policy Environment (Level of Political Commitment) (Group Aligned or Opposed to Child Health, Funding,	<ul style="list-style-type: none"> • Unacceptable levels of high disparities allowed for political commitment to child health • WHO and UNICEF: Joint strategy for the control of diarrheal diseases in children 	<ul style="list-style-type: none"> • IMCI based on three pillars: UNICEF responsible for behavior change and community; WHO had a normative role; and World Bank invested in health • Articulation with Millennial 	<ul style="list-style-type: none"> • Child survival strategy endorsed by UNICEF and World Bank—push for IMCI (2006) • Lancet publication influenced WHO and UNICEF commitment to 	<ul style="list-style-type: none"> • GAVI support from Bill & Melinda Gates Foundation (BMGF), UNICEF, and Norwegian Agency for Development Cooperation (NORAD) 	<ul style="list-style-type: none"> • Global Fund integration of vertical MCH programs for iCCM • iCCM had more momentum than IMCI 	<ul style="list-style-type: none"> • Perception of no money for MCH

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
Norms, and Social Value for Child Health)	(1991)	<p>Development Goal (MDG) in 2001 focused global policymakers' attention on reducing child mortality. Included: discussion around disease-specific interventions (malaria, HIV/AIDS, and pneumonia); renewed emphasis on vaccine preventable diseases following the development of <i>Haemophilus influenzae</i> type b (HiB), pneumococcal disease and rotavirus, and undermalnutrition</p> <ul style="list-style-type: none"> • Evidence that MDG will not be met unless urgent interventions- call for action (2004) • WHO and UNICEF Joint statement: management of pneumonia in community settings and clinical management of acute diarrhea (2004) • UNICEF: limited support to household and community IMCI (household and C-IMCI) <p>The household and C-IMCI strategy, at the Baltimore meeting, seemed already dead.</p> <ul style="list-style-type: none"> • Lancet (Child Survival): Calls for partners to collaborate in programs to strengthen country capacity for child survival and health system; and continue developing best available evidence guidelines (poor children and mothers in the center) <p>Calls on worldwide</p>	<p>IMCI</p> <p>IMCI funding</p> <ul style="list-style-type: none"> • 1990: introduction of IMCI strongly funded by external donors, focus on in-service training of HW (case management) • After 10 years, funding for IMCI has faded, leaving health departments with: a commitment; often too complex IMCI programs added on to existing programs for maternal and child health; and often incompletely integrated and now inadequately funded. • Reduction in IMCI funds (official development assistance [ODA]) from USD 16.5 million (2003) to USD 6.8 million in 2006 in those countries with highest child mortality • Domestic and donor support for IMCI have diminished over time in favor of vertical programs, partly due to the difficulty in monitoring and measuring the impact on an integrated intervention like IMCI. • An estimated USD 5–8 billion in additional development aid for maternal, newborn, and child health (MNCH), per year, would enable the scale-up of child survival interventions in more than 40 of the poorest countries in the world. <p>Integrated Community</p>	<ul style="list-style-type: none"> • Governments involved in immunization (budgets and accountability) • Immunization: vertical program, funding, UNICEF allocating 50% of staff to GAVI <p>Funding</p> <ul style="list-style-type: none"> • Current funding for iCCM is primarily reliant on external multilateral and bilateral donors. The way funding is integrated and used for iCCM varies across countries. Funding alone does not assure policy change or the scale-up of iCCM. 	<ul style="list-style-type: none"> • Immunization: vertical program, well-funded • Immunization: governments' ownership in hand with routine data reporting and accountability 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
		initiatives to expand their guidelines and support (2003)	Case Management (iCCM): <ul style="list-style-type: none"> • Current funding for iCCM is primarily reliant on external multilateral and bilateral donors. The way funding is integrated and used for iCCM varies across countries—does not assure policy change or the scale-up of iCCM. 			
Governance (Effective or Ineffective Group Action and Coordination)	<ul style="list-style-type: none"> • Interagency working group (IAWG)—household and C-IMCI • CORE Group: group of nongovernmental organizations (NGOs) facilitating information and knowledge sharing 	<ul style="list-style-type: none"> • CORE Group: NGOs around community interventions 	<ul style="list-style-type: none"> • Pneumonia and Diarrhea Working Group (2008) • iCCM Task Force (2009) 	Community Case Management (CCM) Task Force <ul style="list-style-type: none"> • Publishing in scientific journals: CCM Task Force (2005–2012) • Initially clustered by pathology—linked to malaria and pneumonia up to 2010 • First CCM study: authors linked malaria and pneumonia, and the larger malaria group worked on home malaria management (HMM) (2011) • Principal members of the iCCM policy network were linked through publication of the iCCM supplement in American Journal of Tropical Medicine and Hygiene, followed by the 2012 statement (2012) • At least some core members of the iCCM epistemic community appear to have enjoyed substantial familiarity and collegial relationships: trust and collaborative work on iCCM • Monitoring indicators and 	<ul style="list-style-type: none"> • IMCI—fragmented (competing integrated frameworks; difficult for countries to align) • iCCM Task Force: Focused on resources, financing, data gathering, and sharing; has strong leadership from WHO and UNICEF • iCCM: Fragmented: focus on specific interventions, not on health systems • Immunization: GAVI Working Group brings partners together, adopt common positions, gets institutional buy-in. Strong political and technical support 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
				<p>supply chain (technical not political)</p> <p>Coordinating mechanisms involved in iCCM policy development (early 1990–2012)</p> <ul style="list-style-type: none"> • <u>CORE Group</u> (coalition of NGOs and United States Agency for International Development [USAID])—70 NGOs (Care, International Rescue Committee [IRC], Catholic Relief Services [CRS], World Vision (WV), PATH, Save the Children, and others) • <u>Child Health Epidemiology Reference Group (CHERG)</u> (2011) by WHO as independent source of technical expertise on child health estimates Members: Technical experts from the University of Toronto, Johns Hopkins School of Public Health, London school of Hygiene and Tropical Medicine, University of North Carolina—Chapel Hill, etc. • <u>Partnership for Maternal, Newborn, and Child Health (PMNCH)</u>: Hosted by WHO from 2005 Share strategies, align objectives and resources, interventions Members include academia, donors, health care professionals, multilaterals, NGOs, partner countries, 		

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
				<p>and private sector</p> <ul style="list-style-type: none"> • <u>Countdown to 2015</u> (2005) as multisector collaboration to speed up progress towards MDG 4 and 5. <p>Members: Academics, the Lancet, WHO, UNICEF, World Bank, BMGF, implementing partners, JHPIEGO, and Save the Children</p> <ul style="list-style-type: none"> • <u>CCM Task Force</u>: Grew out of Global Action Plan for the Prevention and Control of Pneumonia (GAPP) process in 2007–2008 to track iCCM policy change and program status; steering committee (UNICEF; WHO; USAID; Save the Children; Maternal and Child Health Integrated Program [MCHIP]; CORE Group; MSH; Population Services International [PSI], University Research Co. (URC), John Snow, Inc. [JSI], and others) 		
Composition (Diverse, Similar Interests among Groups)	<p>Pneumonia:</p> <ul style="list-style-type: none"> • Initial pneumonia community care level network (narrow-shared identity) • Global and national programs: Control of diarrheal diseases (CDD) and acute respiratory infection (ARI) • Formation of global networking of child health pneumonia with major focus at community level (1994) <p>Diarrhea:</p>	<ul style="list-style-type: none"> • CORE Group (developed Community approach based on IMCI; origin of CCM) 		<ul style="list-style-type: none"> • Competing frameworks: IMCI and GAPPD • ENAP support child survival interventions • Disease specific interventions • Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea (GAPPD) stalled out at theoretic level (2013) 		

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
	<ul style="list-style-type: none"> Decline in global priority of oral rehydration salt (ORS) starting 1990 					
Framing Strategies (Public Positioning of Child Health)	<ul style="list-style-type: none"> Political acceptability to do something for children 	<ul style="list-style-type: none"> UNICEF (iCCM): Lead organization for household and C-IMCI (empowering communities and integrated approach) (convention of rights of the child and poverty reduction) <p>Call for a shift in child survival efforts for the child health community</p> <ul style="list-style-type: none"> Health facility and healthy system: needs to be supported Strong community approach (go beyond health facility) Greater accountability for intervention coverage at population level Country adaptation of guidelines based on local epidemiological data Need to achieve and sustain equitable coverage (to reduce child mortality) Focus to renewed child survival efforts; need to achieve and sustain equitable coverage Include neonatal death (1st week) Child survival efforts must start with local epidemiology Prioritize interventions known to be cost-effective in reducing under-5 mortality Support policy-relevant 			<ul style="list-style-type: none"> Immunization: campaigns led by donors; political pressure to do so while, at the same time, helped raise awareness 	<ul style="list-style-type: none"> New vaccines, new energy, investment

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
		research at country level				
Policies and Guidelines	<ul style="list-style-type: none"> • Focused on single disease program and approaches: oral rehydration therapy (ORT) for diarrhea (1980–1990) • Added pneumonia program (ARI) (1980–1990) <p>IMCI strategy (1992)</p> <ul style="list-style-type: none"> • Developed home care and community intervention based on IMCI Framework developed because of NGO pressure • IMCI is developed due to limitation of disease-specific interventions 	<ul style="list-style-type: none"> • IMCI strategy (not a program) in need of funding and coordination • Key family practices for C-IMCI (WHO and UNICEF) (2000) • C-IMCI framework development (2001) • Household and C-IMCI: Three linked elements supported by multisector platform (addresses constraints communities face) • UNICEF: develops community dialogue tools (IMCI) • WHO, Pan American Health Organization [PAHO], and UNICEF tools: described only one component, not integrated approach. • WHO assigned a special steering committee to develop interventions for neonatal death 	<p>Community interventions</p> <ul style="list-style-type: none"> • Life cycle approach • States that community health workers (CHWs) can provide the following interventions at the community level: behavioral interventions (hand washing, breastfeeding); insecticide-treated nets (ITNs); prevention of mother-to-child transmission of HIV (PMTCT); management of childhood malaria, pneumonia, and neonatal sepsis; and diarrhea. 	<ul style="list-style-type: none"> • ICCM implementation guidelines (issued by USAID and CORE Group) (2010) • CCM Essentials Guide (USAID and CORE Group) (2010) • 63rd World Health Assembly resolution supporting CCM for pneumonia (2010) • iCCM implementation guidelines (issued by USAID and CORE Group) (2010) • CCM Essentials guide (USAID and CORE Group) (2010) • 63rd World Health Assembly resolution supporting CCM for pneumonia (2010) • Global Action Plan for Pneumonia; Nairobi (WHO) (2011) 		

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
<p>Policy Analysis (iCCM) Some Concepts (31/2015)</p> <ul style="list-style-type: none"> • Three mechanisms influenced policies: 1) instrumentally (resulting in direct change); 2) conceptually (enlightening users in unspecific ways); and 3) symbolically (support existing positions) • It has been widely acknowledged that evidence is not usually used rationally. 		<ul style="list-style-type: none"> • Effect of multicountry evaluation (IMCI): highlighted shortcomings of earlier key child survival interventions and initiatives; potential role of improving access to treatment for nonsevere forms of diarrhea, malaria, and pneumonia; most impact on child mortality at community level • IMCI improved health workers' skills and quality of care but had limited impact on child mortality due to inadequate scale of implementation, lack of household recognition of symptoms and low prioritization of care-seeking; in some cases, there were competing private sector services. • Neglected other health systems strengthening interventions; even though clearly identified and responsible for limited success of IMCI • iCCM faces similar challenges as IMCI implementation: engage, supervise, and supply CHWs; how to address iCCM services • Global efforts have focused on iCCM as an approach within the health sector; unlinking it from wider sector approach proposed by C-IMCI • Lack of community involvement in iCCM policy 	<ul style="list-style-type: none"> • Key barrier in increasing scale of iCCM was lack of supportive policies at national level in SSA countries (2008) • Response of iCCM depends on many factors (development, emergence of virus, prevalence of malaria, etc.). The identified need to include rapid diagnostic test (RDT) for malaria opened the space for malaria to be integrated into iCCM, ensuring financial support from GFATM. • Global actors describe and promote a brand of iCCM, distinct from former child survival interventions. At national level, community interventions were rarely defined as iCCM but referred to C-IMCI and were adapted to include iCCM components. • Research supporting the integrated management at service delivery is sparser that those related to curative services at the community level. There has been certain resistance to adopt iCCM as evidence-based policy. (31/2015) <p>Role of international actors plays in iCCM policy transfer</p> <ul style="list-style-type: none"> • WHO, UNICEF, related bodies (PMNCH): transfer agents; primary responsibility for promoting transfer of iCCM policies 	<ul style="list-style-type: none"> • It was found that iCCM was not hold by political leaders (except Niger, Rwanda and Ethiopia), but managed by mid-level actors in MoH and technical experts (partners)- question of accountability • Role of UN agencies: trusted brokers at national level, advocates for specific policies, recipients of donor funding, and mediators of donor interests • Use of Lives Saved Tool (LiST): estimates potential mortality impacts due to increases in coverage of specific health interventions_ solution to the problem of CM and iCCM (iCCM epistemic community influenced policy development!) Relieving decision-makers uncertainties about complex issues2) By interpreting the data and observations and3) by institutionalizing preferred Policy solutions: Initially little support from WHO and UNICEF and little financial resources In this case, technical experts also engaged in policy development. 	<p>Policy analysis</p> <ul style="list-style-type: none"> • iCCM implementation is affected by the nature of existing health workers (scope of iCCM implementation—domain and services these cadres already provide). • Acceptability and success of iCCM: integration (or not) into national health system • Policy development and implementation: available financing- but also, the role of policy entrepreneurs, epistemic communities, power analysis • Importance for global health to build on evidence: for iCCM case studies, demonstrate how evidence is brokered at country level, specific evidence is also filtered through policy entrepreneurs and epistemic communities • Success in implementation is closely linked to the flow of power—most successful programs, countries with greatest impact—where iCCM has been championed by charismatic and powerful political executive leaders, beyond the sphere of technical assistance in MoH. • It is important to have a balance between looking for 'gold standard,' experimental science, and generalizable findings and having a closer look at political context and policy. <p>iCCM policy analysis in SSA key messages:</p> <ul style="list-style-type: none"> • Policy analysis informed by social science seeks to understand the critical process that supports decision-making within health systems, and how policy is or is not translated into implementation. • iCCM policy and implementation or lack thereof are not purely technical or operational concerns. • Policy analysis helps us better understand the nature of the intervention. • Policy resistance to scaling up iCCM: 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
		<p>development; understanding perspectives of CHWs may reveal the contradictions of their role, highlight areas of policy reform</p> <ul style="list-style-type: none"> • Ministry of Finance was not involved in iCCM policy design. iCCM expansion was aided in Niger and Malawi via Heavily Indebted Poor Countries (HIPC) Initiative and Global Fund to Fight AIDS, TB, and Malaria (GFATM). • CHWs are extremely varied in nature, scope of work and degree to which they are formally integrated into national health system • Strategic decisions about CHWs being temporary, ‘stopgap’ or long-term is critical • Balance between preventive, promotive and curative tasks, gender balance, and community versus health care services: important questions to be considered • Full weight of health system limitations was not considered at the outset (political commitment, human resources, financing, decentralization, etc.) household and C-IMCI • Framework provides approach for NGOs to introduce community interventions in countries (is useful, allows comparison); defines what, not how • Does not build on existing community interventions 	<ul style="list-style-type: none"> • Canadian International Development Agency (CIDA), BMGF: funding agents working through multilateral organizations with limited in-country engagement • Save the Children Fund, Basic Support for Institutionalizing Child Survival (BASICS): implementing agents; negligible role in policy transfer, implementation experience may inform operating norms and procedures 		<p>acknowledgement that the health system effects are wide ranging, require strategic analysis and resourceful management</p> <p>Skill sets are underrepresented in resource constrained health systems.</p> <ul style="list-style-type: none"> • An inclusive, deliberate consensus-building process with active facilitating of stakeholders to foster learning and broaden accountability is required, as definitive solutions or closure is elusive. 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
		<p>(Bamako initiative)</p> <ul style="list-style-type: none"> • Many countries not ready • How to implement a range of key practices without losing effectiveness of single intervention • Principles: flexible, creative, multiple actors • Recognizes importance of curative and preventive interventions at community level • No clear standards, not so clearly defined 				
Activities and Key Events	<ul style="list-style-type: none"> • IMCI launched (1995) • IMCI global review and coordination Meeting (WHO); highlights need to progress on C-IMCI (IMCI launched) (1997) • CORE Group (1997) • IMCI designed for countries with infant mortality rate > 40 per 1,000 live births 	<ul style="list-style-type: none"> • IMCI multicountry evaluation (1998–2004) • GAVI Launched (2001) • CORE Group: Coalition of NGOs (focus on community-based health programming) (2001) • Baltimore meeting to create C-IMCI Framework (2001) • WHO meeting in Stockholm on CCM pneumonia (2002) • GFATM created (2002) • Lancet series on child survival (2003) • WHO and UNICEF joint statement: management of pneumonia in community settings and clinical management of acute diarrhea (2004) 	<ul style="list-style-type: none"> • UNICEF's Accelerated Child Survival and Development (ACSD) program, implemented in 11 West African countries failed to reduce mortality (partially because CCM for pneumonia and malaria was not sufficient) (2001–2005) • Home management for malaria (WHO and Roll Back Malaria [RBM]) (2004–2005) • Countdown to 2015 group (2005) • PMNCH launched (2005) • RBM strategy for improving access (improve treatment through home management of malaria) (WHO and RBM) (2005) • Global Fund First Replenishment (2005) • Global Zinc Task Force (2005) • CHW intervention models for child illness (WHO and UNICEF) (2007) 	<ul style="list-style-type: none"> • iCCM bits in Ethiopia but not comprehensive (2010) • GAVI First Replenishment (2011) • Global Fund Third Replenishment (2011) • iCCM website (CCM.org) (2011) • WHO and UNICEF released joint statement iCCM (2012) • UN Commission on Life-Saving Commodities for Women and Children (UNCoLSC) was launched by UNICEF and United Nations Population Fund (UNFPA) as part of the Secretary-General's Every Woman Every Child (EWEC) movement (2013) • WHO and UNICEF GAPPD (2013) • Lancet Series on Childhood Pneumonia and Diarrhea (2013) • American Society for Tropical Medicine supplement on iCCM 	<ul style="list-style-type: none"> • Global Fund integration of vertical MCH programs for iCCM • Reaching Every District (RED)—most important legacy for 15 years • GAVI Second Replenishment (May 2015) • Global Financing Facility (GFF) launched (July 2015) • Sustainable Development Goals (SDGs) launched (October 2015) 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
			<ul style="list-style-type: none"> • Community-based management of severe acute malnutrition (WHO, World Food Programme [WFP], and UNICEF) (2007) • Beginning of GAPP process (2007) • Global Fund Second Replenishment (2008) • CCM Task Force established (2008) • Madagascar: share iCCM experiences (2008) • GAPP (WHO) (2009) 	(2013) <ul style="list-style-type: none"> • Global Fund Fourth Replenishment (2014) • Every Newborn Action Plan (ENAP) launched (2014) • Ghana Meeting with consensus and indicator guide for iCCM (2014) 		
Issue Characteristics (Perception of Severity, Effectiveness of Solution, Importance of Children)	<ul style="list-style-type: none"> • Increased disparities among SSA countries • Child mortality sensitive indicator of inequity in health and health care 	<ul style="list-style-type: none"> • Gaps in child mortality between rich and poor countries are unacceptably wide; in some areas, becoming wider • Gaps between wealthy and poor children within most countries • Inequities: poor children are more exposed to health risks • The focus of child survival interventions should be poor children and mothers 				
Challenges	<ul style="list-style-type: none"> • IMCI is not enough to tackle child mortality • Perinatal death not covered by IMCI; AIDS increases in Africa • Question around IMCI: Does training change health worker practices? Can health services support costs? Cost effective? 	IMCI: <ul style="list-style-type: none"> • Interventions at facility level not enough to reduce under-5 mortality • IMCI depends on health systems strengthening (HSS); implementing it in weak health systems will not be easy; few developing countries have systems strong enough to handle multifaceted approach like IMCI • IMCI—no indicator for diarrhea and CCM of 	IMCI <ul style="list-style-type: none"> • IMCI implemented less energetically in areas where it is most needed • Disappointment: IMCI does not reach the world's poor after 10 years of implementation • Striking contrast between IMCI and ORT, the earlier focus of WHO The vertical approach reached 20% of the poorest populations in nine countries (after 10 years)	<ul style="list-style-type: none"> • IMCI/iCCM and other best practices: don't come together, outdated, fragmented • iCCM often perceived as donor driven (ownership?) • IMCI/iCCM and other best practices: don't come together, outdated, fragmented • IMCI is challenge at country level, low coverage • IMCI training coverage (Kenia and Tanzania experience) was related to 	<ul style="list-style-type: none"> • IMCI scale-up too costly, didn't get enough resources • iCCM: Overcome country resistance; task-shifting; does not work the same everywhere • iCCM: Need for HSS • iCCM: Donors do not "reach every district." • iCCM: Has not been scaled up in 	<ul style="list-style-type: none"> • Need HSS (IMCI and iCCM) equity • Tension between vertical and integrated approaches in child health; specific diseases get diluted in an integrated approach

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
		<p>pneumonia was ineffective and small scale (2000–2003)</p> <ul style="list-style-type: none"> • Multicountry evaluation of IMCI: problem was how to scale up IMCI in high-mortality areas to ensure coverage; importance of parallel health sector reform at regional and community levels; cost-effective treatments are being reported and findings of research should directly influence guidance offered to UN agencies (18/2004) • Not enough data (IMCI not implemented actively enough) to support reasonable change (that can be measured) • IMCI neglected CCM by prioritizing health facility indicators • IMCI and C-IMCI conducted training with no supervision. <p>Community: Key family practices for C-IMCI (WHO and UNICEF)</p> <ul style="list-style-type: none"> • Vague on implementation details and did not include curative care • Limited support from UNICEF (at Baltimore conference, strategy "seemed already dead") • Lancet Series: Current knowledge needs to translate into effective child survival. It needs: leadership, strong health systems, targeted human resources and financial resources, and 	<ul style="list-style-type: none"> • Early IMCI implementation districts better off; had difficulties expanding to most difficult areas, the poorest • Little support to IMCI pre-service training by governments, donors and international agencies (57/2009) • In the absence of innovative thinking, health system will almost certainly continue to overlook the poor. (6/2006) <p>Lessons learned: CHW in child survival</p> <ul style="list-style-type: none"> • Training is not enough • Tasks and roles specified (clear roles, specific tasks) • Targeted incentive system • Consistent policy and community support 	<p>personal commitment; facilitated access to external funds and local-level policy adaptation; Barrier: cost of training, limited financial decentralization</p> <ul style="list-style-type: none"> • Low priority of IMCI at national and international levels limited expansion of training • Alternative, lower cost methods of IMCI need to be promoted, and greater advocacy for IMCI is necessary both nationally and internationally 	<p>most countries even through it has been included in national plans.</p> <ul style="list-style-type: none"> • GAVI issues: attention to commodities, less attention to HSS, and routine immunization coverage 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
		a modified health system to ensure poor children and mothers benefit. <ul style="list-style-type: none"> • 63% of child deaths could be prevented if level 1 and 2 interventions were universally available. 				
Results and Child Health Data	<ul style="list-style-type: none"> • > 50 countries with child mortality rate > 100 per 1,000 live births (1998) • Nine countries: one out of five children do not reach 5 years of age • Almost 11 million die before 5 years of age (1999) • Seven out of 10: due to pneumonia, diarrhea, measles, malaria, malnutrition (3/4 episodes due to these illnesses) • Child mortality: 13 million (1980); 10.5 million (1999) Problems: HIV, economic instability, deterioration of health systems	Child Survival II, 2003 <ul style="list-style-type: none"> • Child mortality: 10 million per year • Preventable causes: pneumonia, diarrhea, measles, malaria, HIV/AIDS; underlying cause: undernutrition • Global coverage for most child health interventions is below 50% IMCI <ul style="list-style-type: none"> • Almost all developing country governments had subscribed to IMCI; half began expansion • IMCI not implemented actively enough to support reasonable change (that can be measured) 		<ul style="list-style-type: none"> • 6.3 million under-5 children died. Pneumonia, diarrhea, and malaria remain leading causes of death. Access to effective and appropriate treatment is extremely low where it is needed most. (2013) • SSA: 31% of children with Diarrhea receive ORS; 37% children with fever receive antimalarial and 39% of children with symptoms of pneumonia receive antibiotics. 	<ul style="list-style-type: none"> • Immunization: GAVI—huge impact in sub-Saharan Africa: 90% measles coverage, tetanus coverage, and polio • Under-5 mortality rate in countries with high mortality rates IMCI implemented in more than 100 countries, however mortality rates failed to materialize, as IMCI impact was limited to facilities and not communities where most child deaths occur.	<ul style="list-style-type: none"> • IMCI is an important part of child survival • Almost every country has integrated IMCI in child survival strategies, policies • Outcomes: measles, pneumonia, diarrhea, meningitis • GAVI and morbidity: polio
Results of Implementation		IMCI <ul style="list-style-type: none"> • Introduced in more than 100 countries with little impact on child mortality (limited to health facility and not communities, where most child deaths occur). • By end 2002: almost all developing country governments had subscribed to IMCI and half began the expansion of at least two of its components, 	IMCI <ul style="list-style-type: none"> • Bangladesh: IMCI proved an effective child mortality strategy (standardized management of common illnesses and increasing health system use). IMCI was associated with increased rates of breastfeeding and nutrition practices and a lower prevalence of stunting (in survey area, 5-year implementation). • In last 2 years, under-5 	iCCM <ul style="list-style-type: none"> • 2010 study: out of 40 targeted SSA countries, 83% had adopted national policies supportive of treatment of diarrhea by CHW, 74% had similar policies for malaria and 65% for pneumonia • 2013: 36 of the 44 SSA countries have written policies, memos, or national guidelines supportive of community treatment of diarrhea; 35 have them for 	<ul style="list-style-type: none"> • Niger: interactive model of research utilization, as well as political model (use of health huts) • Mozambique: use of evidence was straight forward, aimed to answer specific questions (problem-solving model) • Kenya: Resistance for the use of AB by CHWs was not overcome by international and national evidence. Resistance for clinical care by CHWs and lack of financial commitment question the support of Kenyan policymakers. Lessons Learned <ol style="list-style-type: none"> 1. Different type of evidence had specific 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
			<p>mortality was 13% lower in IMCI districts.</p> <ul style="list-style-type: none"> The broader determinants of child survival are crucial to understanding the potential effect at any set of interventions and the obstacles reducing child mortality. <p>iCCM</p> <ul style="list-style-type: none"> BASICS and USAID began implementing CCM-like strategies and facilitated three large African regional meetings on CCM with international agencies (Dakar 2005, Democratic Republic of Congo 2007, and Madagascar 2008). iCCM-like strategies were further implemented in other countries after 2007 (CIDA signed a CAD 100 million agreement with UNICEF—Catalytic Initiative—with additional funding from BMGF). By the time iCCM policy was issued in 2012, large-scale iCCM interventions were underway in six or more countries in SSA. (1990–2009) 	<p>malaria treatment; and 31 have them for pneumonia treatment. Large variations in scale and depth of implementation remains.</p> <ul style="list-style-type: none"> Nearly all African countries have adopted some form of iCCM, including CCM for malaria, diarrhea, or pneumonia, or some combination. <p>IMCI training</p> <ul style="list-style-type: none"> Coverage is low Experience of two East African countries (Kenya and Tanzania) 10 years after adopting IMCI (evaluated training): Higher training coverage (Kenya) due to strong district leadership and personal commitment to IMCI that facilitated access to external funding and encouraged local level policy adaptation; Main barrier was the cost and complexity of the training. Limited financial decentralization: district managers relied only on external financial support. Tanzania: districts could not spend more than 10% of their budget in training. Low priority of IMCI at the national and international levels limited the expansion of training. 	<p>usefulness in the policymaking process. Once it was identified that children die at home before reaching facilities, there was consensus across stakeholders in the countries.</p> <ul style="list-style-type: none"> Local pilots played a fundamental role Lancet Series: used and referenced; later on ascribed to the series that child survival interventions should be delivered at community level (not right) <p>2. Role of development partners in introducing evidence in iCCM policy discussions (WHO and UNICEF seen as trusted actors in the policy arena)</p> <ul style="list-style-type: none"> Suggested an interactive transfer loop of evidence between national and global actors: 1) knowledge generation at national level, 2) policy consolidation and standardization at international level, 3) policy marketing and promotion from international to national level <p>3. Interplay of national and international evidence: Need of local evidence despite international evidence available</p> <p>Public health interventions need more evidence on implementation and sustainability; local evidence is seen as more credible.</p> <p>Questions</p> <ul style="list-style-type: none"> How well CCM for pneumonia can work in SSA, delivered in single or integrated way Questions around cross-setting transferability of iCCM; evidence 	
Lessons Learned	<ul style="list-style-type: none"> IMCI has potential to contribute to global initiatives like RBM 	<ul style="list-style-type: none"> IMCI/C-IMCI conducted training with no supervision IMCI depends on strength 	<ul style="list-style-type: none"> IMCI: wrong focus of implementation (who, where, how) 	<ul style="list-style-type: none"> C-IMCI was not effective; huge gap until iCCM was developed. IMCI is not 	<ul style="list-style-type: none"> IMCI poorly managed, targeted wrong people 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
		<p>of health system. Implementing it in weak health systems will not be easy. Few developing countries have systems strong enough to handle multifaceted approach like IMCI.</p> <p>Successful approaches to reach poor populations</p> <ul style="list-style-type: none"> • Improve geographic access to health interventions in poor communities • Subsidized health care and health inputs • Social marketing • Equity must be a priority in the design of child survival interventions and delivery strategies. • Ensure accountability at national and international levels (must be developed) <p>Action needed (child survival interventions)</p> <ul style="list-style-type: none"> • Vaccines for pneumonia, diarrhea, and malaria (continued research on vaccines, micronutrients, supplementation, etc.) • Micronutrients, breast-feeding, and interventions to prevent and treat undernutrition • Information on cost of different interventions 	<p>IMCI multicountry evaluation: Programmatic pathway to child survival (2005):</p> <ul style="list-style-type: none"> • Widespread uptake of IMCI concept resulted in overextension of the guidelines to settings with disease profiles that varied widely from those for which they were developed. • IMCI could and should be implemented regardless of the strength of the health system. Slow IMCI in countries with weak health system (indication) • Supervision was ambitious. • Health system problems affected IMCI implementation. Coverage was not included in the initial impact model. • Countries with high under-5 mortality with weak health system were not able to support IMCI. • Priority for IMCI implementation: training, not HSS <p>Training took longer than expected.</p> <ul style="list-style-type: none"> • Health facility-based: access and utilization of facilities is often low • Improved quality of care at facility level, not enough to increase utilization • Weak community component • Introduction of IMCI led to rationalization of child health policies and the updating of essential drug 	<p>really linked to the community.</p> <ul style="list-style-type: none"> • Alternative, lower cost methods of IMCI need to be promoted, and greater advocacy for IMCI is necessary both nationally and internationally. (58/2010) <p>Evidence informed policy-making: DISCUSSION— what needs to be considered (31/2015)</p> <ul style="list-style-type: none"> • Niger: interactive model of research utilization, as well as political model (use of health huts) • Mozambique: use of evidence was straight forward, aimed to answer specific questions (problem-solving model) • Kenya: Resistance for the use of antibiotics by CHWs was not overcome by international and national evidence. Resistance for clinical care by CHWs and lack of financial commitment question the support of Kenyan policymakers. <p>Lessons learned</p> <p>I. Different type of evidence had specific usefulness in the policymaking process. Once it was identified that children die at home before reaching facilities, there was consensus across stakeholders in the</p>	<ul style="list-style-type: none"> • Countries with community platform find it easier to adopt and scale iCCM. 	

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
			<p>lists in most countries in Africa</p> <ul style="list-style-type: none"> • Facility-based treatment will not impact child mortality; low coverage of child health interventions; most children die at home and little access to health facility (56/2007) 	<p>countries.</p> <ul style="list-style-type: none"> • Local pilots played a fundamental role. • Lancet Series: used and referenced; later on ascribed to the series that child survival interventions should be delivered at community level (not right) <p>2. Role of development partners in introducing evidence in iCCM policy discussions (WHO and UNICEF), seen as trusted actors in the policy arena</p> <ul style="list-style-type: none"> • Suggested an interactive transfer loop of evidence between national and global actors: 1) knowledge generation at national level, 2) policy consolidation and standardization at international level, 3) policy marketing and promotion from international to national level <p>3. Interplay of national and international evidence: Need of local evidence despite international evidence available Public health interventions need more evidence on implementation and sustainability; local evidence is seen as more credible.</p> <p>Questions</p> <ul style="list-style-type: none"> • How well CCM for pneumonia can work in SSA, delivered in single or integrated way • Questions around cross-setting transferability of 		

Category	Pre-2000	2000–2004	2005–2009	2010–2014	2015	2016 and beyond
				iCCM; evidence		

Appendix E: Pneumonia and Diarrhea

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
Leadership in Child Health (Weak, Strong, Leadership, Champion)	<ul style="list-style-type: none"> • Twin engine (1980) • World Health Organization (WHO) and UNICEF's joint strategy for the control of diarrheal disease (CDD) 	<ul style="list-style-type: none"> • WHO began in response to call for action in low- and middle-income countries (LMIC). (4/ 2015) • WHO and UNICEF's joint CDD strategy for children 	<ul style="list-style-type: none"> • IMCI launched (WHO, UNICEF, World Bank) 	<ul style="list-style-type: none"> • WHO and UNICEF emerged as pneumonia leads. • WHO and UNICEF reemerged as pneumonia leaders; coordination improved early 2003. • UNICEF: James Grant (1988) moved focus from CDD to immunization. After his death, (1995) direct support to CDD was abandoned; now it is part of integrated management of childhood illness (IMCI). Carol Bellamy was considered (by interviewees) as negative for CDD programming; also, immunization was neglected. Immunization was taken over by GAVI. 	<ul style="list-style-type: none"> • Joint Statement on integrated community case management (iCCM)—WHO and UNICEF (2012) • Needs new funding and new energy • Lack of leadership from WHO • Governments are fragmented • Diarrhea (2011–2015): low priority on government agendas • No current voice to advocate for diarrheal disease • Even though efforts around child survival are gaining momentum, they do not include mention or promotion of diarrheal disease specifically. Increased awareness of child survival and maternal mortality around the Millennium Development Goals (MDGs); no country level or global diarrheal disease advocates
Policy Environment (Level of Political Commitment) (Group Aligned, Opposed to Child Health, Funding, Norms and Social Value for Child Health)	<p><u>Pneumonia</u></p> <ul style="list-style-type: none"> • Little global attention because focus was diverted to malaria and TB; newborn (more recent success) and diarrhea lagged behind 	<p><u>Diarrhea</u></p> <ul style="list-style-type: none"> • Decline of global priority (based on diminishing trend in oral rehydration therapy [ORT] coverage and starting in 1990: little reliable coverage data available) • WHO and UNICEF: Joint strategy (1991) for CDD in children (eight targets) 	<ul style="list-style-type: none"> • Joint statement (WHO and UNICEF) on the management of pneumonia in community settings and clinical management of diarrhea (2004) • Focus on HIV/AIDS and malaria and little awareness of pneumonia and diarrhea (2003–2008) • Little attention to pneumonia and community case 	<ul style="list-style-type: none"> • Little global awareness of pneumonia and diarrhea as a consequence of current focus on the control of HIV/AIDS, TB, and malaria <p>FUNDING</p> <ul style="list-style-type: none"> • Substantial funding from GAVI (pneumococcus, 2003; and <i>Haemophilus influenzae</i> type b [HiB], 2005) • Bill & Melinda Gates Foundation (BMGF) major contributor to GAVI and funder of pneumonia-specific grants related to immunization • Also the Centers for Disease Control and Prevention, John Hopkins University, London School of Hygiene & Tropical Medicine, and other actors • 2006: USD 600 million (would provide universal antibiotics saving around 600,000 children's lives); scaling up coverage to 	<ul style="list-style-type: none"> • Lacking momentum of the Pneumonia and Diarrhea Action Plan: fell flat • Reproductive, Maternal, Newborn, and Child Health (RMNCH) Trust Fund: funding mechanism for money to pneumonia and diarrhea (2013) • Integrated Global Action Plan for the Prevention and Control of Pneumonia & Diarrhea (GAPPD): no political will power, no recognition, not well funded; provided momentum • No specific funding for pneumonia and diarrhea, no advocacy (as main killers) • Global Fund integrates pneumonia and diarrhea with malaria grants; bringing program managers together has been difficult • RMNCH Trust Fund: comprehensive, pneumonia and diarrhea got lost (received small percentage); main challenge • Huge gap of resources • Limited progress in implementation

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
			<p>management (CCM), focus on child survival; With IMCI moved to horizontal programs, comprehensive approach</p> <ul style="list-style-type: none"> • WHO moved to IMCI; UNICEF some attention to pneumonia (influenced donors and research), vaccines, CCM, diagnosis, household air pollution 	<p>universal levels in Africa and South Asia would cost USD 200 million a year</p> <ul style="list-style-type: none"> • Controlling diarrhea: pneumonia and diarrhea main killers of children worldwide, not addressed by disease-specific funds 	<p><u>Diarrhea</u></p> <ul style="list-style-type: none"> • CDD priority on global health agenda is 1/3 to 1/6 compared to 1985 • CDD priority declined because of weak leadership at global institutions; great possibility with new vaccine; increased bibliography • Competing with malaria, TB, and HIV/AIDS; HIV received five times more attention <p>Funding pneumonia</p> <ul style="list-style-type: none"> • The cost to achieve target by 2025 is USD 6.715 billion (ending preventable deaths from pneumonia and diarrhea is achievable by 2025). • All 15 high-burden countries have line items in national budget for vaccines. In half of them, governments are financing less than 30% of the total immunization expenditure. • Importance of removing financial barriers to facilitate care-seeking and public-private partnership is increasingly recognized. <p>Funding CDD</p> <ul style="list-style-type: none"> • Funding and support to CDD by WHO, UNICEF, and the United States Agency for International Development (USAID) were reduced to 5–10% in 2008, compared to 1985. • WHO 1985: 20–25 full time staff for CDD. After that, it included acute respiratory infection (ARI); in 1992, it integrated IMCI. Direct support for diarrheal disease was discontinued. In 2008, around three staff members were designated full-time for diarrheal disease. • USAID: large professional staff for CDD; now assigned to all child health interventions; only one staff full time in CDD in 2008 • Before, large investment in CDD through Technologies for Primary Health Care (PRITECH) and Basic Support for Institutionalizing Child Survival

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
					(BASICS) BASICS continued funding five countries on smaller scale (2008). BASICS was assumed by Maternal and Child Health Integrated Program (MCHIP), which combines maternal, newborn, and child health (MNCH).
Diarrhea Governance, Political Context (Ineffective or Effective Group Action and Coordination)	Trends in treatment coverage (increasing or high coverage shows growing or high priority; decreasing or low coverage shows diminishing or low priority—proxy indicator for political context) 1970: Zero ORT coverage 1980: Limited ORT coverage 1989 (WHO estimates): 20–30% of the annual 1.5 billion child diarrhea episodes were treated with ORT in most regions. Africa: +/- 13% 1986–2003 (ORT use trend in 40 LMIC): Overall ORT use rate from +/- 35% to			<ul style="list-style-type: none"> • Pneumonia and Diarrhea Working Group (2008) • Zinc Safe Kids program with UNICEF: evidence-based approaches in Nepal and Peru 	<ul style="list-style-type: none"> • Pneumonia and Diarrhea Working Group: supports 10 countries, no leadership, involves several organizations (2011) • Pneumonia and Diarrhea Working Group Partners: John Snow, Inc.; Marie Stopes International (MSI); Maternal and Child Survival Program (MCSP); MCHIP; International Centre for Diarrhoeal Disease Research, Bangladesh; FHI360; PATH; Population Services International; Save the Children; WV; and Millennium Development Goals Health Alliance • Zinc Taskforce: policy environment, finalized by BMGF and led by Johns Hopkins University (Bob Black, Charles Walker), implemented by WHO and UNICEF • There is a need to advocate at the global and country level to generate momentum around diarrheal disease (not part of the public health agenda).

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
	41%; unfinished agenda				
Pneumonia Governance— Network (4/2015)	<p><u>Pneumonia Network— Little global attention</u></p> <ul style="list-style-type: none"> • No network , but shared identity; what enabled future network formation Competing priorities (diseases) • Pool of potential allies and members is limited • Shared identity around community level treatment 	<ul style="list-style-type: none"> • Initial pneumonia community care level network (narrow shared identity) • Global and national programs • 1994: International Union against TB and Lung Diseases (Now "the Union") added a subgroup of ARI. This enabled the formation of global network of child health pneumonia with major focus at community level 	<ul style="list-style-type: none"> • Pneumonia network and CCM experts felt excluded by IMCI, partial dissolution of the network • Resuscitation of pneumonia network formation, reinforced by turn to Millennial Development Goal (MDG), frustration and lack of progress (developed a shared identity) 	<p>Brief reemergence of network</p> <ul style="list-style-type: none"> • Events that strengthened network: 1) network members differ substantially compared to former network members; 2) attention on CCM based on former relationships and shared identities; 3) evidence of pneumonia severity (Child Health Epidemiology Reference Group [CHERG]), seen as leading killer for children and slow progress reducing mortality; 4) vaccine development (pneumococcus and HiB); 5) Research priorities: implementation studies • Frustration due to lack of progress: actors formed an network of broad spectrum • Public call for change; global meetings brought potential new network members together • WHO and UNICEF (Global Action Plan for the Prevention and Control of Pneumonia [GAPP]): participants through snowball selection process, more members from national programs; helped develop a shared identity 	<p>Established working group</p> <p><u>Broad spectrum of interventions</u> (network opens up, shares different approaches)</p> <ul style="list-style-type: none"> • Comprehensive strategies, welcomed all aspects of pneumonia prevention and treatment; part of Global Action Plan for the Prevention and Control of Pneumonia (GAPP) (WHO) • Internal conflict around intervention-specific funding and policies • Advocacy (more attention, funding, policies, some implementation) • Much of network’s composition and leadership drew on individuals and organizations focused on immunization and CCM. • Network membership: 1) researchers; 2) international bureaucrats; 3) some advocated and care providers and 4) national policy makers <p><u>2013: New era</u></p> <ul style="list-style-type: none"> • Working closely with community network addressing diarrheal disease. • Most members have history of working in pneumonia and diarrhea. There is no evidence that the two network merged. • Impression that pneumonia funding and attention are paltry compared to HIV/AIDS and malaria.

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
Composition (Diverse, Similar Interests among Groups)					<ul style="list-style-type: none"> Fragmentation and separation from other interventions like water, sanitation, and hygiene (WASH) and immunization Decade of vaccine collaboration (time period December 2010 to mid-2012): WHO, UNICEF, US National Institute of Allergy and Infectious Diseases, and BMGF could provide short-term leadership. There is no sustainable mechanism to bring together stakeholders in vaccine science, public health, and advocacy.
Framing Strategies: Power Of Ideas (Public Positioning of Child Health: Internal And External)	<ul style="list-style-type: none"> External: The affected were labeled as innocent: showed to have no power to influence attention 			<ul style="list-style-type: none"> Important call for action: recognize pneumonia's significant contribution to overall child mortality (use the context of MDG) <p>Pneumonia</p> <p><u>External:</u></p> <ul style="list-style-type: none"> MDG 4: impact on child mortality required pneumonia progress to succeed "Forgotten Children" joint statement by WHO and UNICEF; push for a greater community focus Need for an enhanced, high-level sustained advocacy campaign <p><u>Internal:</u></p> <ul style="list-style-type: none"> Reasons for neglecting pneumonia in children: 1) nature of target group (deprived communities), 2) multiple etiologies and lack of agreement among experts on the most appropriate intervention strategies, 3) integration of pneumonia management into IMCI—reduced disease visibility <p>Diarrhea</p> <ul style="list-style-type: none"> To increase effectiveness, child survival programs should target poor and vulnerable groups. Scale up activities to improve diarrheal disease management and reduce child death Critically review approaches and activities 	<ul style="list-style-type: none"> More external awareness: World Pneumonia Day, research, vaccines Lancet Series on pneumonia and diarrhea (2013) Pneumonia and diarrhea management have received less focus when integrated into other strategies like IMCI. The perception of it being the main killers for child health didn't lead to the scale-up of effective, existing and proven intervention. <p>Pneumonia</p> <p><u>External:</u></p> <ul style="list-style-type: none"> Publish more research (gain attention from global policymakers, scholars). Special publication WHO (2008) World Pneumonia Day (4/2015) Gain momentum for vaccines: if GAVI was fully funded (USD 3.7 billion), 4 million lives could have been saved between 2011 and 2015, reaching more than 240 million children in the world. Still, many global health funders and general public do not have a clear idea about pneumonia's impact, partly due to messaging. <p><u>Internal:</u></p> <ul style="list-style-type: none"> Pneumonia network identity: around and leading killer of children being neglected, instead of prioritizing individual interventions Strengthen global and national leadership: Emergence

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
				<p>designed to reach caregivers of children at the risk of dying from diarrheal disease. Important role for research</p> <p>External:</p> <ul style="list-style-type: none"> • Program messages may not reach all target groups, especially those with the highest risk of mortality. 	<p>of many initiatives and guiding documents and frameworks</p> <p>GAPPD launched; it provided important opportunities to engage political leaders and civil society.</p> <ul style="list-style-type: none"> • There are the joint action plan (WHO and UNICEF, 2013) and Lancet Series on pneumonia and diarrhea. <p>Diarrhea</p> <ul style="list-style-type: none"> • External: Even though diarrheal disease is main killer of children, little attention • Diarrheal disease overshadowed by AIDS, TB and malaria attention -no coherence between disability-adjusted life years (DALYs) due to diarrheal disease and funds allocated • Less emphasis on ORT in 2008; more effort invested in rotavirus vaccine development and measles immunization campaign • <u>Internal</u>: Misconception that diarrhea problem has been solved, thought it was done in the 1980s • Perception of CDD problem, compared to 1985, is 3/10 (value assigned by interviewees) • No coherence—for achieving MDG targeted actions on pneumonia and diarrhea are important—call for action
Policies and Guidelines		<p><u>Pneumonia</u></p> <ul style="list-style-type: none"> • Developed standards (prescription, diagnosis) • In mid 1980s: updated community, district hospital and health facility guidelines • ARI program guidelines 	<ul style="list-style-type: none"> • IMCI—no indicator for diarrhea and CCM; pneumonia was ineffective and small scale (2000–2003) • IMCI (integrates ARI and CDD): efforts to include CCM of pneumonia have shown ineffective due to small scale implementation and 	<ul style="list-style-type: none"> • Global revision of policy and immunization, recommending use of HiB (by WHO) (2006) • GAPP 	<ul style="list-style-type: none"> • MDG Health Alliance attention on pneumonia, diarrhea, and malaria; but recent attention on malnutrition and newborn (2013) • GAPPD provides a holistic and integrated framework but is difficult to translate into operational intervention; it has little impact. • World Health Assembly Resolution (2010) • GAPPD: led by WHO and UNICEF (2013) • GAPP (WHO) (2009) • CCM Essentials Guide (USAID and CORE Group) (2010) • 63rd World Health Assembly resolution supporting CCM for pneumonia (2010) • Management of severe pneumonia (2012)

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
			fragmented, community, and health facility components not being sufficiently linked.		
Activities & key events			<ul style="list-style-type: none"> • MDG and UN: pneumonia network formation reinforced by data and by turn to MDG (2000) • MDG focused global policymakers' attention on reducing child mortality (disease-specific interventions: malaria, HIV/AIDS, and pneumonia); renewed emphasis on vaccine preventable diseases (HiB, pneumococcal disease, and rotavirus), and undernutrition and malnutrition (2001) 	<ul style="list-style-type: none"> • WHO/UNICEF joint statement: management of pneumonia in community settings and clinical management of acute diarrhea (2004) • Roll Back Malaria (RBM) strategy (improve access to treatment and health management) (WHO and RBM)—USAID Action for West Africa Region (AWARE) project sponsored meeting on CCM for pneumonia in Senegal (2005) • Beginning of GAPP process (meetings in 2007 and 2008) • CCM Task Force created (2008) 	<ul style="list-style-type: none"> • UN Commission on Life-Saving Commodities (UNCoLSC): oral rehydration salt (ORS) for diarrhea, amoxicillin for pneumonia (2012) • Clinton Health Access Initiative (CHAI): diarrhea treatment—local governments, built demand (2011) • Mining Compact Initiative: top 10–15 areas (mapped by UNICEF, WHO, and USAID) • Regional workshops, informal interaction, small grant programs • Global Coalition (by GAPP): perused World Health Assembly resolution (2008), passed in 2010 • Global Action Plan for pneumonia. Nairobi (WHO) (2011) • WHO and UNICEF joint statement on ICCM (2012)
Issue Characteristics (Perception of Severity, Effectiveness of Solution, Importance of Children)			<ul style="list-style-type: none"> • CHERG: shared deadly toll of pneumonia 	<ul style="list-style-type: none"> • Neglecting pneumonia: nature of target group, multiple etiologies, IMCI reduced visibility • Call for action: pneumonia burden contributes to child health (2006) • There is evidence of severity and tractability 	<ul style="list-style-type: none"> • CDD low on list of health problems, little attention and no coherence, misconception that diarrhea has been solved (2006–2010) • Most people are amazed that pneumonia is single largest infectious disease killer

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Challenges			<ul style="list-style-type: none"> • Had negative effect on network and pneumonia control • Reduced attention on pneumonia and affected community care • IMCI delayed or ignored at the community level care; early indicators prioritized health facility care 	<ul style="list-style-type: none"> • Highly cost-effective interventions are not being adequately implemented in local settings, not at scale • There is enough knowledge about cost-effective interventions to reduce under-5 mortality of pneumonia. <p>Resistance of pneumonia CCM</p> <ul style="list-style-type: none"> • Call for action: allow CHWs treat children with antibiotics; to provide treatment to most vulnerable children and ensure equity in access to treatment 	<ul style="list-style-type: none"> • Pneumonia and diarrhea scale-up of access: policy environment and commodities, supply availability, build demand, and caregivers are aware of products • Reaching children in high population countries (like India and Niger) • Other interventions lag behind. CCM is reliant on donors; strengthening health system is an urgency • Bottleneck against increasing coverage: share and adapt existing, successful country experiences • Scale up interventions to reach the poorest children • Address inequities (disease-specific mortality within countries) • Available cost-effective interventions—adoption is highly variable, often slow especially in settings with greatest need. • Effective care at health facilities (IMCI); with iCCM can safely and effectively treat pneumonia and diarrhea • Estimates of the incidence of severe pneumonia and diarrhea imply potential burden on hospital services in LMIC • Call to action for a new decade of vaccines (research and development; advocacy at highest level and donor community; compliance by developing countries; and advocacy around benefits of vaccines)
Results and Child Health Data	<p><u>Diarrhea</u></p> <ul style="list-style-type: none"> • 1982 (1955–1980): 4.6 million deaths (18 countries) • Most CDD programs were established between 1980 and 1990. By 1988, more than 100 countries had such programs in place. 	<p><u>Pneumonia</u></p> <ul style="list-style-type: none"> • Research: estimates of mortality, CCM • Early 1990 (limited data): less than 20% of children with pneumonia received antibiotics <p><u>Diarrhea</u></p> <ul style="list-style-type: none"> • 1988: more than 100 countries with 	<p><u>Pneumonia</u></p> <ul style="list-style-type: none"> • Less progress on pneumonia than other diseases, no CCM or prevention and increase in equity gaps for access <p><u>Diarrhea</u></p> <ul style="list-style-type: none"> • Joint strategy, as part of the targets set, increased fluids and continued feeding from 20% in 	<ul style="list-style-type: none"> • More than 2 million deaths per year due to pneumonia; more than any other child health disease, affecting mainly underprivileged and poor children • Research showed that children referred to hospital did not receive appropriate treatment (in Bangladesh, also seen in Ethiopia, Gambia, Kenya). <p>Propose to modify WHO IMCI guidelines—treatment of severe pneumonia with oral amoxicillin at home</p>	<ul style="list-style-type: none"> • Diarrhea (2011–2015): Rollout of rotavirus, which fell behind in Africa (55%) • Pneumonia and diarrhea lost focus (failure of IMCI and iCCM) • No tangible results compared with malaria (silver bullet); less appealing to global community • ORS stagnation: barrier even though sense of mortality reduction • Reduction of under-5 mortality (diarrhea); number of factors, not just programs <p><u>2010–2011 Data (33/2013)</u></p> <ul style="list-style-type: none"> • Pneumonia and diarrhea among most common reasons for hospital admission in LMIC

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
		<p>CDD programs in place.</p> <ul style="list-style-type: none"> • Global ORS use: estimated to increase from 51 million packets in 1979–1980 to 800 million in 1991–1992 • 1990 (1981–1986): 4 million deaths (60 countries) • 1992 (1978–1987): 3.3 million deaths (40 countries) 	<p>1992 to 80% by 2000.</p> <ul style="list-style-type: none"> • 1985–1998: 2.5 million (21 countries) • Use of ORS and recommended home fluids (RHF) (40 LMIC countries, 1986–2003: annual increase by 0.39% • Increased fluids (38 countries; 1986–2003, LMIC): annual increase of 1.02% 		<ul style="list-style-type: none"> • 2010–2011: pneumonia and diarrhea account for 30% of child deaths worldwide (1.97 million); < 1 million in 2013 • Severe episodes of diarrhea and pneumonia: Southeast Asia (26% and 39%); African regions (26% and 30%) • Highest number of deaths in sub-Saharan Africa (SSA) (50% and 43% due to diarrhea and pneumonia, respectively) • 2011: 15 countries account for 74% of total burden of under-5 mortality (pneumonia and diarrhea) • Vaccines: capacity to prevent pneumonia and diarrhea deaths and morbidity: 1) <i>Streptococcus pneumoniae</i> (18% of severe cases and 33% of deaths worldwide); 2) influenza virus (7% of severe episodes and 11% of deaths) • Deaths from HiB are falling because of widespread vaccination in many LMIC. <p><u>Acceleration and limits on progress on impacts:</u></p> <ul style="list-style-type: none"> • Immunization: Mainly GAVI (2009: USD 1.5 billion advance for pneumococcus vaccine); also research and development of vaccine; pneumonia network members were not involved or influenced this choice • Coverage is progressing; HiB reaches only 50% and pneumococcus only 25% of most vulnerable children.
Lessons learned Possible solutions				<ul style="list-style-type: none"> • Improve mortality by improving nutrition and living conditions • Intervention strategies: 1) immunization (HiB, Pneumococcus); 2) improvement in the nutritional status of children (breast-feeding); 3) reduction of environmental risk; 4) increased access to case management; 5) CCM and promotion and development; and 6) investment to improve quality of hospital care 	<ul style="list-style-type: none"> • Pneumonia and diarrhea working group focus countries: those with funding had better results than those without funding. • New Research: effective treatment is available and there is no need for more research; it is lost energy. What is important is to reach all children who are far way with pneumonia. • Should be linked with nutrition—lost that pillar • Management: closely linked with vaccines (prevention) • Not scaled up even though there are existing and

Category	Before 1984	1985–1995: Acute Respiratory Infection (ARI) and Control of Diarrheal Disease (CDD) Program	1996–2003: Integrated Management of Childhood Illness (IMCI)	2003–2008	2008–2015
					<p>proven interventions- missed opportunity</p> <p>Possible interventions</p> <ul style="list-style-type: none"> • Focus pneumonia and diarrhea prevention and treatment interventions in under-2 children (most affected—72% of diarrhea deaths and 81% of pneumonia deaths) • Link with nutrition interventions • Scale-up of 15 highly cost-effective interventions would prevent 95% of diarrheal deaths and 67% of current under-5 pneumonia deaths by 2025 (by implementing IMCI (facility-based), iCCM, and scaling up new vaccines; better understanding the clustering of risk factors and infections—from pre-pregnancy to first 2 years; environmental health; sanitation and hygiene; and child nutrition) • Country implementation and prioritization of interventions based on their local context • A five-step approach to planning and management of national and subnational pneumonia and diarrhea programs can rapidly lead to the scale-up of coverage of cost-effective interventions • Understanding disease epidemiology and intervention packages in every context: address inequities, health system, investment barriers, intersector collaboration, and coordination; and address social determinants of health • Capacity-building and coordination across different levels of decision-making for planning, investment, and action to collect, interpret, and apply relevant local information to guide action • Advocacy to reprioritize diarrheal disease: water and sanitation should be part of the intervention package. • Effective advocacy efforts should both target country and global-level influencers. • Vaccines, zinc, water, sanitation, and ORS have the highest potential to motivate donor funding.

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