

CHILD HEALTH LEADERSHIP AND NETWORKS IN MOZAMBIQUE FROM 2000 TO THE PRESENT: COUNTRY PERSPECTIVES

CASE STUDY REPORT MARCH 2020



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ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome		
AKF	Agha Khan Foundation		
ANSA	Associação Académica Nutrição e Segurança Alimentar (Association of Academic Nutrition and Food Security)		
APE	Agente Polivalente Elementar (Community Health Worker)		
CCS	Consulta da Criança Sadia (Healthy Child Consultation)		
CHW	Community Health Worker		
CIDA	Canadian International Development Agency		
DFID	Department for International Development		
ENAP	Every Newborn Action Plan		
EPI	Expanded Program on Immunization		
FHI 360	Family Health International		
FDC	Fundação para o Desenvolvimento da Comunidade (Foundation for Community Development)		
GAIN	Global Alliance for Improved Nutrition		
GFF	Global Financing Facility		
HIV	Human Immunodeficiency Virus		
IDI	In-depth Interview		
iCCM	Integrated Community Case Management		
IMCI	Integrated Management of Childhood Illness		
INGO	International Nongovernmental Organization		
MCH	Maternal Child Health		
MCHIP	Maternal and Child Health Integrated Program		
MCSP	Maternal and Child Survival Program		
MDG	Millennium Development Goals		
МОН	Ministry of Health		
MOH_MCH	Ministry of Health, Maternal Child Health Department		
MOH_CHD	Ministry of Health, Division of Child Health		
NGO	Nongovernmental Organization		
NMR	Neonatal Mortality Rate		
ONA	Organization Network Analysis		
PEPFAR	President's Emergency Plan for AIDS Relief		
PMI	President's Malaria Initiative		
PMTCT	Prevention of Mother-to-Child Transmission		
RMNCAH	Reproductive Maternal, Newborn, Child and Adolescent Health		
SDG	Sustainable Development Goals		
SWAP	Sector-Wide Approach Process		
Setsan	Technical Secretariat on Food Nutrition and Security		
U5MR	Under-five Mortality Rate		
UNICEF	United Nations Children's Fund		
USAID	United States Agency for International Development		

WHO

World Health Organization

EXECUTIVE SUMMARY

Mozambique surpassed the Millennium Development Goal (MDG) four target to reduce the mortality rate for children under-five by two-thirds between 1990 and 2015. However, declines in neonatal mortality rates and maternal mortality ratios have slowed in the last decade, and there is quite a way to go to reach the Sustainable Development Goal (SDG) targets by 2030. This slowdown in progress has highlighted the need to identify barriers, facilitators, and contextual factors impacting continued progress on child health. This study aimed to understand the effectiveness of leadership, stakeholder networks, and political commitment in improving child health in Mozambique¹ since 2000, and to suggest what might be done to improve child health outcomes in the future.

The study team used a mixed methods approach including a desk review of published data and literature, 17 in-depth interviews (IDIs) and 15 organizational network analysis (ONA) surveys with national-level child health experts. The IDI informants provided historical information on key facilitators and barriers to progress in child health, insights into the role of leadership and political commitment in influencing results, and characteristics of stakeholder coordination. The ONA explored relationships and interaction among organizations in the child health network related to communication, coordination, and collaboration. IDI data were analyzed by evaluation question, using Dedoose (a web-based qualitative data analysis platform) and aligned with a framework on the effectiveness of global health networks developed by Shiffman and others.² The ONA data were analyzed using UCINet and NetDraw. All country data and conclusions were reviewed in a joint meeting of researchers and country representatives. Findings are intended to inform investment, policy, and programmatic decisions and enhance stakeholder collaboration to improve child health outcomes.

KEY FINDINGS AND CONCLUSIONS

CHILD HEALTH SUCCESSES AND FAILURES

- Mozambique experienced a sharp decline in deaths of children under five between 1990 and 2016. The under-five mortality rate (U5MR) declined from 248 per 1000 live births to 71.5 per 1000 live births. The neonatal mortality rate (NMR) also declined, though less than the U5MR, from 58 per 1000 live births in 1990 to 27.1 per 1000 live births in 2016.³
- The main causes of deaths are maternal factors and complications during pregnancy, labor, and delivery among newborns; malaria, bacterial sepsis, and HIV among infants; and malaria, HIV, pneumonia, and diarrheal diseases among children under-five.

¹ For the purposes of this study, child health is defined as the health of children from birth to five years. Thus, it includes newborns (younger than one month) and infants (younger than one year).

² Shiffman, Quissell, Schmitz, et al. (2015), "A framework on the emergence and effectiveness of global health networks," *Health Policy Planning*, 1(14).

³ These data are from country projections made by the United Nations Inter-agency Group for Child Mortality Estimation in 2017 (<u>http://data.unicef.org</u>). The most recent available data from Mozambique is the Demographic Health Survey (DHS) published in 2013 which reported a fall in U5MR from 226 per live births in 1990 to 97 per live births in 2011. DHS data indicates that neonatal deaths as a proportion of under-five mortality has increased from 23 percent in 1990 (NMR 53 per 1000 live births) to 31 percent in 2011 (NMR 30 per 1000 live births). This is the official data currently being used. (http://www.ine.gov.mz/operacoes-estatisticas/inqueritos/inqueritodemografico-e-de-saude).

- The reduction of U5MR was associated with the implementation of child survival strategies and investments in health systems strengthening, specifically increases in the public sector health workforce, particularly maternal and child health nurses.
- The most successful child health interventions reported were Integrated Management of Childhood Illness (IMCI); the introduction of chlorhexidine for umbilical cord care; the expansion of immunization; the Integrated Community Case Management of Childhood Illness (iCCM); and oral rehydration solution and zinc to treat diarrhea and protect against pneumonia. However, apart from iCCM and immunization, these strategies have been implemented unevenly across the country and have not prioritized those in most need.

FACTORS THAT ENABLED AND CONSTRAINED PROGRESS

Progress toward improving child health has been affected by a combination of global and local dynamics. These enabling and constraining factors are grouped into four categories: structural issues, national priority and resources; health systems; and community engagement.

Category	Enabling Factors	Constraining Factors
Structural Issues	 Improved access to non-health public services such as education, clean water, and basic sanitation 	 Socioeconomic vulnerability of the Mozambican population High illiteracy rates Geographic inequalities in access to clean water and adequate sanitation
National Priorities and Resources	 Comprehensive child health policy framework Adherence to regional and global commitments and strategies (e.g. MDGs, Every Woman Every Child, President's Malaria Initiative (PMI), President's Emergency Plan for AIDS Relief (PEPFAR), Scaling Up Nutrition). 	 Inadequate national funding and heavy reliance on external funding Prominence of disease-specific support and vertical programs promoted by global initiatives (e.g. PEPFAR, PMI, the Global Fund), Implementation priorities and resources diverted from broader child health issues to HIV Fragmentation of interventions and poor coordination of implementation Uneven distribution of resources among central and provincial levels
Health Systems	 Adoption of key child survival initiatives (e.g. IMCI-ICCM, immunization) Improved coverage and access to health (e.g. vaccines, institutional birth, insecticide-treated mosquito nets) 	 High staff turnover and "brain drain" from public to international and private organizations Overburdened and underqualified human resources Shortage of pediatric formulations of medicines, equipment, and materials Lack of supervision and mentorship at facility level
Community Engagement	 Revitalization of "Agente Polivalente Elementar", the community health worker (CHW) program Campaigns to address negative sociocultural norms related to child 	 Lack of integration of CHWs in the public health sector

Category	Enabling Factors	Constraining Factors
	health, family planning, and early marriages Growing awareness of the importance of vaccination	

LEADERSHIP

- Senior government leadership has promoted child health through participation in high-visibility initiatives such as the Child Health Weeks, the introduction of the Baby Friendly Hospital Initiative and the creation of the nutrition department within the Ministry of Health (MOH). Leadership of technical staff through technical working groups was essential for progress. However, emerging leadership reflects the fragmented nature of the child health field: most leaders are siloed, focused on areas directly related to their work.
- MOH's leadership in child health has improved in the last few years, but there is significant room for improving the political visibility, institutional strength, and proactivity of the Child Health Section, beyond policy development and chairing technical working groups.
- Multilateral agencies (UNICEF, WHO, World Bank), bilateral agencies (CIDA, DFID, and USAID), and global initiatives (PEPFAR, Global Fund and Gavi, the Vaccine Alliance [hereafter referred to as Gavi]), have provided valuable support to child health interventions. USAID's Maternal and Child Survival Program (MCSP) has been a leader in the provision of technical assistance and advocacy for child health.

POLITICAL COMMITMENT

- Mozambique has consistently prioritized effective child health programs since the late 1990s. Though child health has been deprioritized within the maternal-child health nexus, political visibility and commitment to child health increased between 2000 and 2015. There has been a strong focus on HIV, but also growing attention to immunization, nutrition, and newborn health.
- Political commitment to child health at the national level has been bolstered by global initiatives and movements (IMCI, Baby/Child Friendly Hospital Initiative, MDGs, PEPFAR, President's Malaria Initiative, Child Survival Call to Action: Ending Preventable Child Deaths, Every Woman Every Child, Every Newborn Action Plan, Gavi, and Scaling-up Nutrition), World Health Organization (WHO) guidelines, and evidence published in international journals such as the Lancet showing the severity of the issue, all of which have increased the visibility of and funding for child health.

STAKEHOLDERS, GOVERNANCE, AND COORDINATION

The child health field in Mozambique is relatively small and constituted by a few government institutions/departments (the majority within MOH), multi/bilateral agencies, many international nongovernmental organizations (INGOs), and some health training and research institutions. Mozambican civil society participation is mostly limited to the HIV and nutrition fields, and a professional organization. Mozambique's child health network has a moderate level of connections. USAID has the greatest number of connections followed by UNICEF and the Technical Secretariat on Food Nutrition and Security (SETSAN). The government departments have fewer than half of the connections with other agencies. UNICEF has the most intensive collaborative relationships.

- Many structures in place serve as platforms to build synergies to accelerate child health progress, such as national forums and councils and more than 10 technical working groups formed around specific child health topics, issues, strategies, and programs (including a child health technical group). Most technical groups are at the ministry level and bring together technical staff from multilateral and bilateral agencies, INGOs, and focal points from MOH departments.
- There are major coordination challenges due to heavy reliance of external funds, vertical funding to the MOH which is channelled through INGOs which tend to operate in isolation, limited collaboration for implementation, and lack of mutual accountability and information on who is doing what, where and with whom.
- Dependency on external resources and centralization within the MOH has had a negative effect on leadership, coordination, and negotiation capacity (e.g., negotiating with partners about the use of available resources at central, provincial, and district levels).

RECOMMENDATIONS

The recommendations described below focus on six issues: 1) visibility of child health; 2) multi-level leadership and coordination; 3) leadership, coordination, and negotiation capacity; 4) domestic funding; 5) research and evidence; and 6) civil society engagement.

RECOMMENDATION I: Give greater focus and priority to child health to increase its visibility.

This can be achieved through two complementary approaches: convening multi-stakeholder child health discussion forums and conducting a participatory child health audit⁴ in the MOH. These exercises could foster dialogue and learning around the severity of child health challenges and the existing child health-specific structures, instruments, budgets, and projects at various levels as well as help establish a baseline, identify critical gaps and challenges, and recommend ways of addressing them.

RECOMMENDATION 2: Adopt a multi-level, multi-stakeholder approach to child health coordination.

- The involvement of other actors, such as Mozambican NGOs and professional associations, in child health should be fostered, particularly around the design and implementation of advocacy initiatives on issues identified by the Child Health Technical Group.
- There is a need to ensure that approaches to coordination, communication, and collaboration "trickle down" to the central, provincial, and district levels to improve interactions between actors that operate at provincial and district level and those at the central level, capitalizing on the recent appointment of child health focal points within the Provincial Directorates of Health.

RECOMMENDATION 3: Build leadership, coordination, and negotiation capacity.

⁴ A child health audit is a tool that can contribute to improving child health governance and accountability by assessing the institutionalization of child health into institutions, including the governance structure, management accountabilities at different levels, policies, programs, budgets, delivery of services. For instance, in 2015, Global Affairs Canada commissioned a similar type of audit of maternal, newborn and child health commitments (source: <u>https://www.international.gc.ca/gac-amc/publications/audits-verification/2016/mnch-smne.aspx?lang=eng</u>). This type of audit has also been used to assess the integration of other cross-cutting issues, such as gender equality and HIV and AIDS. (see: Moser, Caroline. An Introduction to Gender Audit Methodology: Its design and implementation in DFID Malawi. Overseas Development Institute. London. May 2005.)

- Development partners should invest more in strengthening the capacity of MOH, particularly but not exclusively of the Division of Child Health, to deal with multiple actors and manage competing interests and agendas in a way that equips its staff to have more prominence in the child health network.
- Technical assistance to the MOH should focus on building capacity to convene and lead through direct intervention or technical advisers. Interactions within the child health network should extend beyond planning to address resource allocation and accountability for outcomes.

RECOMMENDATION 4: Increase domestic funding for child health.

- Despite optimism that the Health Sector Financing Strategy will provide a roadmap to increase domestic funding for the health sector, the dire needs and competing priorities could result in the neglect of less visible or prioritized areas.
- Child health actors must design a clear strategy to participate in ongoing budget debates by highlighting both the implications of funding mechanisms for advancing child health. This is an area where civil society organizations can play a role, particularly those involved in policy influencing, lobbying, and advocacy.

RECOMMENDATION 5: Foster civil society engagement in child health.

- Greater civil society involvement in child health is needed. This should encompass identifying champions at various levels and equipping them to perform a watchdog role, and demand accountability on outcomes.
- Lessons can be drawn from the nutrition and HIV fields on civil society participation and advocacy, especially on formal institutional mechanisms that include civil society representation.

RECOMMENDATION 6: Generate evidence to inform programming and support advocacy.

- There is a need to improve routine data collection, for instance through the child health cards and record books recently approved. Health workers should be trained and supervised to use these tools so that eventually, data will systematically inform programming.
- It is also critical to address gaps in evidence on the effectiveness of the strategies that have been adopted to accelerate child health progress. Generation of evidence showing the value of systematically investing in child health could also be valuable for civil society advocacy efforts.

INTRODUCTION AND STUDY BACKGROUND

In 2015, the United States Agency for International Development (USAID) commissioned a mapping of global child health leadership to better understand the evolution of child health since 2000, the current network of global stakeholders and leaders, and the potential implications for USAID's future investments in child health. This landscaping exercise explored how the global child health community might strengthen leadership and reposition child health to improve outcomes.

To reach the vision and Sustainable Development Goals (SDGs) for 2030, it was strongly recommended that countries be at the center of reframing the future child health agenda and that in-depth country reflections on child health progress, leadership, and the effectiveness of stakeholder networks be more systematically documented. This report presents findings from Mozambique, one of three African countries studied to document child health leadership, networks, and political commitment for child health at the national level. Findings are intended to contribute to investment, policy, and programmatic decisions of stakeholders and to enhance collaboration to help children survive and thrive.

STUDY OBJECTIVE AND RESEARCH QUESTIONS

In this study, child health is defined as the health of children from birth to five years. Quantitative measures and trends have been drawn from existing published sources. The under-five mortality rate (U5MR), the infant mortality rate, and the neonatal mortality rate (NMR) have been used to describe overall, impact-level change in child health over the past decade. Changes in impact are likely the result of improvements in multiple sectors including health, the economy, and education. Change in child health activities and results in Mozambique were reviewed for a period of approximately 15 years, starting in 2000.

The aim of the study is **to understand the effectiveness of leadership, political commitment, and stakeholder networks in improving child health over the past 15 years in Mozambique.** The study also investigates how these and other drivers of change might be harnessed to advance child health going forward, especially for USAID. More specifically:

- What strategies were employed to improve child health over time? (Strategies are defined as policies, plans of action, implementation, and their results.)
- What were the key facilitators (enabling factors) and barriers (constraining factors) to progress in child health since 2000?
- Who were important leaders and organizations in child health in Mozambique and what role did they play to influence progress and results?
 - Applying organization network analysis theory, what was the structure, relationship characteristics, and dynamics of country child health organizations and networks?
 - What role did USAID contributions play in progress in child health, specifically the Call to Action for Child Survival,⁵ A Promise Renewed (APR),⁶ and Ending Preventable Child and Maternal Death⁷ initiatives?

⁵ https://www.unicef.org/childsurvival/index_62639 accessed 06_04_2018

⁶ https://www.apromiserenewed.org accessed 06_04_2018

⁷ https://www.usaid.gov/ActingOnTheCall accessed 06_04_2018

- Applying a conceptual framework developed by Shiffman and others,⁸ what factors shaped the development of child health networks? What was their influence on priorities, policy, and results in Mozambique?
- What might be done differently by USAID and others to enhance progress on child health over the next five to ten years in Mozambique?

Methods used in the analysis included a desk review and secondary data analysis (see Annex A), in-depth interviews (IDIs) with national-level child health stakeholders, and an organizational network analysis (ONA) and survey. To deepen understanding of change over time, a few child health interventions were examined in detail to explore how leadership, networks, and commitment affected program performance. These interventions included Integrated Management of Child Illness (IMCI), child immunization, newborn health, and child nutrition.

Organizational network analysis (ONA) depicts multi-organizational patterns of interaction and relationships, illuminating flows of information and how people are working together. This study used ONA to gain a deeper understanding of the actors involved in child health in Mozambique, exploring how they relate to each other by situating them along a continuum of communication, coordination, and collaboration. The ONA was also used to identify the key organizations involved in strategy development, capacity building, and implementation and to gather respondents' perceptions about 1) the most influential organizations in child health; 2) organizations sought for the latest evidence in child health; and 3) recognized coordinators/leaders that can bring the child health community together to build common goals and directions for the future. The ONA questionnaire was applied to 15 organizations and covered most of the organizational actors except the international non-governmental organization (INGO), "Médicos com África" – CUAMM. The majority of those covered are based at the central level, while some have interventions in the provinces. The analysis does not include organizations based in the provinces nor district and community-based organizations operating at local levels, due to financial limitations.

Data were collected in Maputo from February – April 2019. Fifteen ONA surveys were conducted with representatives from government (two), multilateral (two), bilateral (two), INGO (six), and national NGO (three) agencies. Seventeen IDIs were conducted with government (four), multilateral (four), bilateral (two), INGO (five), and national NGO (two) staff. Twenty-one of the thirty organizations (including Ministry of Health departments) and 25 of the 35 people identified participated in the study. Some interviewees were unavailable, partially related to focus on the recovery and relief efforts due to the Ciclone Idai and floods in the central region of Mozambique in March 2019. Participating individuals and organizations were initially selected in collaboration with USAID, and the list was extended based on input from other interviewees.

In-depth interviews were coded and excerpted in Dedoose, a web-based qualitative data analysis platform.⁹ Coding was based on the questionnaires and the Shiffman framework. The ONA data were analyzed using UCINet software, and visualization of network plots used NetDraw. A confirmation process was used to measure relationships. The IDIs provide historical information on stakeholders,

⁸ 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.

⁹ Dedoose Version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data (2018). Los Angeles, CA: Socio Cultural Research Consultants, LLC <u>www.dedoose.com</u>.

stakeholder engagement, and coordination. The ONA explicitly characterizes connections and interactions over the recent past. (See Annex B for detailed methodology and Annex C for study instruments.) The study protocol was submitted to and received ethical approval from institutional review boards in Mozambique and the United States.

LIMITATIONS OF THE STUDY

The results of this study reflect interviews with a limited number of individuals and organizations focused on child health in Mozambique. To increase reliability of the results and reduce possible bias, IDI results were triangulated with the desk review findings. ONA data reflect only those organizations for which there were full responses. A major limitation of this study is that the Department of Nutrition and the Extended Program on Immunization participated in the IDIs but not the ONA because their staff did not have time to contribute to both. Interviews were limited in length which may have excluded deeper consideration of related, but broader health topics. Limited resources also precluded the option of conducting interviews at the provincial, district, or community level, which might have provided information on the effects of national programs, differences that might arise from inequities, and the strength of local ownership and local networks. Despite these limitations, the study provides insight into the effectiveness of leadership and stakeholder networks in improving child health over the past 15 years in Mozambique.

CHILD HEALTH IN MOZAMBIQUE

Mozambique surpassed the MDG four target to reduce the mortality rate for children under-five by two-thirds between 1990 and 2016. In 1990, the U5MR was 248 per 1000 live births compared to 71.5 per 1000 live births in 2016 (Figure 1).¹⁰



Figure 1. Trends in U5MR and U5 deaths, Mozambique, 1990-2016

¹⁰ These data are from country projections made by the UN Inter-agency Group for Child Mortality Estimation in 2017 (http://data.unicef.org). The most recent available data from Mozambique is the Demographic Health Survey (DHS) published in 2013 which reported a fall in U5MR from 226 per live births in 1990 to 97 per live births in 2011. DHS data indicates that the weight of neonatal deaths in under-five mortality has increased from 23 percent in 1990 (NMR 53 per 1000 live births) to 31 percent in 2011 (NMR 30 per 1000 live births). This is the official data currently being used. (http://www.ine.gov.mz/operacoes-estatisticas/inqueritos/inquerito-demografico-e-de-saude).

Neonatal rates and maternal mortality ratios also declined. In 2016, the NMR was 27.1 deaths per 1000 live births (30,469) a 56 percent reduction from 1990 (Figure 2). However, Mozambique has quite a way to go to reach the SDG target of 12 deaths per 1000 live births. Despite a steady decline in the number of maternal deaths, Mozambique did not attain its MDG target of 325 deaths per 100,000 live births. The maternal mortality ratio was 489 in 2015, far from the SDG target of less than 70 deaths per 100,000 live births.¹¹





Data from the 2011 Demographic Health Survey (DHS) show differences in U5MR among provinces (e.g. 39 deaths per 1000 live births in Inhambane province, in the south of Mozambique, and 95 deaths per 1000 live births in Zambézia province, in central Mozambique), urban (69 deaths per 1000 live births) and rural areas (72 deaths per live births), and mother's education, with 56 deaths per live births in mothers with secondary education or more and 70 deaths per live births in illiterate mothers. The main causes of deaths are bacterial sepsis (35.0 percent), maternal factors (9.6 percent), and complications during pregnancy, labor and delivery (6.4 percent) among newborns; malaria (35.2 percent), bacterial sepsis (12.8 percent), and HIV (9.3 percent) among infants; and malaria (42.3 percent), HIV (13.4 percent), pneumonia (6.4 percent), and diarrheal diseases (5.9 percent) among under-fives.

Findings indicate that the reduction of U5MR was associated with the implementation of child survival strategies and investments in health systems strengthening, specifically increases in the public sector health workforce, particularly maternal and child health nurses. The most successful child interventions reported by the interviewees were: Integrated Management of Childhood Illnesses (IMCI); the introduction of chlorhexidine for umbilical cord care; the expansion of immunization both in terms of vaccines introduced and their coverage; the Integrated Community Case Management of Childhood Illness (iCCM), because of its positive effects on care-seeking behaviors and utilization of health services, including institutional birth coverage; and oral rehydration solution and zinc for treatment of diarrhea and protection against pneumonia. However, apart from iCCM and immunization, these strategies have been implemented unevenly across the country and have not prioritized those in most need.

Source: UN Inter-agency Group for Child Mortality Estimation, 2017 (http://data.unicef.org)

¹¹ As per the DHS 2011, the maternal mortality ratio was 408 per 100,000 live births.

FINDINGS: EVOLUTION OF CHILD HEALTH

Promotion of child health in Mozambique has been inspired by the country's adoption of primary health care following its independence in 1975 and the identification of maternal and child health as a priority area of intervention. The integration of maternal and child health, since 1978, has led to a tendency to develop homogenous policy instruments that have failed to define clear priorities and strategies for child health.

This started to be addressed from the late 1990s through the development of specific strategies, plans, and norms on newborn, infant and child health, as illustrated in the timeline below (Table 1).¹² The introduction of IMCI in 1998, the evaluation of national health needs in 2000, the reaffirmation of maternal and child health as a priority area in the first Health Sector Strategic Plan, developed in 2000, and the Millennium Declaration and Millennium Development Goals, together created momentum for the approval of the first Maternal and Child Health strategy, in 2001, and the instruments to reduce child mortality that followed.

1998	 Introduction of the Integrated Management of Childhood Illness
1999	 Evaluation of National Health Priorities
2000	 Plan of Action for Reduction of Absolute Poverty 2001-2005 Development of first Health Sector Strategic Plan 2000-2005 Mozambique ratifies the Millennium Declaration and the Millennium Development Goals Introduction of the Sector-Wide Approach in the Health Sector following the signature of the Kaya-Kwanga Code of Conduct Development of the National Strategy for Reduction of Maternal and Perinatal Morbidity
2001	 Newborn consultation in the postnatal period: a guide for health personnel Plan of Action for Reduction of Absolute Poverty 2001-2005 (PARPA I) Introduction of the hepatitis B vaccine in the Extended Program on Immunization National Strategy on Maternal and Child Health
2002	 Vitamin A supplementation (VAS) integrated in routine child health services (between 1999 and 2001, VAS was delivered only through national immunization days) Integration of various measures concerning attention to newborns in the Child Health Section/Family Health Division, such as training of personnel that assisted newborns in the delivery room, admission units, and newborn consultations; revitalization of committees for the study of maternal and neonatal deaths; evaluation of care provided to newborns in collaboration with the Reproductive Health Division; definition of newborn health indicators to be integrated in the National Information System; coordination of tetanus vaccine; syphilis screening for pregnant women; and introduction of a basic nutritional package
2003	 Memorandum of understanding for the common fund PROSAÚDE I Introduction of PMTCT with nevirapine Introduction of a module on IMCI in training institutions

Table I. Child Health Policy Framework, 1998-2018

¹² It was toward the end of the study period (2000-2015) that maternal and child health were outlined as related yet separate areas in the 2014-2019 Health Sector Strategic Plan through the design of specific objectives, impact indicators, strategies, and interventions related to child health. The main objective for this area is to "reduce mortality in children <5," and its strategies are formulated around four strategic goals related to access, quality, equity, effectiveness and efficiency.

	 health Revitalization of the Baby Friendly Hospital Initiative National HIV and AIDS Response Strategic Plan, 2010-2014 		
2010	 National Strategy for Family Planning MDG Progress Report Revitalization of the Community Health Workers Program Launching of the national partnership for promotion of maternal, neonatal, and infant 		
2009	 Strategy on waiting houses for pregnant women The National Five-Year Plan Introduction of the hib conjugate (haemophilus influenzae type b) vaccine in the Extended Program on Immunization Adoption of the Integrated Plan for the Achievement of MDGs 4 and 5, 2009-2012 (subsequently extended to 2017) Human Resources for Health Strategic Plan, 2009-2018 		
	 Committee for auditing of maternal, perinatal and neonatal deaths Plan of communication and social mobilization for the promotion, protection, and support for breastfeeding, 2009-2013 (subsequently extended to 2015) 		
	 Launching of Armando Guebuza's Presidential Initiative for the Reduction of Maternal and Child Mortality Adoption of the Code for the Marketing of Breast-Milk Substitutes Global Fund Against HIV, Tuberculosis, Malaria pauses funding Round 8 		
2008	 Introduction of implementation of biannual National Child Health Weeks Introduction of the Reaching Every District Approach (later Reaching Every Child) to the Extended Immunization Program Update of the PROSAÚDE memorandum and amalgamation of three Common Funds in PROSAUDE II 		
	 Strategy for Strengthening Traditional Midwives' Interventions National Child Mortality Study Incorporation of a neonatal component in the Integrated Management of Childhood Illness (IMCI) and Integrated Community Management of Childhood Illness, which resulted in the change of acronyms to Integrated Management of Neonatal and Childhood Illness (IMNCI) and Integrated Community Management of Neonatal and Childhood Illness (C-IMNCI) 		
2007	 National needs assessment for maternal and neonatal health Operational plan for neonatal and child health in Mozambique, 2008-2010 Basic nutrition package 		
2006	 Health Sector Strategic Plan 2007-2012 National Policy on Neonatal and Infant Health Review of IMCI guidelines to integrate the first week of life of the newborn and HIV Introduction of intermittent and preventive treatment of malaria for pregnant women Development of the Strategy to Prevent Malaria in Infants 		
2005	 Plan of Action for Reduction of Absolute Poverty 2006-2009 (PARPA II) Guide for Health Professionals on Supplementation with Micronutrients in Mozambique Development of Strategy on Community Involvement in Health 		
2004	 Development of the National Strategy on Prevention of Mother-to-Child Transmission of HIV Traditional Medicine Policy and Implementation Strategy Mozambique receives first Global Fund Against HIV, Tuberculosis and Malaria support in Round 2 for all three diseases Highly active anti-retroviral therapy becomes available for all patients, including pregnant women, in line with national guidelines 		
	 Development of the National Strategic Plan against Sexually Transmitted Infections and HIV/AIDS, 2004-2008 		

2012	 Technical manual on assistance to newborns during partum and main obstetric and neonatal complications Adoption of well-child and at-risk clinical norms Approval of the Multisectoral Action Plan for the Reduction of Chronic Undernutrition, 2011-2015 (subsequently extended to 2020) Development of the Comprehensive Multi Year Plan, 2012-2016, of the National Program on Immunization Adoption of the AIDS Response Acceleration Plan for Mozambique, 2013-2017 National Action Plan for Children 2013-2019
	 Global Fund against HIV, Tuberculosis and Malaria Round 8 Health System Strengthening grant is reinstated
2013	 Introduction of pneumococcal vaccine (PVC)
2014	 Comprehensive Multi-Year Plan of the National Immunization Program, 2015-2019 Adoption of the Health Sector Strategic Plan, 2014-2019 (subsequently extended to 2023) Adoption of the Guidelines for Integrated Management of Childhood Illnesses
2015	 Introduction of the rotavirus vaccine in the Extended Program on Immunization Development of draft Strategy for the Implementation of Home Fortification with Multiple Micronutrient Powders in Mozambique Development of Social and Behavior Change Communication Strategy to Prevent Undernutrition in Mozambique Integration of Multiple Micronutrient Powders in Health Services National Health Promotion Strategy 2015-2019 (subsequently extended to 2020)
2017	 Development of Investment Case for Smart, Sustainable and Scale Actions in Reproductive, Maternal, Neonatal, Child, and Adolescent Health (RMNCAH) in Mozambique Development of the Health Sector Financing Strategy
2018	 Launch of the Planning Guide of Vitamin A Supplementation and Deworming Activities in Routine Health Services Development of the Every Newborn Action Plan Development and implementation of new child health registration books

Table I shows that there is history and consistency in prioritizing effective child health programs at the policy level. However, it also reveals that some child health topics have received more attention than others (e.g. immunization versus chronic undernutrition).

"Chronic malnutrition is not recognized as a major problem for our society, when more than 40 percent of children under-five suffer from chronic malnutrition.... For a long time, this problem was not very well recognized. The Nutrition Program within the Ministry of Health was poorly funded compared to the vaccination program. Why? Because ... if we do not vaccinate, the child gets measles. But with chronic malnutrition, a child may survive the diseases of childhood but, in the long run, will not deliver their maximum potential to society. The non-recognition of this for me is still one of the greatest problems to date." [Multilateral Agency]

Despite the need to increase awareness of the severity of chronic malnutrition, policy visibility of child nutrition has improved between 2000 and 2015,¹³ fostered by the creation of the Technical Secretariat

¹² Despite important coordination challenges, the framing of nutrition as a cross-cutting and multisectoral issue has contributed to a more holistic approach to child health. While in the early years nutrition was considered just a "health sector" issue, now

on Food Nutrition and Security (SETSAN) in 1998 under the Ministry of Agriculture,¹⁴ the approval of ESAN II (2008-2015) and its implementation plan – Food Security and Nutrition Action Plan (PASAN) – in 2007; and the approval of the Multisectoral Action Plan for the Reduction of Chronic Malnutrition 2011-2014 (extended to 2020), commonly known as PAMRDC, in 2010.

These developments were shaped by the government's participation in the 1996 International Food Conference in Rome, and further influenced by a strong domestic lobby and advocacy, over the years, which has been strengthened by evidence published in the Lancet series of papers on maternal and child undernutrition in 2008 and Mozambique's participation in the Scaling-Up Nutrition movement that followed the publication of the policy brief Scaling-Up Nutrition: a Framework for Action, in 2010. Knowledgeable and committed leaders within the nutrition department have also fostered multisectoral action to address undernutrition.

"Global movements, such as Scaling up Nutrition, have brought nutrition a little bit higher in the political agenda. The two series of articles in the Lancet on maternal and child undernutrition, which have showed how malnutrition, especially chronic malnutrition, can impact a country's human and economic development, have... increased the political visibility, which led to the development of the Multi-Stakeholder Action plan to Reduce Chronic Malnutrition in Mozambique in 2010." [Nongovernmental Organization]

Milestones within the Ministry of Health include the creation of the Nutrition Department; development of the Guide for Health Professionals on Supplementation with Micronutrients in Mozambique, in 2005; the Basic Nutrition Package, in 2007; the adoption of the Code for the Marketing of Breast-Milk Substitutes, in 2008; the approval of the Plan of Communication and Social Mobilization for the Promotion, Protection and Support of Breastfeeding, 2009-2013 (subsequently extended to 2015), in 2009; and the establishment of the Nutritional Rehabilitation Program I, in 2011.¹⁵

The nutrition policy framework in the health sector emphasizes improving the nutritional status of children and pregnant and lactating women. Concerning children, the focus is on newborns and infants up to age five, though adolescent girls are being increasingly targeted due to the high rates of adolescent pregnancies in the country. The topic has been integrated in the existing guidelines and strategies targeting healthy, sick, and at-risk children. Relatedly, nearly all the indicators in the new child health record book are on nutrition, especially those related to the healthy child consultation.

The main strategies in the area of child nutrition encompassed promoting early lactation and exclusive breastfeeding in the first six months and introduction of complementary foods at six months; addressing negative myths, beliefs, and norms related to breastfeeding; regulating the commercialization of breastmilk substitutes; addressing micronutrients deficiencies through vitamin A supplementation and home fortification with multi-micronutrient powders; providing pregnant women with folic acid supplements; salt iodization; nutritional treatment and rehabilitation in health units and at the

there is greater policy awareness of the role of other sectors, particularly water, sanitation, agriculture, education, and social action in addressing nutritional problems. An important driver was the establishment of the National Council for Food Security and Nutrition, *Conselho Nacional de Segurança Alimentar e Nutricional (CONSAN)*, in December 2017.

¹⁴ In 2010 SETSAN received a semi-autonomous status.

¹⁵ This was followed by the development of the National Strategy on Social and Behavioral Change Communication for Prevention of Malnutrition (2015-2019), in 2015; development of the Nutritional Rehabilitation Program II was developed respectively; production of two manuals on Nutritional Treatment and Rehabilitation of Infants and Adolescents aged 0-14 years and Adolescents and Adults >15 respectively; National Policy on Infant Feeding and National Strategy on Infant Feeding; and production of the Reference Book on Growth Curves in Children and Adolescents, aged 0-18 years. The development of these tools was based on the WHO global strategy and guidelines on infant feeding (including those specific to HIV).

community level; growth monitoring in health cards; community health workers (CHWs) delivering a community-based nutrition package which includes talks, cooking lessons, and screening for malnutrition; and early childhood development.

The timeline presented in Table I also reveals that certain areas have evolved more slowly than others, especially newborn health. The MDGs have helped shift attention to newborn health, which has been an impetus for improving the existing policy framework. This included the development of the Strategy for Reduction of Maternal and Perinatal Morbi-Mortality (in 2000), the National Strategy on Prevention of Mother-to-Child Transmission of HIV (PMTCT) (in 2004), and the National Policy on Neonatal and Infant Health in Mozambique (in 2006).

In addition, since 2002 several measures have been adopted to promote newborn health. This included the essential newborn care and neonatal IMCI as well as the definition of a standard for treatment of children in newborn infirmary for hospitals at secondary and tertiary levels; operationalization of committees for the study of maternal and neonatal deaths; definition of indicators to be integrated in the health information system; development of guidelines for clinical conduct; and collaboration between the Ministry of Health (MOH) Department of Women and Child Health, the Reproductive Health Section, and the Nutrition Department to coordinate interventions related to tetanus vaccination, screening for syphilis in pregnant women, and implementation of a basic nutritional package.

Mozambique only started developing its Every Newborn Action Plan (ENAP) in 2018, four years after the launching of the global initiative it ratified at the 67th World Health Assembly. ENAP includes a set of immediate actions needed by 2020 in view of the SDGs and the Every Woman Every Child Global Strategy for Women, Children and Adolescents Health, 2015-2030. The action plan aims to reduce both NMR and stillbirths to 12 or fewer per 1000 live births by 2030.

"We had several activities that contributed to improving newborn health, but were designed and implemented in isolation; they were in line with the recommendations [of the Global Every Newborn Action Plan], but did not follow a scheduled and budgeted plan." [Government]

"Unfortunately, we started drafting the plan quite late. Most countries are well advanced. This delay makes it a bit of [a challenge] to follow up...[The] government is very interested. The minister was one of the people that called attention to the need for following up on this plan." [Nongovernmental Organization]

Finally, despite having a comprehensive framework of child health policies, strategies, plans, and norms, the country still lacks a comprehensive strategy that covers all child health-related issues and provides a long-term vision.

"Although there are specific strategies for certain areas, there needs to be umbrella-like strategy in which, for example, child health [staff] knows okay, the goal I want to achieve is this and the activities that I have to implement in the next five years to achieve this are these." [Nongovernmental Organization]

Thus, the Integrated Plan for the Achievement of MDGs four and five is considered an important document for its comprehensive approach to child health.

"I think that the plan for achieving the MDGs... was a very strategic plan because it speaks of this integrality of services, from vaccination, nutrition interventions, the interventions themselves for child health

and maternal health; therefore, it promotes the continuum of maternal, newborn, and child health in a more holistic way. The intervention package [addresses] different levels of action within the sector—primary, secondary, and tertiary and includes the community level. I think that this plan was a key for this comprehensiveness of interventions." [Government]



Figure 3. Confirmed Overall Strategy Relationships with Nodes Sized by Betweenness Centrality

Findings from the ONA (Figure 3) illustrate the key organizations working together to develop strategies, policies, plans, and legislation. This network has the second highest density of possible relationships after the overall network, reflecting health sector investments in strengthening the policy framework and strategic plan, described below. It is also the least centralized out of all the networks.

SETSAN has the greatest number of connections in the strategy network but is not connected to the two MOH departments. SETSAN is followed by five equally connected organizations (at six connections each): MOH_MCH, UNICEF, ANSA (*Associação Académica Nutrição e Segurança Alimentar*, a national Mozambican NGO), DFID, and USAID. UNICEF is at the center of the network, suggesting that it is a key player in developing strategies for child health. This is done in collaboration with the Maternal and Child Health Department (MOH-MCH) and the Division of Child Health (MOH_CHD) of the Ministry of Health and through the Child Health Technical Group and other child health-related groups.

ANSA, a Mozambican NGO established by nutrition specialists, by far has the largest node or betweenness centrality,¹⁶ signifying its ability to pull other organizations into the network that may not be working together on strategies. This strong position is likely attributable to its good relationships

¹⁶ Betweenness centrality quantifies the number of times a node acts as a bridge along the shortest path between two other nodes.

with the MOH and SETSAN and the fact that it hosts the national civil society platform of the scaling-up movement, and its advocacy work. Agha Khan Foundation (AKF) and FHI 360 are only part of this network because of their connection to ANSA, which provides them a bridge for information exchange with the other organizations. SETSAN follows ANSA with the second highest betweenness centrality score.

The quotes below from the IDIs illustrate the importance attached to policy development and strategic planning:

"The fact that we have goals, knowing that we are working with deadlines, that in year 'X' we have to go until here, causes us to do more, innovate, do differently, so it helps a lot. We are always making strategic plans... but these guiding documents...where we have the lines, the pillars and we know where we want to go, and ensure that the priorities of the Ministry of Health are incorporated in different areas and have included the issue of maternal and child health and nutrition for at least the last 10 years...is clearly a facilitating factor." [Government]

"Having the multi-sectorial plan on chronic undernutrition, in spite of the fact that we are not yet reducing chronic malnutrition—everyone, each at their level, always thinks about how to reduce chronic undernutrition. It was a commitment that we made as a country. Whether we will achieve it or not...at least we all ran to reach it, because we committed to it." [Government]

PERCEPTIONS OF SEVERITY OF CHILD HEALTH CHALLENGES

The slow progress in reducing NMR and MMR has contributed to increased concern about child health. However, perceptions of the severity of the problem vary at different levels. There is a tendency to blame front-line workers for lack of attention to newborns and infants, despite awareness of the structural constraints (inherent to the National Health System) they face, such as heavy workloads, lack of training and mentoring, poor infrastructure, and shortage of pediatric equipment, medicines, and materials.

A sense of urgency emanates from the policy framework developed to reduce mortality in the age groups of up to 28 days, up to 12 months, and up to five years. There is also great awareness that addressing child health will require an integrated approach that considers various child health topics and is geared toward forging better relationships among the different actors in this field. However, this sense of urgency has not been reflected in resource allocation. While the difference in budget is relatively small, maternal health has received more attention at institutional, programmatic, and implementation levels than child health.

Moreover, despite significant investment in the development of a comprehensive child health policy framework and awareness of the need to go beyond the health sector to address social determinants of child health, the issue of child health remains largely invisible beyond the health sector. The education, agriculture, and social action sectors are the main exceptions, and most activities developed in these areas focus only on nutrition. It has been difficult to generate broader political commitment to child health beyond the public sector, as many tend to treat it as "a health issue."

The lack of robust routine monitoring data about availability, accessibility, and utilization of child health services and related health outcomes, together with limited systematized evidence on human, material,

and financial resources for child health that is separate from maternal health, has hampered efforts to improve policy and institutional visibility of child health. For example, the lack of a health sector nutritional surveillance system and mechanisms to monitor breastmilk substitutes has undermined policy making and programming in the area of nutrition.

"I am of the opinion that there should continue to be a system of monitoring the nutritional status of children; unfortunately, the system died. I do not understand why, because without that how are we going to know that the policies of our program are having impact, because we cannot guarantee regular surveillance.... There was a system that worked very well, but today it does not exist. It helped to understand what was going on in the country and direct policies." [Nongovernmental Organization]

FINDINGS: STRATEGIES AND FACTORS THAT ENABLED AND CONSTRAINED CHILD HEALTH PROGRESS

Child health in Mozambique has been affected by a combination of local and global dynamics. This section discusses the main factors that enabled (facilitators) and constrained (barriers) child health progress between 2000 and 2015. Achievements in this period built on initiatives introduced in the previous years, some of which were disease-specific, such as the introduction of oral rehydration solution as part of the global Diarrheal Diseases Control Program in the early 1980s and the Program for the Control of Acute Respiratory Infections in Children in the early 1990s.

Key factors that enabled and constrained progress toward improving child health are summarized below (Table 2). Factors are categorized by structural issues, national priorities and resources, health systems, and community engagement.

Category	Enabling Factors	Constraining Factors
Structural issues	 Improved access to non-health public services such as education, clean water, and basic sanitation 	 Socioeconomic vulnerability of the Mozambican population and geographic inequalities Economic crises and secret loan scandal¹⁷ High illiteracy rates Geographic disparities in access to clean water and adequate sanitation Heavy reliance of external funding Deeply ingrained corruption at all levels of the health sector Weak accountability culture between state actors and citizens

Table 2. Factors that Enabled and Constrained Progress

¹⁷ Between 2012 and 2014 the government provided loans of close to US\$2 million to three private companies, without approval from the parliament and other oversight mechanisms. The hidden debts were disclosed in 2016, but initially the Minister of Finance denied their existence. In May of the same year, the group of donors providing budget support suspended their funding. Civil society organizations, members of the Budget Monitoring Forum (FMO), Mozambique Debt Group (GMD) and Transparency and Fiscal Justice Coalition (CTJF) have opposed the payment of the debts and campaigned against the transformation of the debts into sovereign debts.

Category	Enabling Factors	Constraining Factors
National priorities and resources	 Strong commitment to child health and significant investment improving the policy framework covering a wide range of child health-related issues Adherence to regional and global commitments and strategies (MDGs, Every Woman Every Child, President Malaria Initiative, PEPFAR, Scaling Up Nutrition) Established coordination mechanisms and technical working groups Leadership of technical staff in various organizations Top leadership and multisectoral approach in the nutrition network Increase in funding for immunization and nutrition 	 Weak leadership at top level of the Ministry of Health and the Department of Women and Child Health Poor implementation of the existing child health policy framework Inadequate national funding and uneven distribution of resources across provinces Deprioritization of child health within the maternal-child health nexus Poor involvement of civil society organizations in child health advocacy
Health systems	 Rollout of IMCI and training of maternal and child nurses Adoption of the Reaching Every District/Reaching Every Children Initiative Expansion of health facilities Increase in health workforce, especially maternal and child nurses Increase in institutional birth coverage attendance Improved response to malaria, including increased access to and use of insecticide-treated mosquito nets. 	 Limited coverage and uneven distribution of health facilities Overburdened and underqualified human resources High staff turnover and brain drain from public to international and private organizations Lack of supervision and mentorship at facility level Shortage of pediatric formulations of medicines, equipment, and materials Lack of routine and systematized child health data Overly narrow focus with disease-specific support and vertical programs promoted by global initiatives (e.g. PEPFAR, PMI, the Global Fund) Implementation priorities and resources diverted from broader child health issues to HIV Patchy and vertical implementation of the IMCI strategy Low access to postnatal consultations Fragmentation of interventions and poor coordination of implementation
Community engagement	 Revitalization of the community health workers (CHWs) program and expansion of their services with the introduction of iCCM Campaigns to address negative sociocultural norms related to child health, family planning, and early marriages Growing awareness of the importance of vaccination 	 Negative cultural norms and myths around pregnancy and newborn care (including breastfeeding) Lack of integration of CHWs in the public health sector

Social determinants of health and the level of strength of the health system were noted to be both facilitators and barriers to progress. According to the interviewees, the main drivers of child health progress were related to IMCI-ICCM and immunization. Newborn care and nutrition were perceived as critical yet with little progress in terms of improved health outcomes. Interviewees praised the multisectoral approach to nutrition and improvements in stakeholder coordination.

INTEGRATED MANAGEMENT OF CHILD ILLNESS-INTEGRATED COMMUNITY CASE MANAGEMENT (IMCI-ICCM)

Several interviewees stated that the introduction of IMCI in 1998 and its rollout in the following years has helped reduce under-five mortality by shifting attention to sick children. It is seen by many as the foundation for the progress of child health in Mozambique and widely accepted as a national strategy. The introduction of IMCI followed the participation of a group of local medical doctors and pediatricians in an IMCI course in Brazil. This group was responsible for implementing IMCI in 29 districts, which included training of trainers, in-service training of maternal and child health nurses, short courses for pediatricians, and the production of guidelines on the provision of health services to children at primary health care level.

"We took an IMCI course, 11 days. When I got back [and] had to work on IMCI from scratch, I said let's do it, let's work on it, I want to change the child mortality panorama. It was very high, it was 150 per 1000. IMCI was created precisely for countries where the mortality rate was over 40 per 1000...today we are at 64 per 1000." [Other Organization]

IMCI gained momentum in the early 2000s with the MDGs and support from a USAID maternal and child health technical assistance and support program (2000-2005). In 2005, several technical updates to IMCI guidelines on nutrition, malaria treatment, diarrhea, and pneumonia were made and IMCI was integrated in the curriculum of health institutes and medical universities at three universities in the country. In 2008, a neonatal component was integrated focusing on the first week of life and issues around HIV, such as on feeding the baby, weighing, and the kangaroo method. The same year, integrated community case management (iCCM) was introduced to reach children in remote areas with care as part of efforts to revitalize the CHW program.¹⁸ This process included the development of training manuals on community-based newborn care, with provision for four home visits in the first month of life; treatment for malaria, diarrhea, and pneumonia; and training of trainers and CHWs in all three regions of the country.

The implementation of IMCI has had many ups and downs. However, according to the interviewees, considerable progress was achieved during its peak moments, when it was revitalized.¹⁹ For instance, until around mid-2000s trained pediatricians spoke of and promoted it widely, likely due in part to the strong leadership and coordination skills of the then head of the Women and Child Health Department who could connect with different provinces and professionals. Interviewees noted that toward the end of the 2000s, IMCI had disappeared from most health units, and remained absent until it was revitalized again in 2012. The interviewees believed that although it has at times lost strength, IMCI was central to draw attention to child health in the years before HIV, has contributed to the reduction of child illnesses where it was properly implemented, and managed to remain a policy priority. They highlighted the

¹⁸ Community participation specialists considered that the introduction of iCCM was the entry point for the revitalization of the CHWs program, which had been virtually discontinued after the civil war.

¹⁹ Revitalization refers to the re-activation of dormant programs through a combination of approaches which include in-service training and supervision, introduction of new components, development and/or updating of guidelines, better integration in the policy framework, and mobilization of resources for implementation.

contribution of iCCM in administration of chlorhexidine for umbilical cord care and in improving timely and appropriate treatment for fever, diarrhea, and malaria.

"I think the major impact was the introduction of chlorhexidine for the treatment of the umbilical cord and prevention of maternal and neonatal mortality. In cases where for some reason the mother ends up giving birth in the community, they [community health workers and traditional midwives] administer chlorhexidine and misoprostol. During home visits, community health workers identify a newborn and advise the mother to go to the health [clinic], but they also facilitate immediate access to chlorhexidine." [Nongovernmental Organization]

IMMUNIZATION

The first immunization intervention in independent Mozambique was conducted between 1976 and 1979. It was a national mass immunization campaign against smallpox, measles, and tuberculosis. In 1979, Mozambique established the Expanded Program on Immunization (EPI). In 1980, immunization was integrated in routine child health services at all delivery points. By 2008, the EPI targeted seven diseases: tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus, hepatitis B, and measles. These were supplemented by the Hib conjugate (haemophilus influenza type b) vaccine starting in 2009, the pneumococcal vaccine (which started with PVC10 in 2013),²⁰ and the rotavirus vaccine in 2015.²¹ The immunization services have traditionally focused on children under the age of one and pregnant women.²²

The introduction of new vaccines has been accompanied by the revision of the vaccination schedule and outreach outside health units. EPI has promoted national campaigns to increase immunization coverage. For instance, in 2005 Mozambique conducted a nationwide campaign against measles targeting children ages nine months to 14 years, which led to a sharp reduction. National Child Health Weeks and the use of CHWs have also been instrumental in raising awareness about the importance of immunization and referring children to health units. In 2008, the EPI introduced the Reaching Every District approach (later Reaching Every Child) to address coverage inequities through building health workers' and communities' capacities to improve immunization and the use of mobile brigades. This approach was used as a platform for reaching MDGs four and five (UNICEF 2010).

The introduction of new vaccines in the public sector, particularly those already available in private health clinics, has been a result of the advocacy of health professionals, especially pediatricians.

"Then we kept on introducing, because at this time the private sector had other vaccines that the public did not. Then as pediatricians we said: we had to have, there are many children dying. So, we pushed the Ministry of Health to introduce the vaccines which were causing diseases that killed our children, we did it." [Other Organization]

The EPI is considered a success by many because of its availability and acceptability. According to the interviewees, immunization has remained a priority since 2015. An interviewee pointed to the response

²⁰ In 2018 the PVC13 vaccine was also introduced.

²¹ More recently, a second dose of measles and rubella has been introduced to address the recurrent outbreaks; now children receive the first dosage at nine months and the second at 18 months.

²² More recently (post-2015) other groups, such as the under-five, under 15, and women of childbearing age, are also being targeted for immunization. For instance, there are plans to introduce the HPV vaccine to prevent cervical cancer in 2021; it will be administered to girls ages nine to 13.

to an outbreak of poliomyelitis in January 2019 as an illustration of "the great priority that child health enjoys." However, the outbreak also challenged the belief that Mozambique was close to eradicating poliomyelitis. After having been declared to be free from poliomyelitis as of 2016, Mozambique identified three cases between 2017 and 2019 in Zambézia province, where children are least likely to have been vaccinated.²³ This, combined with outbreaks of other diseases such as measles, has raised issues both about the sustainability of the gains and the reliability of the existing data.

Most interviewees attributed the reduction of U5MR to an increase of both domestic and external funding, the latter from Gavi, the Vaccine Alliance (hereafter referred to as Gavi), raising optimism about the future of immunization.

"The idea that the vaccine is very important for children is widespread and accepted in this country...people began to realize that a child that doesn't get the vaccines runs the risk of catching measles, have complications and even lose life. So I think there is a great deal of sensitivity in communities to bring the child to the health unit regularly to complete their vaccine schedule, so this should be recognized as a major gain in Mozambique." [Multilateral Agency]

"We think that vaccination may have had an effect [on the reduction of child mortality], there are more vaccines and vaccine coverage is better." [Multilateral Agency]

"We know that vaccination is the most cost-effective disease prevention method available. Fortunately, our vaccination program has been reaching many children nationwide...we have made progress in reaching children. We have more and more children fully vaccinated." [Government]

The interviewees were pleased with the gains but also recognized that gaps remain, particularly improving the number of children who are fully vaccinated.

"We know that what we call the completely vaccinated children does not reach the desired level; I think we are at 63 or 64 percent. So we still have to do a lot." [Multilateral Agency]

BARRIERS TO CHILD HEALTH PROGRESS

The main barriers interviewees identified were the inadequate implementation of existing child health strategies and guidelines, and inadequate coverage of child health services. Reasons cited included structural issues, weakness of the health system, demand-side factors, and misplaced national priorities and resources.

The implementation of the child health policy framework has been negatively affected by the deprioritization of the child component within the maternal-child health nexus, overburdened and underqualified health professionals, lack of supervision and mentorship at the facility level, shortage of pediatric formulations of medicines, equipment, and materials, narrowly focused disease-specific support and vertical programs promoted by global initiatives (e.g. PEPFAR, PMI the Global Fund), and poor integration of facility- and community-level interventions.

²³ UNICEF (2010). Child Poverty and Disparities in Mozambique. Maputo.

Interviewees said that the slow reduction of newborn deaths illustrates a combination of the neglect of child health at the service delivery level and structural and sociocultural issues. For instance, they pointed out that although a number of measures have been adopted to advance newborn health, this area has been largely neglected as compared to maternal health at service delivery level.

"In the past, about a decade ago, when the mother gave birth in the hospital, the nurse only looked at the mother. They did not even look at the baby, before discharging the mother. So babies were born well, but returned sick; they would come back sick with jaundice, asphyxiation and other problems. Many children died, because the nurse looked at mother and did not look at the baby." [Other Organization]

In fact, a number of measures adopted to improve child health seemed to be linked to the newborn period; these covered pre/postnatal care, including screening for syphilis, introduction of PMTCT and postnatal consultation, and prevention and treatment of prematurity (neonatal IMCI, kangaroo mother care for low birth weight infants, administration of chlorhexidine for umbilical cord care, neonatal resuscitation). However, these measures alone have not addressed the context-specific complexities, such as access to high quality care, social norms, etc., of ensuring good prenatal and postnatal health.

"The topic of newborn has several aspects: [including] access to health services, quantity of human resources, quality of the services provided, and availability of material resources, equipment and medicines. All these are, undoubtedly, determining factors for a successful delivery. If the delivery was done in a health unit with lighting for the nurse to see what was happening, whether the mother was bleeding or not; if the nurse and the mother had water to wash their hands before and after delivery; if there was a clean place to receive the baby, which can contribute to the onset of an infection. But there are also other factors: the family and society in which the child is born. All these factors interfere directly with neonatal mortality making it complex to address." [Multilateral Agency]

The lack of qualified human resources coupled with shortages of pediatric formulations of medicines, equipment, and materials have limited the effectiveness of measures such as neonatal resuscitation.

"You have to have people who know how to resuscitate a baby who does not breathe immediately after birth. You need to identify the cause and give proper treatment; this requires more nurses specialized in neonatology. There must be a lot of investment training staff to know exactly what to do and to take the necessary care to improve the neonatal survival." [Multilateral Agency]

Limited training and poor infrastructure and equipment to address complications have prevented the accreditation of many health facilities in IMCI.

"The implementation of IMCI has various strands; it has a training part, the provision of inputs for consultation, availability of medicines. There are several factors that need to be [considered] to assess whether... a health unit is implementing it or not. In theory, if one of these items is missing, it is not possible to implement IMCI." [Multilateral Agency]

Similarly, the lack of ability to diagnose childhood illnesses, despite its introduction in pre-service training of maternal health nurses, as well as insufficient supervision and inadequate linkages between clinical staff and community health teams, have resulted in the partial implementation of the package of services.

"What should already be institutionalized practice with its incorporation in pre-service training, yet the workers behave as if they had never learned in the school and are always requesting additional training, which we know is linked to the incentives [per diems] given during trainings." [Multilateral Agency]

"We put various strategies in place at the facility level, but there is no one to oversee its implementation...So at both central and provincial levels, there is poor management and supervision of all the strategies that are being implemented at the facility level." [Nongovernmental Organization] "We trained the APEs [CHWs], but they lack supervision. We have APEs in the community where they assist children, treat pneumonia, malaria, and diarrhea, but ...We do not know very well what the weaknesses of the APEs are and, consequently, what needs to be improved." [Nongovernmental Organization]

The combination of heavy workload of health providers, vertical child health services, siloed training, and lack of supervision and mentorship at the facility level means missed opportunities for integrated care.

"We have contacts with children at various points, yet we often fail to check if the child who comes to the health unit has the vaccine calendar or not. This happens not because the health providers are not instructed to check, [but] simply because of their workload. ... the new child health [registration] books have the potential to improve things; however, because of the amount of work, there is no guarantee that the health providers will look into it to see if something else is missing or needed." [Nongovernmental Organization]

Moreover, the lack of IMCI champions at implementation levels, associated with high staff turnover and shift of attention to HIV and AIDS, has contributed to neglecting healthy and sick children, as the HIV response is more oriented toward at-risk children.

"There is a lot of change of managers. Initiatives are discontinued and there is such fragmentation that it feels like every month and year we have to start things from scratch, at all levels." [Nongovernmental Organization]

"The HIV epidemic may have influenced the country to concentrate on other things such as at-risk child and not necessarily to the implementation of IMCI." [Multilateral Agency]

Demand-side constraints include community accessibility and acceptability of health interventions in general,²⁴ low or no schooling of mothers, and home deliveries.^{25, 26} Other important barriers are incomplete postnatal care, poor use of child health services, and negative sociocultural norms concerning eating habits of pregnant and lactating women and death of newborns. For instance, many interviewees said that for some Mozambicans, the death of a newborn "does not count."

"In some communities things are a little different than in Maputo. The death of a newborn often can't be mentioned; it has to be forgotten as if it had never existed. This matters for statistics, because some of this mortality goes under-reported and it is hard to identify these deaths at the community level....we need to

 ²⁴There have been reports of health agents being attacked by people who believed they were spreading diseases.
 ²⁵ Jani JV, De Schacht C, Jani IV & Bjune G. (2008). Risk factors for incomplete vaccination and missed opportunity for immunization in rural Mozambigue. *BMC Public Health*, 8(161), doi:10.1186/1471-2458-8-161

²⁶ Démolis et al. (2018). A rapid qualitative assessment of oral cholera vaccine anticipated acceptability in a context of resistance towards cholera intervention in Nampula, Mozambique. *Vaccine*, 36(44):6497-6505. doi: 10.1016/j.vaccine.2017.10.087.

work with people who are experts in the area [of sociocultural norms] who can understand these attitudes well." [Nongovernmental Organization]

IMPLEMENTATION NETWORK

The different program implementation scenarios that interviewed respondents presented were further assessed to understand the dynamics and organizational relationships that reflected the past five years of work in this area. The implementation network is the most fragmented network in the series (with the lowest density and second lowest centralization). This could indicate that strategies are not fully translating into implementation (Figure 4).

Figure 4. Confirmed Implementation Relationships with Nodes Sized by Betweenness Centrality



The uneven distribution of resources across provinces and programs, the weak accountability culture within public institutions and between state actors and citizens, and the poor involvement of civil society organizations in child health advocacy (further discussed in the section on stakeholders) may be some of the reasons for the weakness of the implementation network. When asked about accountability for implementation, respondents indicated that civil society would be better suited to demand accountability than international organizations; INGOs in particular are ill-suited for this, as they depend on good relationships with the MOH to operate in the country. Most relationships function on a string-like structure.

ANSA and AKF are separate from the larger cluster, but they are directly connected to the Department of Nutrition, which is not represented in the network. The connection between the two NGOs may be related to their involvement in the civil society platform of the Scaling-Up Nutrition Movement. AKF's isolation may be explained by the fact that this NGO works mostly at provincial level, specifically in Cabo Delgado province, in northern Mozambique. The World Health Organization (WHO), Family Health International (FHI 360), and Global Alliance for Improved Nutrition (GAIN) are isolates. WHO does not implement activities, while the work of FHI 360 and GAIN is mostly connected to the MOH-Department of Nutrition and not the MOH-MCH and MOH-CHD departments.

UNICEF is at the center of the larger cluster and has the highest betweenness centrality, as it serves as a conduit for linking other organizations that are not connected. Jhpiego implemented USAID's flagship program Maternal and Child Survival Program (MCSP) in direct collaboration with the MOH-MCH and MOH-CHD. DFID has funded the CHW program via UNICEF. These results point to a lack of effective connections for implementation of child health programs.

CAPACITY DEVELOPMENT NETWORK

As indicated above, implementation challenges are linked to capacity issues. The ONA survey assessed the capacity development network in child health. The density of the capacity development network is 26.9 percent, meaning that less than a third of potential relationships have materialized. It is also the second-most centralized (34 percent) as compared to the other three networks that were assessed (overall, implementation, and strategy networks). The plot (Figure 5) resembles an inner rhombus-like structure outlined by MOH_MCH, WHO, UNICEF and DFID.





While there are some strong players in the capacity development arena, the network is not actively engaging organizations in a collective capacity development effort. UNICEF is at the network center with most connectivity, i.e., they have more influence with respect to capacity building. UNICEF works with all the government institutions and WHO. DFID appears in this network because it funds the community health workers program. USAID, in addition to financing MCSP, funded a child health advisor

who was based at the Division of Child Health. Jhpiego worked with the two MOH agencies through the USAID-funded Maternal and Child Health Integrated Program (MCHIP) and MCSP programs.

AKF and FHI 360 drop out completely from this network and are "isolates" on the left side of the plot. If the Department of Nutrition had been covered (i.e. participated in the ONA), FHI 360 would be more centrally located, as the Food and Nutrition Technical Assistance (FANTA) program has worked on capacity development there. The same is true for AKF, which has provided training to build the capacity of health personnel and has been implementing a World Bank-funded community-based intervention in Cabo Delgado since 2012, in partnership with the Department of Nutrition that includes capacity-building of community health workers. In addition, the foundation collaborates with the Provincial Directorate of Education in the area of early childhood development.

FINDINGS: LEADERSHIP

ORGANIZATIONAL LEADERSHIP ACTION OR INFLUENCE

In qualitative discussions related to leadership in child health, respondents said that at one point Mozambique had strong, knowledgeable, and vocal leaders who had convening power and have trained and inspired many to promote child health. However, most of these leaders have departed. Emerging leadership reflects the fragmented nature of the child health field with a siloed focus, generally on the areas their work directly relates to. Many of these emerging leaders (individuals and organizations) focus on the areas of nutrition and HIV that were not covered in the ONA.

The interviewees identified several factors that may have shaped the emergence and action of individual leaders such training, technical knowledge which can influence a person's sensitivity toward child health and funding for it, and strong lines of authority and hierarchy within the MOH. Some informants were reluctant to single out individual leaders and preferred to talk about collective efforts and/or less visible leaders, such as community leaders (in the promotion of community participation in child health) and pediatric or maternal and child health nurses located in the various levels of the national health system around the country.

"... all of the child health program managers, provincial directors, provincial medical doctors, the provincial child health managers, they all implemented the core program, they did their job!" [Other Organization]

"One of the great heroes in this country is the maternal and child health nurse, because she often works in extremely deplorable conditions. Those are the people who are in the front line and guarantee the care of these children. Not much is said about them, but the system, the National Health Service in Mozambique, depends to a great extent on the maternal and child health nurse. Each new program that appears, be it HIV or malaria, works with the maternal and child health nurse. This is the hero that few people talk about, but they really care for... [most] of the children in this country." [Multilateral Agency]

IN-COUNTRY INDIVIDUAL LEADERS

In-country leaders include professionals from a wide range of areas, particularly maternal and child health, nutrition, pediatric AIDS, and immunization. Some informants identified individuals and organizations with whom they work as leaders but seldom were able to explain why. Informants mentioned a total of 46 individuals from government and non-governmental organizations (particularly

international), academia, and multilateral agencies, as well as one artist (a singer). More than half have experience working in the national health system, either as current or former MOH staff, including a technical advisor seconded to the Department of Women and Child Health who left as fieldwork for this case study was being conducted.

Many of the leaders cited by informants have years of experience within the MOH but are currently working for INGOs (such as John Hopkins, Elizabeth Glazer Foundation) and bilateral agencies (such as UNICEF, WHO, and WFP). Many were identified because of their role within the MOH, although some were singled out for their contribution after leaving the ministry, such as Maria da Luz Vaz and Lurdes Fidalgo. Among the leaders who have left the ministry is a group of doctors who were forced to retire following their participation in a 2013 strike of health professionals.

The majority (29) of the named individuals were only identified once, eight were identified twice, and four were identified three times. Five individuals were identified four or more times: Prof. Hélder Martins, former Minister of Health (five times); the current Minister of Health, Nazira Abdula (six times); pediatrician and former director of the Department of Child Health Benedita Silva (seven times); social activist Graça Machel (eight times); and Prof. Ivo Garrido, former Minister of Health (nine times). However, participants were only able to give specific examples of the role played by a few individuals in the promotion of child health, such as Benedita Silva.

"Dra. Benedita Silva - who was head of the department of child health for almost 20 years or more in the Ministry of Health - it was with her that the child health cards were made, the various adaptations of IMCI until we reached this product last year, which covers from childbirth up to the first seven days, i.e. the most critical period of mortality. She was decisive, many things were done with her." [Multilateral Agency]

"The IMCI strategy, I think she [Dra. Benedita] was one of the mentors, the catalyst, the driving force behind the strategy, I think it made a lot of difference for child health." [Multilateral Agency]

The others were named either because they had spoken publicly about the importance of maternal and child health, such as the former (Maria da Luz Guebuza) and current (Isaura Nyusi) first ladies; former President Guebuza for launching the Presidential Initiative to Reduce Maternal and Child Mortality; Maria da Luz Vaz, for her technical role in MCHIP and MCSP, and her active participation in technical working groups at the ministry level; and the academic, Baltazar Chilundo, for his contribution to the generation of evidence that underpinned the revitalization of the community health workers program.

Former health ministers Hélder Martins, Francisco Songane, Ivo Garrido, and Alexandre Manguel were mentioned as leaders. Ivo Garrido was singled out for his commitment to child health and his role in the introduction of the Baby Friendly Hospital Initiative, as well as the creation of the nutrition department. Obstetrician-gynecologist and former Minister of Health (2002-2004) Francisco Songane was a member of the Task Force Four of the UN Millennium Project and is the founding director of the Partnership for Maternal, Newborn and Child Health. Although the current minister, a pediatrician and nutritionist by training, was also identified as a leader, informants did not provide concrete examples of her leadership in the area of child health beyond her training. Rather, there appeared to be an unfulfilled expectation that she would do more for child health, by virtue of her training.

Armando Guebuza, the former president of Mozambique, and his wife, first lady Maria da Luz Guebuza, were noted for their support to maternal and child health initiatives and campaigns. For instance, Maria

da Luz Guebuza has participated in several domestic and international meetings related to child health, such as the Child Survival Call to Action in Washington, D.C (in 2012) and national Child Health Weeks. Also, in May 2010 the First Lady and the Ministry of Health launched the National Partnership for Promotion of Maternal, Newborn and Child Health.

Ministers from other sectors who were cited as leaders include the former Minister of Agriculture (Pacheco), former Minister of Education (Ferrão), and the current Prime Minister (Agostinho do Rosário) because of their involvement in the area of nutrition. The Prime Minister was regarded as a leader in this area because of his role as the chair of the National Council of Food and Nutrition Security, *Conselho Nacional de Segurança Alimentar e Nutricional (CONSAN)*,²⁷ and for the approval of the Multisectoral Action Plan for the Reduction of Undernutrition 2011-2015 (extended to 2020), *Plano de Acção Multisectorial para a Redução da Desnutrição Crónica (PAMRDC*).

ORGANIZATIONS IN THE COUNTRY

The discussion that follows reflects a combination of data from the ONA and the IDIs. The whole child health network has a moderate level of connections. Figure 6 shows the network of organizations with confirmed relationships and nodes sizes by betweenness centrality.





USAID has the greatest number of connections, followed by UNICEF and SETSAN. USAID also has the highest betweenness centrality; it controls the flow of information and resources between other organizations and can link other organizations that are not directly connected with each other. USAID is the main child health funder in the country and has supported MCHIP and its follow-on, MCSP, both well-known and robust child health programs in Mozambique. USAID directly funds multilateral

²⁷ Established under the prime minister's office, CONSAN convenes eight ministers, senior management of the Technical Secretariat for Food Security and Nutrition (SETSAN), relevant councils and institutes, and representatives of civil society, academia and businesses.

organizations, such as UNICEF (e.g., the community health workers program) and INGOs. Initiatives such as PEPFAR, Gavi, Global Fund, and Global Financing Facility (GFF), CIDA, DFID, and the World Bank were also mentioned for the funding they provided. Yet, the participants also emphasized that while some organizations, such as USAID, led in terms of financial support, they do not engage enough in policy dialogue or agenda-setting related to child health. This means that although USAID has the greatest number of connections within the child health network – due to funding it provides through multilateral agencies and INGOs – it does not participate directly in child health fora. This is discussed further in the section on coordination mechanisms.

Respondents cited UNICEF's strong position in the child health network, confirming the leading role of United Nations agencies – UNICEF and WHO – in all topics related to child health. UNICEF works directly with the Division of Child Health and other actors and is considered the "guardian of child health" in the country. UNICEF has provided funding and technical assistance and has invested in evidence generation and advocacy for child health.

"WHO and UNICEF are cross-cutting, they are present in almost every need we have for the child's area." [NGO]

SETSAN's strong position in the child health network is due to its multisectoral remit and its contribution to raising awareness among other sectors about the importance of nutrition. The Ministry of Gender, Children and Social Development and the Ministry of Education were also mentioned for their leadership in early childhood development, school feeding, and school health programs.

The ONA shows that the government departments (MOH-CHD and MOH-MCH) have fewer than half of the connections with other agencies and tend to be connected to UN agencies, bilaterals, and only one INGO (Jhpiego). It is noteworthy that the visual and quantitative results of the whole child health network of organizations are limited by who participated in the survey. SETSAN, ANSA, and FHI 360 collaborate with the Department of Nutrition; between 2012 and 2018, FHI 360 implemented the Food and Nutrition Technical Assistance Program III (FANTA), through which it has strengthened the capacity of the National Program of Nutrition, led by the Department of Nutrition. The Fundação para o Desenvolvimento da Comunidade (FDC), a local NGO focusing on nutrition and early childhood development, has a connection with the Extended Program on Immunization, as its Director of Programs is a member of the immunization expert group (National Advisory Group on Immunization, mentioned above).

The government departments tend to be technical and connected via resource support to donors/technical agencies for specific support. The MOH has different levels of coordinating mechanisms, and the departments and divisions participate differently, depending on their mandate/bureaucratic position, which affects their level of connectivity within the broader network of organizations operating in Mozambique. The ONA findings generally align with the interviewees' perceptions about the MOH not appearing to be a central leader in the child health network. Most interviewees felt that staff from the MOH should be leading child health policies, interventions, and working groups, but they had mixed views about MOH leadership in child health in general.

While some thought that the ministry is not leading, MOH staff felt that its leadership has improved over time. Interviewees were similarly ambivalent about the Department of Women and Child Health and the Child Health Section, which many felt lacked political visibility, institutional strength, and
leadership. Moreover, many noted that child health has been overshadowed by maternal health and family planning, which has more visibility and funding. The delay in the design and approval of the ENAP implies a relatively low priority placed on improving newborn health outcomes. Similarly, the ONA findings reveal that the MOH is not the central leader in the child health network.

"The head of the Department of Maternal and Child Health seemed to be more responsible for maternal health and family planning. I am part of the children's health group, we had several meetings, she [the department head] had not participated in any child health meeting, never been in discussions related to child health. But maternal health and family planning, she was there to lead. Child health is a forgotten area, unfortunately." [Bilateral Agency]

Outside of government, the INGOs and one local NGO (FDC) have the least number of connections and are located at the periphery of the network, except for ANSA, a national NGO. The overall network is centralized with three main hubs being USAID, UNICEF, and SETSAN. Several other organizations are in the network but not part of the more closely integrated inner core, including the INGOs AKF, FHI 360, Jhpiego, GAIN, and FDC. Jhpiego has collaborated with the MOH-MCH and MOH-CHD through MCSP, which interviewees considered to be a unique and innovative program with a strong child health component.

Other INGOs mentioned for their prominence and leadership include Save the Children (mentioned six times), Elizabeth Glaser Pediatric AIDS Foundation (mentioned six times), John Snow International (mentioned twice), Jhpiego, FHI 360, Path, Gain, ADPP, Pathfinder, and Santo Egidio Community. There was little reference to leadership from domestic NGOs beyond ANSA (nutrition) Ariel Foundation (pediatric HIV, mentioned six times), Consulta da Criança Sadia (CCS), the Child Parliament (child rights), FDC (nutrition and early childhood development), and N'weti (community dialogues about child health and monitoring of child health services, with community scorecards). Professional associations such as the Mozambican Association of Obstetricians (mentioned once) and the Mozambican Association of Paediatricians (mentioned three times) have been leading the provision of technical assistance to the MOH.

EXTERNAL ORGANIZATIONS

Most interviewees could not identify an individual or organization leader outside of Mozambique. Those who did, mentioned Nelson Mandela for being vocal about child rights and mobilizing resources regionally and internationally. Jeffrey Sachs was mentioned for his role as an advisor of the One Million Community Health Workers Campaign (ImCHW Campaign), which inspired the revitalization of the Community Health Workers Program in Mozambique. Bill Gates and the Bill and Melinda Gates Foundation were cited for support to child health programs in Mozambique. Ban Ki-Moon, the former United Nations Secretary-General, was identified for his support to the development of the UN Global Strategy for Women's and Children's Health and to Every Woman Every Child movement.

Mozambican leaders with regional and global influence, such as Graça Machel, who was called "a champion of great battles," were also mentioned. Graça Machel was Chair of the Board of the Partnership for Maternal, Newborn & Child Health. In January 2016, United Nations Secretary-General Ban Ki-Moon appointed her to the High-level Advisory Group for Every Woman Every Child.

"Graça Machel is a national leader, but also someone important at [the] regional level." [NGO]

FINDINGS: POLITICAL COMMITMENT

There is a general perception among the interviewees that political commitment from the government and donors to child health has improved in the last few years. Several interviewees stated that it is highly unlikely that there will be a reduction of political commitment concerning child health.

"The commitment is there. Any five-year program, strategic plan, or annual plan highlights child health. I am not seeing someone in this country changing it or saying that is not priority. It is very unlikely that this would happen regardless of the problems the country faces. I think there will always be a vaccination program against childhood diseases and there will be more and more commitment to ensure that children have adequate nutrition. I see more and more new things appearing on behalf of the child, the development of early childhood, at the community level, teaching men to talk to their children, even if the child does not respond, and this is very positive. But it needs more investments. The only thing that can cause disruption, as I said, is the financing; frankly, I do not see that changing." [Multilateral Agency]

According to the interviewees, the commitment is expressed "on paper" through the approval of the comprehensive policy framework described earlier and existence of key child health programs (e.g. the Extended Program on Immunization) and services (e.g. the newborn consultation, the child consultation, and the consultation of at risk children). However, child health has yet to receive commensurate funding to be effectively addressed. The interviewees noted the dearth of human and material resources, such as child health nurses and child-specific drugs.

"The commitment has naturally increased, but it is not enough.... It is also necessary that we as a government make our contribution to show that there is political commitment. Unfortunately, there is not much funding from the government to show that there is indeed this political commitment. I think the government is a bit relaxed because there are these funds, perhaps people think that it is enough to advance child health interventions. But ideally, we should show political commitment by increasing the government funding, because we need to take into account that there are sustainability issues. ... I think political commitment has to be more than words, be more in terms of action than talk." [Government]

Immunization appears to be an area where the government is matching its verbal and financial commitment. In 2015, the government spent \$7.8 million on immunization (\$1.8 million on vaccines), representing 2.5 percent of the health budget. This represented 21 percent of the total immunization costs, most of which (78 percent) are covered by donors.²⁸

"There is a commitment to ensure that there are vaccines available in health clinics. Vaccines are very expensive, so there is an important political commitment, because they cannot get those vaccines without the country contributing with 20 percent of the cost of each vaccine. We never had problems with that, thus there is a high level commitment to ensuring everything is right." [NGO]

Political commitment to child health has strengthened as a result of concrete evidence showing the severity of the issue and is seen in the agenda-setting of various actors and support to the development of child health strategies. This commitment is further reinforced by global initiatives such as the Child

²⁸ Ministry of Health of Mozambique & Abt Associates (2018), "Improving Immunization Programming in Mozambique: Insights from Health Expenditure Analysis," in <u>https://www.abtassociates.com/insights/publications/report/improving-immunization-programming-in-mozambique</u>

Survival Call for Action or the Every Woman Every Child initiative. Political commitment to reducing child mortality has been expressed through high visibility public initiatives such as the biannual Child Health Weeks, launched in 2008, or Armado Guebuza's Presidential Initiative for Reduction of Maternal Mortality and Child Health, also launched in 2008 and directly related to MDG goals four and five.

"The countdown to the Millennium Development Goals was without doubt a driving force that has made all countries focus on achieving its goals. There was an effort so that the country could achieve them and there were improvements... certainly thanks to this global movement." [Multilateral Agency]

The National Child Health Weeks, a campaign to improve access through the delivery of an integrated package of health services at a single point in time and at a single location, has been critical in expanding the reach and creating demand for health services and has been used to showcase political commitment and mobilize participation through the involvement of senior government officials, decision makers, and opinion leaders.²⁹

The Sustainable Development Goals (SDGs) are not as visible in health sector documents as the Millennium Development Goals. However, multilateral agency staff perceived that they have contributed to "keep the North's [focus]" because they are linked to existing initiatives that have caught the attention of technicians and politicians.

"I think the Sustainable Development objectives have enhanced what was already the agenda of the Millennium Development objectives and what is the agenda of the Multi-sectorial Plan for the Reduction of Chronic Undernutrition because they are aligned. It acts more like [a] framework, [and] supports what we are doing." [NGO]

These international campaigns are very important, above all, because they are sharing forums and often we hear good practices from other countries. It works as a wake-up call to start new interventions." [Multilateral Agency]

Interviewees believe that better leadership, evidence generation and use, and multi-level advocacy, from the central to the local levels within and beyond the MOH, could increase the current level of political commitment toward child health. They underlined the need for support to relevant departments within the MOH to increase the visibility of child health, including the ability to use existing evidence to inform priority-setting.

"... there is another mortality [aside from maternal] that we could also show to people, show that we can actually do something about it, that we can make a difference. But if the indicator is there and person does not bring it to table ... it is the ministry who has to bring. I think the leadership and the structure of the ministry has to move a little to show that child health is a priority. [NGO]

The issue of advocacy was mainly raised by nutrition specialists, some of whom are already engaged in this type of work, particularly the Technical Secretariat on Food Security and Nutrition in the context of the Multi-sectorial Plan for the Reduction of Chronic Undernutrition.

Advocacy, especially in my area that is nutrition, I think we are failing in the advocacy component, we are focusing a lot of effort on the communication for behavior change and changes in social norms at the level of

²⁹ UNICEF (2010). Child Poverty and Disparities in Mozambique. Maputo.

individual and the environment that influences it, but we are not communicating properly with those [policy makers] who structure and allow changes to be made." [NGO]

"In the Mozambican context we need to have more evidence of the cost-effectiveness of interventions in order to advocate for greater allocation of domestic resources. So we are lacking the advocacy component and most of us do not have evidence." [NGO]

Advocacy is also required for greater visibility of child health in the maternal-child health nexus. In this regard, some interviewees argued that the lack of distinction between maternal and child health represents another failure to acknowledge the severity of child health problems and the absence of political will to improve them. They believe that while some issues legitimately affect both maternal and child health, such as childbirth, the lack of policy and institutional separation between the two contributes to the invisibility of child health priorities and needs.

"I think we really have to sit down and disaggregate, what is for the child to put on the child, what is for the mother to put on the mother. So that we can really know what kind of support the government is giving to children and women, because at the moment we are not able to discriminate." [NGO]

FINDINGS: STAKEHOLDERS, GOVERNANCE, AND COORDINATION

LANDSCAPE, GOVERNANCE, AND COORDINATION MECHANISMS

Since its inception in 1975, the National Health Service rapidly expanded primary health care, making it the main provider of formal health services. There are private not-for-profit health (PNFP) and private for-profit providers exclusively in urban areas both with strong ties to the public sector. Close to 250 medical clinics are registered in Maputo City and Province. PNFPs are dominated by INGOs and religious entities.

The MOH is responsible for developing sector policies and strategies, mobilizing and allocating funds, and implementing and monitoring plans. It is composed of national directorates, departments, and supervised and subordinate institutions. The National Health System operates at the central, provincial, and district level. This includes 11 provincial health directorates (*Direcções Provinciais da Saúde*, or DPS), and 148 district services for Health, Gender, Children and Social Action (*Serviços Distritais da Saúde*, *Género, Criança e Acção Social*).

DPSs are part of the provincial government and report to the provincial governor. They coordinate the implementation of provincial sector plans, monitor progress, distribute resources, provide logistical and technical services at the district level, and oversee primary health care services. A district management team is responsible for supporting and managing health facilities. However, district health directorates are underfunded, and their limited technical, managerial, and workforce capacity hinders their ability to take on increasing responsibilities in the context of the ongoing decentralization.

Level I and II facilities represent the primary health care system, while Levels III and IV provide secondary and tertiary health care services. The primary level has health centers and health posts which provide priority health programs. Health centers provide a comprehensive package of maternal and child health (MCH) services including antenatal care, labor and delivery, postpartum care, family planning counseling, HIV prevention and treatment, TB and malaria care, child health and child-at-risk consultations, immunizations, and treatment for injuries and diseases. The MOH's policy calls for two MCH nurses at each health center, and one medical technician and general doctor at the larger centers. The secondary level consists of the district, general, and rural hospitals, generally serving more than one district and constituting the first level of referral. Both the primary and secondary levels provide primary health care services. At the tertiary level are provincial, central, and specialized hospitals that offer differentiated care. The network includes 1,859 health units; 1,500 small rural health centers (type II); 150 bigger rural health centers (type I); 150 urban health centers; 43 district hospitals in rural areas and 5 general hospitals in urban areas; and 11 hospitals in capital cities (7 at the provincial level and 4 at the central level, i.e. in the capital city).³⁰

CHILD HEALTH ACTORS

The child health field consists of a few government institutions/departments (the majority within the MOH), multi/bilateral agencies (USAID, UNICEF, WHO, Gavi, World Bank, CIDA, DFID and, previously, Danida), INGOs (Save the Children, John Snow International, Path, GAIN, Jhpiego, Elizabeth Glaser Foundation, Agha Khan), and health training and research institutions (Faculty of Medicine of the Eduardo Mondlane University, Unilurio University, Catholic University, the National Health Institute within the MOH, and the Institute of Health Sciences). There is little participation of Mozambican NGOs beyond those working in HIV (Ariel Foundation, N'weti) and nutrition (ANSA, FDC), although professional organizations such as the Association of Pediatricians are influential, particularly at the central level. The main stakeholders are grouped around certain topics (e.g., newborn and infant health, HIV, malaria, tuberculosis, nutrition, maternal health). While they tend to operate in silos, a network of informal relationships has been forged through professional mobility and circulation among topics and institutions (government, national and international nongovernmental organizations, multilateral and bilateral agencies, and academia). These informal networks function as a bridge between them but do not eliminate coordination problems. Most are based at central level with interventions in selected provinces, although some, such as Save the Children, work in all provinces.

There are few agencies or NGOs that support child health. We have UNICEF, and then small INGOs such as [Doctors with Africa] CUAMM have a newborn and infant health project in Cabo Delgado and Sofala. The project in Cabo Delgado is focused on neonatal health. Then we had the USAID MCSP project that has closed [in 2018]; they had interventions in Nampula and Sofala also with a neonatal and infant health component.... There are few national-level interventions ... provinces do not receive any direct support because the Ministry [of Health] does not have capacity to fund those interventions. Then we have WHO which supports more [technical work]... but ... for example, if we need money to pay for monitoring visits to the provinces or trainings, they have less flexibility than UNICEF who has a much larger budget. There are some community-based associations that support community initiatives, but none that provides institutional support." ³¹

FUNDING LANDSCAPE

³⁰ Government of the Republic of Mozambique (2017). *Investment Case of the Republic of Mozambique*. Global Financing Facility. Retrieved from https://www.globalfinancingfacility.org/investment-case-republic-mozambique

³¹ Notes from the application of Organizational Network Analysis survey with a provider of technical assistance – Feb. 27, 2019.

"Unfortunately, when you are desperate you try a little bit of everything. We know ... what we want is to reduce maternal mortality, reduce infant mortality. There are several guidelines and many initiatives around the world, some of which are not replicable. The fact that we do not have our own funds from the state budget to [support] sustainable activities is a big challenge and it makes us vulnerable. As a result, even when we do not believe in some projects we have to accept. Between doing nothing and doing this, which may produce some results – even if only for 3, 4, 5, 6 months because is not replicable, sustainable, or scalable – it is better to go ahead and do it. [Government]

Since its independence, the national health system has relied heavily on external funding and technical assistance from northern and southern actors. For many years considered a "donor darling," Mozambique has seen a proliferation of development cooperation actors operating in the health sector. The proportion of state budget to health is below the Abuja target of at least 15 percent. Between 2006 and 2010 there was a decrease from 13.4 percent to 8.4 percent. Bilateral and multilateral agencies have provided on-budget and off-budget support. The *Prosaúde*, the health Sector Wide Approach (SWAP) introduced in the early 2000s, was a consistent and predicable source of on-budget and on treasury (Single Treasury Account) funding for many years, but since 2014 development partners' contributions have been decreasing. This is related to challenges with fiduciary oversight, linking spending with results, centralization of resources (in the MOH), and the hidden debts scandal.

The secret loan scandal soured relations between the government and development partners and led to a sharp reduction of external funding to *Prosaúde* (from around \$91 million in 2008 to around \$52 million in 2015)³² and the suspension of General Budget Support in 2016. This situation has forced the government to increase the share of funding with internal resources. The portion of internal resources increased from a 48 percent share in 2008 to a 73 percent share in 2016. External resources accounted for 52 percent of total health resources in 2008, 44 percent in 2010, 55 percent in 2013, 20 percent in 2014, and 27 percent in 2016. Table 3 presents the evolution of the total health sector budget and of funding for reproductive, maternal, neonatal, child, adolescent health (RMNCAH) as a sub-component of the total funding.

	2013	2015	2016
External Funding (USD)	519,237,010	244,033,970	178,984,432
Projects: executed by partners +medicines "in kind"	438,637,809	171,253,954	149,787,608
ProSaúde: staff + medicines expenses	80,563,201	52,780,016	29,196,824
State Budget (SB)	182,488,000	371,481,037	235,601,161
<i>Current expenses:</i> includes expenses with medicines (SB + ProSaúde)	143,970,459	295,501,289	220,663,084
<i>Investment</i> : at central and provincial levels	38,517,541	75,979,748	14,938,077
Total Funding	701,725,010	615,515,007	414,585,593
RMNCAH Funding	2013	2015	2016

Table 3. Evolution of health sector funding 2013, 2015, 2016

³² Development partners contributions to Prosaúde continued to decrease to \$28,851 million in 2016 and \$25,253 million in 2017. In 2018, no disbursements were made despite commitments to allocate \$21,258 million. Source: N'weti (2019), Prosaúde: O colapso duma arquitectura de financiamento condenada ao sucesso, Research Brief, Maputo.

Overseas Development Assistance (ODA)+ State budget (SB) expenses: includes expenses with STIs but not HIV (based on data from nine-month period)	117,356,390	92,897,639
<i>Infrastructure</i> : data from nine-month period	2,120,400	5,751,559
Human Resources: includes training; incomplete data from SB	16,434,079	2,505,996

Source: Mozambique Investment Case 2017

A significant proportion of external funds (13 percent) and total current expenditures (7 percent) are allocated to maternal and child health, which is the second largest program after HIV/AIDS. As illustrated below (Table 4) 65 percent, 83 percent and 77 percent of external funding (non *Prosaúde*) to health was allocated to RMNCAH (including HIV), in 2013, 2014 and 2015 respectively, but the public sector managed only 37-40. However, there were huge disparities in terms of supported areas, with nutrition, malaria, and child health being the most under-funded areas. It is unknown how the funding for child health has been divided among areas/programs between 2000 and 2015.

Table 4. Percentage of external funding (non-ProSaúde) to RMNCAH-related areas

	2013	2014	2015
Reproductive and maternal health	14%	9%	11%
Child health (including EPI)	6%	7%	8%
STIs and HIV/AIDS	40%	47%	42%
Malaria	4%	15%	8%
Nutrition	1%	5%	8%
Sub-total	65 %	83%	77%
Staff training and placement	2%	4%	6%
Planning, HIS, M&E	4%	5%	10%

Source: Mozambique Investment Case 2017

CHILD HEALTH INSTITUTIONAL MECHANISMS

Child health is coordinated by the Department of Women and Child Health under the National Public Health Directorate, which includes the Extended Program on Immunization. The Department of Women and Child Health has two divisions: the Division of Reproductive and Maternal Health (*Repartição de Saúde Reproductiva e Materna*); and the Division of Child Health (*Repartição de Saúde da Criança*). It includes neonatal health and PMTCT, an area that has recently moved to the National HIV Program, but the division continues to support developments in this area. The Department of Women and Child Health also includes support components such as monitoring and evaluation and Management of Goods and Products, which cover equipment and medical-surgical materials. At the time of this study, the department had 10 staff, including 3 full-time technical advisers paid by health partners; it was led by an international health specialist with some training in pediatrics. The department head and one of the technical advisers have since left the public sector, and the department as a whole has been affected by high staff turnover. Since 2016, all provincial health directorates have a child health focus point.

Around half of the Department of Women and Child Health work is on child health and covers the following areas: essential newborn care; prevention and treatment of childhood illnesses at the primary

level, from the community to the health center (although in-patient care falls under the responsibility of the National Pediatrics Program within the Directorate of Medical Assistance); prenatal and postnatal care; prevention of childbirth complications; child health routine reporting and information systems; child health surveys and surveillance (in collaboration with the National Health Institute); and early childhood development (in collaboration with other departments). The department concentrates most of its efforts on IMCI, essential newborn care, child health, routine reporting, and information systems. The Nutrition Department is responsible for breastfeeding, complementary feeding, prevention and control of micronutrient deficiencies, treatment of acute and chronic malnutrition (the latter in coordination with the National Pediatrics Program), food security, and growth monitoring. The Extended Program on Immunization is responsible for immunizations, and the Department of Environment Health is responsible for water, sanitation, and hygiene.

MAIN PARTNERS OF THE DIVISION OF CHILD HEALTH

The Division of Child Health has direct relationships with UNICEF, WHO, USAID, Save the Children, Jphiego, EPI, and the Nutrition Department³³ and maintains a good collaborative relationship with UNICEF, WHO, and Jhpiego. The relationship with WHO has improved significantly with the appointment of a child health focal point (in 2018) that liaises with the department. The department staff perceive DFID, World Bank, and USAID mainly as funding agencies. The department has access to funding from these agencies through UNICEF and WHO or INGOs such as Jhpiego and the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), who act as intermediaries. For instance, USAID paid the salary of a child health technical adviser through EGPAF. Interactions with Save the Children are mostly at the provincial level, with sporadic interaction with the department to exchange information. The Department of Women and Child Health has informal interactions with EPI and the Department of Nutrition on a daily basis, facilitated by the physical proximity of their offices, and collaborates with them on strategy development and training.

COLLECTIVE ACTION SPACES

Interview data suggest that strategies, forums, and councils (Health Partners Forum, Technical Secretariat on Food Security and Nutrition, and the National Council on Food Security and Nutrition), technical groups (discussed below), and civil society platforms (such as the one for Scaling-Up Nutrition Mozambique) are the main structures for collective action. For instance, strategies help guide interventions and force the different actors to commit, at least verbally. Spaces such as CONSAN, led by the prime minister, provide leadership and foster accountability, as people feel that there is someone they have to be accountable to. ANSA coordinates the civil society platform of the Scaling-Up Nutrition (SUN) movement; it congregates national and international NGOs, the majority of which work in the areas of maternal and child health. This is a nutrition advocacy platform that conducts high-level advocacy at national and provincial levels and trains NGOs to implement advocacy initiatives.

TECHNICAL WORKING GROUPS

There are several technical groups formed around specific child health topics, issues, strategies, and programs (Table 5). Some technical groups, particularly in the area of nutrition, have sub-groups. Most

³³ The development of the Investment Case for the GFF in 2017 has created opportunities for interaction between the Department of Women and Child Health and the World Bank, something that did not exist in the past; so far their focus has been strategy development.

technical groups are at the ministry level³⁴ and bring together technical staff from multilateral and bilateral agencies, INGOs, and focal points from the ministry's departments. Most stakeholders participate in more than one group; this is seen as crucial for alignment, synergy building, and joint work purposes. For some, such as multi/bi-lateral agencies and NGOs, participation in these technical groups is a way of providing technical guidance and steering the government in a certain direction. For the government, the groups are about being participatory and getting contributions (technical and financial) from others. Participation in the technical groups also provides an opportunity to have access to information and be informed on developments, particularly policy frameworks, within the health sector.

UNICEF, WHO, and clinical partners participate in most of these technical groups. DFID has never participated in the Child Health Group, while USAID participates occasionally. Some groups meet twice a month, others monthly or quarterly. In general, there is little participation of Mozambican civil society beyond the Association of Pediatricians and a few NGOs in nutrition-related groups. Government institutions convene most technical groups.

"We usually work in a way that we can be in tune, we can share what we do, create the scripts, the orientation, rules, strategies, policies. We have to organize ourselves. I cannot sit alone with my colleagues from the department. I could even do it, but it would not be comprehensive, it would not be consultative. It would be something created by us and probably with a rather short vision. So based on this thinking we created technical groups." [Government]

"All of the organizations that are intervening in these areas are invited to participate in these groups, because it is where they receive orientations, where they coordinate the interventions, where they have knowledge of the policies and strategies of the Ministry of Health. They insist on being part of the group, but it is coordinated by the Ministry of Health." [NGO]

Child health-related topics
Nutrition group (has a child nutrition sub-group)
Childhood tuberculosis technical group
Pediatric anti-retroviral technical group
Maternal health technical group
Immunization technical group
Child health interventions
Micronutrients technical group
Food fortification technical group
Nutritional supplements sub-group
Healthy child technical group
Child health programs or strategies
National technical advisory group on immunization
Nutrition rehabilitation program group
Multisectoral action plan for the reduction of chronic malnutrition group and its sub-groups (within
SETSAN)
Other

 Table 5. Child health-related technical groups

³⁴ While the provincial level has coordination structures, most health donors are based in the capital city with no offices in the provinces. The provincial coordination mechanisms involve mainly the provincial health directorate and NGOs implementing projects there. For instance, a staff member of MCSP was the co-chair of the technical working group on water, hygiene, and sanitation in the two provinces where this program was implemented.

Monitoring and evaluation (nutrition focused)	
Logistics and supply group	
Medication and medical supplies technical group	
Implementation group	
Communication technical group	

The interview excerpt below illustrates of the workings of the Nutrition Technical Working Group.

"There is usually an agenda and each member of the group can also propose items for the agenda. For example, the first meeting of the year [2019] was to make a balance of last year's activities and identify what [is] foreseen in the PES [Plano Económico e Social, Social and Economic Plan of the ministry] for this year, especially concerning infant feeding. If we have a planned activity, but we have no budget for it, we ask if anyone is interested in supporting, even if in a particular province. It's a forum where we do technical evaluation of several documents, where we sometimes do the validation of a document; for example, today we reviewed videos about breastfeeding and a spot about the code on marketing of breastmilk substitutes – we made technical comments and advised that a pretesting of the material is carried out to ensure that people can relate to the images and messages. That's pretty much how the group works, it's pretty collaborative. We also discuss what each is doing or intends to do to see if anyone is doing something similar or [to] discuss the feasibility and cost-effectiveness of the initiative." [NGO]

CHILD HEALTH TECHNICAL GROUP

This is a small group of seven to eight people (one from UNICEF, one from WHO, two from MCSP, one from Ariel Foundation, one child health technical advisor funded by USAID, and the head of the Division of Child Health, who is the group's chair; and occasionally USAID),³⁵ all based in the capital city. When necessary, members of other areas/groups (e.g. nutrition, malaria, HIV) are invited to attend specific meetings.

The group focuses mainly on guideline development and/or updating, and identifying issues to be integrated into sectoral policy documents, such as the annual Social and Economic Plans of the MOH. The group also proposes strategies to improve child health (e.g. introduction of zinc in the diet) and organizes public events such as the National Child Health Weeks or the Day of the Premature. The group has an annual plan and a supervision plan containing a calendar with joint monitoring visits.

Although the MOH chairs the group, all members can represent it on issues that have been discussed. The visibility and strength of the group has increased in the last few years. Although the group is considered important for increasing the policy visibility of child health and the technical advice of its members is respected, the group does not see itself as an advocacy platform because it is composed of technical personnel with little political influence. Group members believe that CSOs should lead advocacy efforts; however, as already noted, few Mozambican CSOs are involved in child health.

The issues discussed in the meetings are channeled to other levels through the ministry's internal coordination mechanisms (i.e. ministerial meetings) where health partners do not participate unless invited, as well as by donors who sit in higher level groups, such as the now-dormant Health Partners

³⁵ Due to shortage of personnel, USAID has one staff member responsible for all child health areas.

Forum. The group meets once a month or more, if necessary, and has a WhatsApp group where communication is more frequent.

"I would like to see child health discussion forums where the ministry would embrace child health as a priority, because I think that if the [child health] technical group ceases to exist, it will fall again." [Bilateral Agency]

"With technical documents, the technical group makes proposals and decision makers rarely suggest corrections. Technical content is not changed; but if the issue involves money, [decision makers] make one or another correction. [Multilateral Agency]

"The technical group does everything related to neonatal and child health needs of the Ministry of Health. Everything should go through the technical group... only then it progresses. For example, with the discussion on whether or not we should implement chlorhexidine, we [the technical group] sat down and analyzed how to implement. At the time, a recommendation had been made to use it once a day but the technical group decided that it should be twice a day, considering the national context. The group always debates, and this is very important. Now we feel more empowered, not like in the past. Now the vision is very good, because each one comes with their experiences. We have six pediatricians from different organizations who come not only with the technical experience, but the experience of the organization as well. So, for us the technical group is the basis for defining what we need to be able to promote child health." [NGO]

FREQUENCY AND QUALITY OF INTERACTIONS

As discussed by interview respondents, many structures are in place that serve as platforms for interaction and avenues for building synergies to accelerate child health progress. Principled engagement is an ongoing process that requires meeting time to share and exchange experiences and knowledge to build trust that can translate into shared goals and objectives. To assess this component of network building, the ONA measured the level of interaction among organizations and the quality of relationships (Figure 7).

Most organizations in the study interact with each other monthly, but some interact once or twice a month, usually in technical groups, seminars, and events that dominate the Mozambique health sector. There is a lot of potential for further network development as communication among organizations has been confirmed and provides a pathway for forming stronger ties.

Figure 7. Confirmed overall frequency of interaction with nodes sized by betweenness centrality



As a proxy measure for mutual trust between organizations, the ONA survey measured the quality of relationships (Figure 8). "Fair" was used to denote familiarity with an organization and occasional interactions and/or a close relationship in the past; while "good" was used for present and ongoing relationships with regular interaction. "Poor" denotes the absence of enough interaction to be able to assess quality. Most relationships fall in the "fair" and "good" categories, though leaning toward a "fair" designation. The organizations seldom indicated having a bad relationship with anyone. For instance, DFID does not have a direct relationship with the Department of Women and Child Health, as it interacts mostly with the National Directorate of Public Health. USAID's relationships are mostly "fair" with only one "very good" relationship with Jhpiego (the lead implementer of USAID's MCHIP and MCSP projects). UNICEF has a very good relationship with the two MOH departments because it provides funding and technical assistance and participates actively in the Child Health Group. These dynamics point to a more functional reason for developing better relationships that includes organizational self-interest, though that may not be necessarily aligned with national child health goals and priorities.

Figure 8. Confirmed overall quality of relationships with nodes sized by betweenness centrality



PERCEIVED EFFECTIVENESS OF GOVERNANCE

The ministry's weak internal governance structures, particularly having child health falling under the purview of several departments that do not communicate effectively with each other, has led to a fragmented response to child health problems. Despite some efforts at multisectoral collaboration, such as in the area of nutrition, these have not been fully integrated in broader child health work. Child health continues to be perceived as an issue of the Department of Women and Child Health. The wide array of policies, strategies, plans, and guidelines are rarely costed or fully funded.

An array of structural problems has had a negative effect on child health governance. These include poor information systems, distance among decision makers, technical staff, and operational staff as well as between actors located at different levels (national, provincial, and district), inequitable resource allocation between different levels of health governance and areas, corruption, lack of leadership from the MOH and the Department of Women and Child Health, and tension between the government and development partners. An additional challenge is misalignment between government and health partners' planning cycles in the various interventions, although some partners, such as UNICEF and WHO, were perceived as more aligned with the government's plans than bilateral partners, such as USAID partners.

"One of the factors that hinders complementarity is the planning cycles of the government and donors are not the same. The donors or partners at the moment of drawing their strategic plan, their financial plan, do not necessarily consult or develop them together with local government officials. When partners consult, they [government officials] are often not prepared to say what is needed or identify areas of complementarity, because the information system that could facilitate decision making is still not sufficiently robust or does not yet allow the use of information for decision making." [Government] "So UNICEF and WHO are ... always looking to align its national business plan with the ministry's plan, as it is a bit difficult as a partner to implement something that the ministry is a little disconnected from. So in terms of coordination, coordination has always been good in terms of sharing of plans and implementation of plans." [NGO]

Exacerbating weak governance is the lack of accountability mechanisms beyond periodic reports and joint annual reviews between the government and health donors, with limited civil society participation (though there are some social accountability initiatives that focus on monitoring maternal and child health service delivery, particularly at the primary care level). Although MOH policy documents emphasize the importance of improving community participation in the health sector and formally established spaces for this purpose (e.g. co-management committees created in 2012 at the health unit level and quality and humanization committees bring together health providers and users), they fall short of their expected role. The co-management committees operate more as spaces for consultation, communication on government activities, and mobilization of community resources (e.g. for building health facilities), than accountability mechanisms. It is difficult for members of these mechanisms to identify actors they can collaborate with and/or to whom they can channel problems they identify.

PERCEIVED EFFECTIVENESS OF WORKING TOGETHER

Some actors and groups are perceived as more collaborative than others, and this is highly influenced by the individuals leading the processes. Interactions within and beyond technical working groups have been particularly effective in developing strategy, organizing events such as the National Child Health Weeks, or implementing specific programs. However, collaborative efforts have yet to be translated into improved service delivery. Many perceived the sector-wide approach process (SWAP) and its governance mechanisms as being effective as it brought most donors together under Pro-Saúde and its coordination mechanism, the Health Partners Group.

"So I saw a very close relationship, from the minister to the directors, to the department heads, with the donors, the United Nations, and the nongovernmental organizations. There was a coordination mechanism... which I think has played an important, strategic role at the time, these coordination groups where everyone really had an active, regular participation, there were discussions, strategies that everyone followed and facilitated." [Government]

To quantitatively measure the strength and potential effectiveness of child health networks, the ONA utilized a hierarchy of levels of working together (Figure 9). Basic communication is a starting point that can develop into coordination and then a higher level of collaboration (see Annex C; ONA instrument for definitions). A mix of coordination and collaboration relationships appear to be linked to the number of technical groups in which people participate and the projects implemented together. UNICEF has the most intensive relationships confirmed as collaboration. The intensity of relationships does not necessarily translate to strong working networks in activity-specific networks such as strategy, capacity development, and implementation in child health (presented earlier), as organizations also work on other development issues.



Figure 9. Confirmed intensity of relationships with nodes sized by betweenness centrality

Multiplexity is an indicator of network-level effectiveness and resiliency.³⁶ Multiplexity refers to the different types of relationships and the many ways (e.g. number of activities) in which organizations are connected. For example, two organizations may work together on both child health strategies and capacity building. This relationship is multiplex and not based solely on one type of connection. Also, if the two organizations stop building capacity together, but continue working on strategies with one another, then the relationship between the two organizations will continue. In Mozambique, the most frequent type of relationships are based on two ties (Figure 10). UNICEF has the strongest multiplex relationships, followed by MOH_MCH.

³⁶Provan K. and Milward (2001), "Do networks really work? A framework for evaluating public-sector organizational networks", Public Administration Review, (61):414-423.

Figure 10. Confirmed multiplexity relationships with nodes sized by betweenness centrality



In further discussions to unpack the working dynamics, respondents asserted that coordination has been affected by lack of leadership, individual organizational mandates and agendas, lack of complementary interventions, and inefficient overlap of activities, locations, and target groups among different projects/programs.

"Sometimes we feel some frustration because of the leadership of the ministry. Not everything depends on the partner. We can give all necessary support, but there has to be leadership in relation to the norms we design. We provide funding but if the leadership does not guarantee that laws are implemented at provincial, district, and health unit levels, we as partners cannot do anything. We have a serious problem with child health leadership." [Bilateral Agency]

Examples of programs and interventions that coordinate effectively among different stakeholders include MCSP and work in the nutrition sector that spans beyond health.

"I think [coordination] between the MCSP and the Ministry of Health was good because the MCSP [activities] were focused on the ministry's plans. Coordination is transparent and objective, always in line with the Ministry's Social Economic Plan. I mean, we had more or less the same purpose in terms of implementation of the activities. Unfortunately, it [MCSP] focused only in two provinces, Sofala and Nampula." [NGO]

"There is a greater interconnection between the sectors, the agriculture sector, the water and sanitation sector and the health sector, already with programs together and integrated interventions. For example, the investment in more nutritious crops, such as the production and consumption of orange pulp sweet potatoes is a concrete example." [NGO]

Examples of missed opportunities include situations where synergies were ignored or agreements violated, such as the Baby Friendly Hospital Initiative and the provision of chlorhexidine. According to some of our interviewees, one of the reasons why the Baby Friendly Hospital Initiative has partially failed was lack of inter-department coordination within the National Directorate of Public Health, specifically between the Department of Nutrition responsible for leading it and the Department of Women and Child Health.

"The Baby Friendly Hospital Initiative is an intervention that in Mozambique is not getting leverage The mandate to certify as a child-friendly hospital is still in the nutrition department, but again it is one of those things that should go hand in hand with the maternal-child health department, whether with the model maternity initiative, whether with part of the routine supervision of the division of child health. However, this marriage is not happening. There has been some investment, I think by the UNICEF, in some health units who came very close to being recognized as child - friendly hospitals, but then with the high turnover of staff and reduction in investment, it was lost." [NGO]

"I think that Child Health Division was not involved in the Baby Friendly Hospital Initiative. I cannot tell whether the division was invited to participate and did not respond or if Nutrition did not invite them at all; I don't know what the reason was. What I know is that in Mozambique the initiative is not working like in other countries who [have] more health units certified as child-friendly."³⁷

The chlorhexidine example that follows shows how the failure of health partners to coordinate with each other and with programs on the ground can result in confusion, missed opportunities, and serious health consequences. In this case, the inappropriate use of chlorhexidine in the eyes of babies, mistaken for tetracycline, can lead to blindness.³⁸

"... when Mozambique adopted the use of chlorhexidine for umbilical cord care it was decided that we needed chlorhexidine with a specific size – the bigger tubes to administer for seven days. The issue is that we received different lots of chlorhexidine, bought by different partners, with different grams which created several implementation constraints. The chlorhexidine was to be administered by community health workers, traditional midwives and nurses. However, because some partners bought smaller tubes, we could no longer use it at community level as it would require additional training on how to use them. At the health unit, the nurses also had problems because the smaller tubes were very similar to ophthalmic tetracycline that is

applied in the eyes immediately after birth. The problem is that chlorhexidine when applied in the eyes produces burns; so we [had] to explain that it shouldn't be placed close to tetracycline in the birth room, as in the rush people could easily mistake one for the other. The partner that procured the smaller tubes of chlorhexidine did not contact the [child health] division to inform that they couldn't find the size we needed; they bought it and we only realized what had happened when it was already in the health units."³⁹

 $^{^{37}}$ Notes from the application of Organizational Network Analysis survey with a provider of technical assistance – 27.02.2019. 38 It was not possible to confirm whether there have been cases of blindness in babies caused by the inappropriate use of chlorhexidine in the eyes.

³⁹ Notes from the application of Organizational Network Analysis survey with a provider of technical assistance – 27.02.2019.

CONCLUSIONS

SEVERITY OF CHILD HEALTH

Mozambique surpassed the MDG four target to reduce the U5MR by two-thirds between 1990 and 2015. However, neonatal mortality rates have slowed in the last decade, and there is quite a way to go to reach the Sustainable Development Goal (SDG) targets by 2030. This slowdown in progress has highlighted the need to identify barriers, facilitators, and contextual factors impacting continued progress on child health.

POLICY ENVIRONMENT

There has been significant investment in improving the policy framework covering a wide range of child health-related issues, including national-level strategies and the design of guidelines and norms for health providers at the facility level, such as The Newborn Consultation in the Postnatal Period Guide (in 2001), the Technical Manual on Assistance to Newborns during Partum and Main Obstetric and Neonatal Complications or the Healthy Child and at Risk Child Clinical Norms (both in 2011). This has been accompanied by revitalizations of various interventions (e.g. IMCI, Community Health Workers Program, and the Child Friendly Hospital in 2010) and mechanisms (e.g. committees for auditing of maternal and neonatal deaths, in 2002 and 2009) as well as introduction of new components to existing strategies (e.g. neonatal component to IMCI and community IMCI, both in 2008).

In the area of immunization there has been significant progress with the introduction of vitamin supplements (e.g. vitamin A in 2002) and vaccines (e.g. hepatitis B in 2002, tetanus in 2003, haemophilus influenza type b in 2009, pneumococcal in 2013, rotavirus in 2015). In the area of nutrition, initiatives include the introduction of a basic nutrition package (in 2003), adoption of the Code for the Marketing of Breastmilk Substitutes (e.g. in 2008), and Integration of Multiple Micronutrient Powders in Health Services in 2015. There have also been developments in the area of HIV (e.g. introduction of PMTCT with nevirapine in 2003 and of pediatric anti-retroviral therapy in 2004) and malaria (e.g. development of the Strategy to Prevent Malaria in Infants and distribution of mosquito nets).

IMPLEMENTATION

There are persistent challenges in implementation of the existing policies and guidelines related to contextual and structural issues within and beyond the health sector. Contextual factors include economic crisis and public debt scandal, strained relationships between donors and the government, political instability, and the localized armed insurgency.

Structural factors include the socioeconomic vulnerability of the Mozambican population, high illiteracy rates, and lack of access to clean water and adequate sanitation. There are also factors internal to the health sector, such as the shortage of human resources and high staff turnover from the district to the central level, including within the Department of Women and Child Health, associated with poor employment conditions; inequalities in the availability of health services; deeply ingrained corruption at all levels, and centralization of authority and responsibilities. Moreover, child health has been negatively affected by cultural myths and norms, for example around pregnancy and newborn care (including breastfeeding).

Implementation is also affected by fragmentation of interventions and poor coordination, training with little follow-up and monitoring, overburdened maternal and child health nurses, uneven development of child health areas, lack of routine data to assess progress, lack of pediatric formulations of medicines, poor management of the medicines supply chain, lack of appropriate equipment and materials (e.g. for IMCI), and vertical HIV initiatives which have overshadowed other child health topics.

POLITICAL COMMITMENT

Political commitment to child health at the national level has been bolstered by global initiatives and movements (IMCI, MDGs, PEPFAR, President Malaria Initiative, Every Woman Every Child and Scaling-up Nutrition), WHO guidelines, and evidence published in international journals such as the Lancet, all of which have increased the visibility of and funding for child health. Paradoxically, child health continues to be excessively tied to maternal health to the point invisibility. This is further exacerbated by weak leadership from the MOH in general, and the Division of Child Health in particular, as well as by the lack of routine data and systematized evidence on access to health services and child health outcomes.

The funding landscape has also changed in the last 18 years, from more integrated funding for child health, to more verticalized funding in response to the "era of the three diseases" (HIV, malaria and tuberculosis), to more specific funding for child health in the last 10 years, including for immunization and nutrition, particularly with USAID funding. Nonetheless, political commitment has yet to translate into domestic funding for child health. The national health system remains heavily reliant on external funding, and child health (including immunization) and nutrition are underfunded compared to STIs and HIV. In 2015, child health and nutrition funding outside of budget support (*ProSaúde*) corresponded to 8 percent of the total compared to 42 percent for STIs and HIV. The gap between reproductive health and maternal health and child health has reduced from 8 percent in 2013 to 3 percent in 2015.

LEADERSHIP

Mozambique has had strong, knowledgeable, and vocal leaders who had convening power and have trained and inspired many to promote child health, but most of them have left. Emerging leadership reflects the fragmented nature of the child health field, with specialists usually focused in the areas directly related to their work. Many of these emerging leaders (individuals and organizations) act in the areas of nutrition and HIV. The emergence and action of individual leaders has been shaped by training, technical knowledge in influencing a person's sensitivity towards child health, funding for child health, and strong lines of authority and hierarchy within the MOH. Individual in-country leaders include professionals from maternal and child health, nutrition, pediatric AIDS, and immunization.

MOH leadership in child health has improved in the last few years, but there is significant room for improvement, particularly in terms of the political visibility, institutional strength, and proactivity of the Child Health Section. Government institutions such as the Technical Secretariat on Food Security and Nutrition, the Ministry of Gender, Children and Social Action, and the Ministry of Education are also active in the area of child health. IDI respondents mentioned CIDA, DFID, USAID, and the World Bank for the funding provided. USAID leads in terms of provision of financial support but does not engage enough in policy dialogue and or agenda setting. Respondents also identified Initiatives such as PEPFAR, Gavi, Global Fund, and GFF as playing a key role in steering global action. They viewed MCSP as a leader in the provision of technical assistance and advocacy for child health. In general, they highlighted the

prominence and leadership of INGOs but considered leadership of local CSOs to be minimal, beyond ANSA and the Association of Pediatricians.

CHILD HEALTH ACTORS AND COORDINATION

The child health field is constituted by a few government institutions/departments (the majority within the MOH), multi/bilateral agencies (UNICEF, WHO, Gavi, World Bank, CIDA, DFID, and, in the past, Danida), INGOs (Save the Children, John Snow International, Path, Gain, Jhpiego, Elizabeth Glaser Foundation, Agha Khan), and health training and research institutions (Faculty of Medicine of the Eduardo Mondlane University, Unilurio University, Catholic University, the National Health Institute within the Ministry of Health, and the Institute of Health Sciences). There is little participation of Mozambican NGOs beyond the HIV (Ariel Foundation, N'weti) and nutrition (ANSA, FDC) fields, but professional organizations, such as the Association of Pediatricians, are influential. Most are based at central level with interventions in selected provinces, although some of them, such as Save the Children, work in all provinces.

The main spaces for collective action are strategies, forums, and councils (e.g. Health Partners Forum, Technical Secretariat on Food Security and Nutrition, and the National Council on Food Security and Nutrition), technical groups organized around child health topics, issues, strategies, and programs (e.g. Child Health, Nutrition, Micronutrients, Food Fortification, Immunization, Nutritional Rehabilitation, Medication and Medical Supplies), and a local Scaling-up Nutrition civil society platform coordinated by ANSA.

Interactions within and beyond technical working groups have been particularly effective in terms of strategy development, organization of events such as the National Child Health Weeks, or the implementation of specific programs. However, these have yet to be translated into improved service delivery and health outcomes. Coordination has been affected by lack of leadership, individual and uncoordinated organizational mandates and agendas, and lack of complementary interventions, as well as overlap of activities, locations, and target groups between different projects/programs. The Baby Friendly Hospital Initiative has not been as effective as it could be due to inadequate intrasectoral coordination within the MOH; and the failure of health partners to coordinate their orders of chlorhexidine had potentially serious consequences for newborns.

ORGANIZATIONAL NETWORK ANALYSIS

The child health network has a moderate level of connections. USAID has the greatest number, followed by UNICEF and SETSAN. As the main child health funder in the country, USAID controls the flow of information and resources between other organizations. They are followed by SETSAN, a public institution mandated to coordinate the multisectoral response to food security and nutrition. UNICEF works directly with the Division of Child Health and other actors and is considered the "guardian of child health" in the country.

The government departments have fewer than half of the connections with other agencies and tend to be connected to UN agencies, bilaterals, and only one INGO (Jhpiego). The government departments tend to be technical and connected via resource support to donors/technical agencies for specific things. The INGOs with one local NGO (FDC) have the least number of connections and are located at the periphery of the network, except for ANSA.

The overall network is centralized at 37.5 percent with three main hubs centered around USAID, UNICEF, and SETSAN. But there are several other organizations on the outside and not part of the more closely integrated inner core (mainly INGOs: AKF, FHI 360, Jhpiego, GAIN, and a local NGO – FDC). Most organizations interact monthly, but some interact once or twice a month, usually in technical groups, seminars, and events that dominate the Mozambique health sector. Most relationships span the fair and good categories though mostly leaning toward a "fair" designation.

The strategy network has the second highest density of possible relationships after the overall network, reflecting the health sector's investments in strengthening the policy framework. It is also the least centralized out of all the networks. SETSAN has the greatest number of connections in the strategy network, but is not connected to the Department of Maternal and Child Health or Division of Child Health. SETSAN is followed by five equally connected organizations (at six connections each): MOH_MCH, UNICEF, ANSA, DFID and USAID. UNICEF is at the center, commanding an important position in developing strategies for child health.

The density of the capacity development network is the third lowest out of the four networks examined. It is also the second most centralized. There are many strong players in the capacity development arena. UNICEF is at the center of the capacity development network with most connectivity, meaning that they have more influence with respect to capacity building.

The implementation network is the weakest in the series (least connectivity, lowest density); this means that strategies are not translating into implementation. ANSA and AKF are separate from the larger cluster; this may be related to their involvement in the civil society platform of the Scaling-Up Nutrition Movement. WHO, FHI 360 and GAIN are isolates; UNICEF is at the center of the larger cluster and serves as a conduit for linking other organizations that are not connected to each other.

There is a mix of coordination and collaboration relationships, which is linked to the number of technical groups in which people participate and the projects implemented together. UNICEF has the most intensive relationships that have been confirmed as collaboration. The intensity of relationships does not translate to strong working networks in strategy, capacity development, and implementation of accountability. The most common relationships are based on two ties. UNICEF has the strongest multiplex relationships followed by MOH_MCH.

Participants highlighted the need for improved coordination, stronger leadership, increased funding, strengthened human resources, and greater visibility of child health in the maternal-child health nexus.

RECOMMENDATIONS

Mozambique has made significant progress in child health between 2000 and 2015, fostered by the MDGs. Since then, important developments in the child health sector at policy and operational levels will likely shape priorities, investments, and interventions. These include the development and costing of the Every Newborn Action Plan; the Mozambique Investment Case for Smart, Sustainable and Scale Actions in Reproductive, Maternal, Neonatal, Child, and Adolescent Health, submitted to the Global Financing Facility in support of the Every Woman Every Child Initiative; the development of the Health Sector Financing Strategy; the legacy of child health and nutrition programs such as MCHIP, MCSP and FANTA III; and the implementation of new Child Health Cards and Registration Books that bring together various child health issues. When asked about recommendations for accelerating child health progress, IDI respondents highlighted six issues: 1) visibility of child health; 2) multi-level leadership and coordination; 3) leadership, coordination, and negotiation capacity; 4) domestic funding; 5) research and evidence; and 6) civil society engagement. These are described in more detail below.

RECOMMENDATION I: Give greater focus and priority to child health to increase its visibility.

The link between child and maternal health combined with the public health sector's historical focus on maternal health have led to an overshadowing of child health. Going forward, child health must be more visible at organizational and programmatic levels. This could be done in two ways. The first is convening child health discussion forums that bring together stakeholders from the public, private, and non-profit sectors and academia, including those involved in the various child health-related technical working groups. The centrality of UNICEF and USAID in the Mozambican child health network, stakeholders' appreciation of UNICEF's convening power and its excellent relationships with the Division of Child Health, and USAID's leading position in terms provision of financial support mean that they are well placed to foster such spaces of dialogue. The second is conducting a participatory child health social audit in the MOH. The participatory audit would foster organizational learning around the existing child health-specific structures, instruments, budgets, and projects at central, provincial, and district levels to establish a baseline, help identify critical gaps and challenges, and recommend ways of addressing them. This information is needed to provide a distinct understanding of the child health landscape, which is currently unclear because child health is reported together with maternal health.

RECOMMENDATION 2: Adopt a multi-level, multi-stakeholder approach to child health coordination.

Improved coordination is needed among the various actors in the child health network, and the network should be broadened to include others such as Mozambican NGOs, who should participate in existing coordination mechanisms such as the Child Health Technical Group. Improvements are also needed in coordination, communication, and collaboration throughout the central, provincial, and district levels. Though this case study focused on the central level, it found that there are several child health actors who operate at provincial and district levels but have little interaction with those at central level. Similarly, the central level lacks information about interventions and coordination mechanisms at lower levels. The recent appointment of child health focal points within the Provincial Directorate of Health is an opportunity to build an approach that links actors and interventions at central and district levels, and to improve collaboration between departments and programs of the MOH and beyond. This approach will require strengthening the capacity of MOH, particularly but not exclusively of the Division of Child Health, to deal with multiple actors in a way that equips its staff to have more prominence in the child health network.

RECOMMENDATION 3: Build leadership, coordination, and negotiation capacity.

The regular communications between most organizations in the child health network provide a pathway for forming stronger ties and strengthening the leadership of the MOH. However, an intentional effort to communicate on a regular basis will demand significant effort and time in a context of dependency on external actors, high staff turnover, and overburdened public sector health workers who are unprepared to manage competing interests and agendas. IDI interviewees seemed to assume that leadership naturally emanates from the MOH's mandate without considering the role of unequal power relations and the skills required for effective leadership. Technical assistance to the MOH should aim to improve its ability to convene and lead instead of seeking to fill in leadership gaps, through direct intervention or technical advisers. Interactions within the child health network should extend beyond planning to address resource allocation and accountability for outcomes.

RECOMMENDATION 4: Increase domestic funding for child health.

The limited share of state budget in health and subsequent dependency on external funding threatens the sustainability of the successes achieved, reduces the government's autonomy and bargaining power, and undermines ownership of interventions. Another consequence of dependency on external funding is that government officials tend to spend more time reporting to partners than coordinating and/or holding them accountable. Despite optimism that the Health Sector Financing Strategy will provide a roadmap to increase domestic funding for the health sector, the dire needs and competing priorities could result in less visible or prioritized areas being neglected. In anticipation of this, child health actors must design a clear strategy to participate in ongoing budget debates by highlighting both the implications of funding mechanisms and modalities for advancing child health. This is an area where civil society organizations can play a role, particularly those involved in policy influencing, lobbying, and advocacy.

RECOMMENDATION 5: Foster civil society engagement in child health.

Although several Mozambican civil society groups work in the area of HIV and AIDS and child rights, few work on child health. Most civil society actors involved in child health operate at the local level, mainly in-service delivery through programs managed by INGOs. Greater civil society involvement is needed to manage child health initiatives and in coordination mechanisms. This should encompass identifying champions at various levels and equipping them to be vocal about child health, perform a watchdog role, and demand accountability on outcomes. This should extend to professional associations, such as the Association of Pediatrics which currently provides valuable technical assistance to the MOH. Lessons can be drawn from the nutrition and HIV fields on civil society participation and advocacy, especially on formal institutional mechanisms that include civil society representation.

RECOMMENDATION 6: Generate evidence to inform programming and support advocacy.

Reporting on progress toward achievement of the MDGs has fostered the generation of data and evidence at global and national levels, increasing the visibility of child health and the need for more investment. In Mozambique, data on the lack of progress in reducing NMR has increased concern about newborn health, shaping the policy focus. However, substantial gaps remain in health information systems. There is a need to improve routine data collection, for instance through the child health cards and record books recently approved. Health workers should be trained and supervised to consistently use these tools so that eventually data will systematically inform programming. The interviewees also emphasized the lack of evidence on the effectiveness of strategies that have been adopted to accelerate

child health progress. Generation of evidence showing the value of systematically investing in child health could also be a valuable tool for civil society advocacy efforts.



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