



MCHIP END-OF-PROJECT REPORT



Global Report

Reporting period:

September 2008–December 2014

Submitted on:

March 9, 2015

Submitted to:

United States Agency for International Development
under Cooperative Agreement # GHS-A-00-08-00002-00

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The Maternal and Child Health Integrated Program (MCHIP) is the USAID Bureau for Global Health's flagship maternal, neonatal, and child health (MNCH) program. MCHIP supports programming in maternal, newborn, and child health, immunization, family planning, malaria, nutrition, and HIV/AIDS, and strongly encourages opportunities for integration. Cross-cutting technical areas include water, sanitation, hygiene, urban health, and health systems strengthening.

This report was made possible by the generous support of the American people through the United States Agency for International Development (USAID), under the terms of the Leader with Associates Cooperative Agreement GHS-A-00-08-00002-00. The contents are the responsibility of the Maternal and Child Health Integrated Program (MCHIP) and do not necessarily reflect the views of USAID or the United States Government.

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Acronyms and Abbreviations

AA	Associate Award
AAP	American Academy of Pediatrics
ACCESS	Access to Clinical and Community Maternal, Neonatal, and Women’s Health Services
ACOG	American Congress of Obstetricians and Gynecologists
ACS	Antenatal Corticosteroids
ADRA	Adventist Development and Relief Agency
AFRO	Regional Office for Africa
AMREF	African Medical and Research Foundation
AMTSL	Active Management of the Third Stage of Labor
ANC	Antenatal Care
ART	Antiretroviral Therapy
ATF	Anemia Task Force
AWG	Advocacy Working Group
BBL	Brown Bag Lunch
BCC	Behavior Change Communication
BEmONC	Basic Emergency Obstetric and Newborn Care
BMGF	Bill & Melinda Gates Foundation
CCM	Community Case Management
CDA	Community Development Associations
CDPA	Center for Data Processing and Analysis
CECAP	Cervical Cancer Prevention
CFI	Child Fund International
CHAM	Christian Health Association of Malawi
CHEW	Community Health Extension Worker
CHS	Center for Human Services
CHW	Community Health Worker
CHX	Chlorhexidine
CI	Communications Initiative
CMWG	Case Management Working Group
cMYP	Comprehensive Multi Year Plan
COP	Community of Practice
COPE	Client-Oriented Provider Efficient
CQI	Continuous Quality Improvement
CRS	Catholic Relief Services
CSHGP	Child Survival and Health Grants Program
CSO	Civil Society Organization
CYP	Couple Years of Protection
D&A	Disrespectful Care and Abuse
DCC	Delayed Cord Clamping
DHS	Demographic and Health Survey
DIP	Detailed Implementation Plan
DPT3	Diphtheria, Pertussis, and Tetanus

ECEB	Essential Care for Every Baby
EIMC	Early Infant Male Circumcision
EML	Essential Medicines List
ENAP	Every Newborn Action Plan
ENC	Essential Newborn Care
EONC	Essential Obstetric and Newborn Care
EOP	End-of-Project
EPI	Expanded Program on Immunization
FANTA	Food and Nutrition Technical Assistance
FCHV	Female Community Health Worker
FIGO	International Federation of Gynecology and Obstetrics
FIVD	Friends in Village Development
FMOH	Federal Ministry of Health
FP	Family Planning
GAPPD	Global Action Plan for Pneumonia and Diarrhea
GAVI	GAVI Alliance (formerly the Global Alliance for Vaccines and Immunization)
GDA	Global Development Alliance
GF	Global Fund to Fight AIDS, Tuberculosis, and Malaria
GHSP	Global Health: Science and Practice Journal
GMHC	Global Maternal Health Conference
GNHC	Global Newborn Health Conference
GPEI	Global Polio Eradication Initiative
GSM	Global Strategic Marketing Alliance
GVAP	Global Vaccine Action Plan
HBB	Helping Babies Breathe
HBLSS	Home-Based Life Saving Skills
HBS	Helping Babies Survive
HCI	Healthcare Improvement Project
HHP	Home Health Provider
HIV	Human Immunodeficiency Virus
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HMIS	Health Management Information System
HNDU	Human Nutrition and Dietetics Unit
HSS	Health Systems Strengthening
HTC	HIV Testing and Counseling
icddr,b	International Centre for Diarrheal Disease Research, Bangladesh
iCCM	Integrated Community Case Management
ICM	International Confederation of Midwives
ICN	International Congress of Nutrition
IIP	Immunization in Practice
IMB	Independent Monitoring Board
IMCI	Integrated Management of Childhood Illness
IMNCI	Integrated Management of Neonatal and Childhood Illness
INGO	International Nongovernmental Organization
IP	Infection Prevention

IPAC	Immunization Practices Advisory Committee
IPC	Interpersonal Communication
IPTp	Intermittent Preventive Treatment in Pregnancy
ISDP	Integrated Service Delivery Program
ITN	Insecticide-Treated Bed Net
IUD	Intrauterine Device
IYCF	Infant and Young Child Feeding
IYCN	Infant and Young Child Nutrition
JHU-IIP	Johns Hopkins Institute for International Programs
JHSPH	Johns Hopkins Bloomberg School of Public Health
JSI	John Snow, Inc.
K4Health	Knowledge for Health
KMC	Kangaroo Mother Care
KPC	Knowledge, Practices, and Coverage
L&D	Labor and Delivery
LAC	Latin America and the Caribbean
LAM	Lactational Amenorrhea Method
LARC	Long-Acting Reversible Contraception
LBW	Low Birth Weight
LiST	Lives Saved Tool
LLIN	Long-Lasting Insecticide-Treated Bed Net
LSHTM	London School of Hygiene and Tropical Medicine
M&E	Monitoring and Evaluation
MAMA	Mobile Alliance for Maternal Action
MCA	Multi-Country Analysis
MCHIP	Maternal and Child Health Integrated Program
MCP	Malaria Communities Program
MDG	Millennium Development Goal
MER	Monitoring, Evaluation and Research
MgSO ₄	Magnesium Sulfate
MH	Maternal Health
MICS	Multiple Indicator Cluster Survey
MIP	Malaria in Pregnancy
MIYCN	Maternal, Infant, and Young Child Nutrition
MIYCN-FP	Maternal, Infant, and Young Child Nutrition and Family Planning
MLM	Mid-Level Manager
MMI	Model Maternities Initiative
MNC	Maternal and Newborn Care
MNCH	Maternal, Newborn, and Child Health
MNCH/FP	Maternal, Newborn, and Child Health/Family Planning
MNH	Maternal and Newborn Health
MNT	Maternal and Neonatal Tetanus
MOA	Ministry of Agriculture
MOH	Ministry of Health
MOHSW	Ministry of Health and Social Welfare

MR	Measles-Rubella
NGO	Nongovernmental Organization
NISONM	Nigerian Society of Neonatal Medicine
NMCP	National Malaria Control Programs
NUVI	New and Underutilized Vaccines
OR	Operations Research
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
OSCE	Objective Structured Clinical Examination
PAC	Postabortion Care
PATH	Program for Appropriate Technology in Health
PCV	Pneumococcal Conjugate Vaccine
PDQ	Partnership Defined Quality
PDSA	Plan, Do, Study, and Act
PE/E	Pre-Eclampsia/Eclampsia
PEP	Post-Exposure Prophylaxis
PEPFAR	President's Emergency Program for AIDS Relief
PLHV	People Living with HIV
PMI	U.S. President's Malaria Initiative
PMNCH	Partnership for Maternal, Newborn & Child Health
PMTCT	Prevention of Mother-to-Child Transmission
PNC	Postnatal Care
PPFP	Postpartum Family Planning
PPH	Postpartum Hemorrhage
PPIUD	Postpartum Intrauterine Device
PPSS	Postpartum Systematic Screening
PSE	Pre-Service Education
PSI	Population Services International
PVO	Private Voluntary Organization
PY	Program Year
QA	Quality Assurance
QCA	Qualitative Comparative Analysis
QI	Quality Improvement
QoC	Quality of Care
RAPID	Regular Appraisal of Program Implementation in a District
RBHS	Rebuilding Health System
RBM	Roll Back Malaria
REC	Reaching Every Community
RED	Reach Every District
RH	Reproductive Health
RHB	Regional Health Bureau
RI	Routine Immunization
RMC	Respectful Maternity Care
RMNCH	Reproductive, Maternal, Newborn, and Child Health
RRI	Rapid Results Initiative

SAGE	WHO Scientific Advisory Group of Experts
SAT	Simplified Antibiotic Treatment
SBA	Skilled Birth Attendant
SBCC	Social and Behavior Change Communication
SBM-R®	Standards-Based Management and Recognition
SIA	Supplementary Immunization Activity
SO	Strategic Objective
SP	Sulfadoxine-Pyrimethamine
SPA	Service Provision Assessment
SUN	Scaling Up Nutrition
SW	Strategic Workplan
TA	Technical Assistance
TAG	Technical Advisory Group
TB	Tuberculosis
TBA	Traditional Birth Attendant
TDR	WHO Special Programme for Research and Training in Tropical Diseases
TF	Taskforce
TIPs	Trials for Improved Practices
TOT	Training of Trainers
TRAction	Translating Research into Action Project
TWG	Technical Working Group
UHEP	Urban Health Extension Program
UNCoLSC	UN Commission on Life Saving Commodities
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
URADCA	Urban Research and Development Centre for Africa
URC	University Research Co.
USAID	United States Agency for International Development
UIIFB	Uterotonic Use Immediately Following Birth
VCT	Voluntary Counseling and Testing
VHND	Village Health and Nutrition Day
VMMC	Voluntary Male Medical Circumcision
WASH	Water, Sanitation, and Hygiene
WBW	World Breastfeeding Week
WHO	World Health Organization
WRA	White Ribbon Alliance
WV	World Vision

Executive Summary

The Maternal and Child Health Integrated Program (MCHIP) was the United States Agency for International Development (USAID) Bureau for Global Health's flagship maternal, newborn, and child health/family planning (MNCH/FP) program from 2008–2014. Designed to bring together multiple technically specific programs in MNCH/FP under one mechanism, MCHIP had a diverse portfolio and provided technical assistance in 54 countries. MCHIP received field funding in 41 countries, leveraged bureau and other funding in eight countries, and provided support to Child Survival and Health Grants Program (CSHGP) grantees in an additional five countries.

Jhpiego led the MCHIP consortium of partners, which included Save the Children, John Snow, Inc. (JSI), ICF (which acquired Macro International at the start of the project), the Johns Hopkins Institute for International Programs (JHU-IIP), the Program for Appropriate Technology in Health (PATH), Broad Branch Associates, and Population Services International (PSI).

MCHIP's team combined technical leaders from across the spectrum of MNCH/FP intervention areas with operations experts in health care financing, quality assurance, private voluntary organization/nongovernmental organization (PVO/NGO) capacity building, social marketing, public-private partnerships, logistics, management information systems, behavior change communication (BCC), social mobilization, and high-quality research, analysis, and evaluation.

MCHIP's overall goal was to contribute to reductions in mortality and morbidity among women and children under five, and to accelerate progress toward reaching Millennium Development Goals (MDGs) 4 and 5. MDG 5b, which focuses on improving FP, was also an integral part of the project and MCHIP provided assistance for FP to more than 22 countries. Working in concert with other MNCH partners, MCHIP was expected to contribute to the following outcomes:

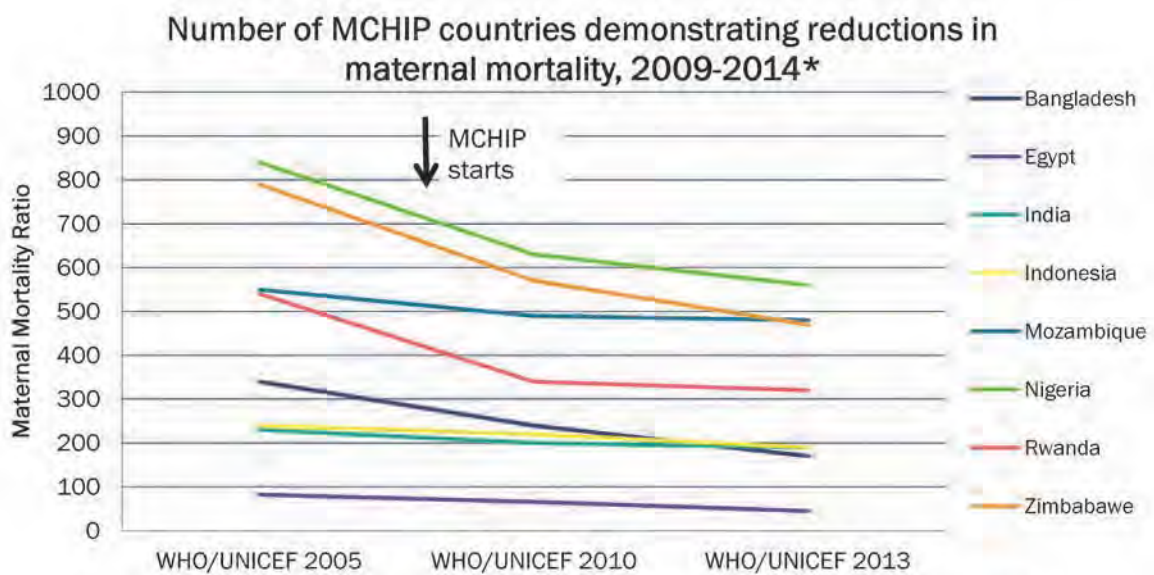
- Reductions in maternal and under-five mortality in 30 countries
- Saving an estimated 118,000 mothers and 7.2 million children under five in high-burden countries
- Demonstrated improvements in coverage in use of MNCH services in 20 countries, with five of these benefiting from an integrated package of high-impact MNCH interventions
- Demonstrated greater equity in coverage of MNCH services in five countries
- All 68 MDG Countdown countries benefiting from MCHIP-promoted learning tools and approaches

MCHIP was designed with three overarching strategic objectives:

- **Strategic Objective 1:** Increased availability and use of appropriate high-impact MNCH interventions, including supportive FP interventions;
- **Strategic Objective 2:** Global leadership in MNCH, including further development and promotion of improved approaches; and
- **Strategic Objective 3:** Assist PVO/NGOs and their local partners supported by the CSHGP and PMI MCP programs to design, implement, monitor, and evaluate innovative, effective, and scalable community-oriented strategies that deliver integrated, high-impact interventions to vulnerable populations.

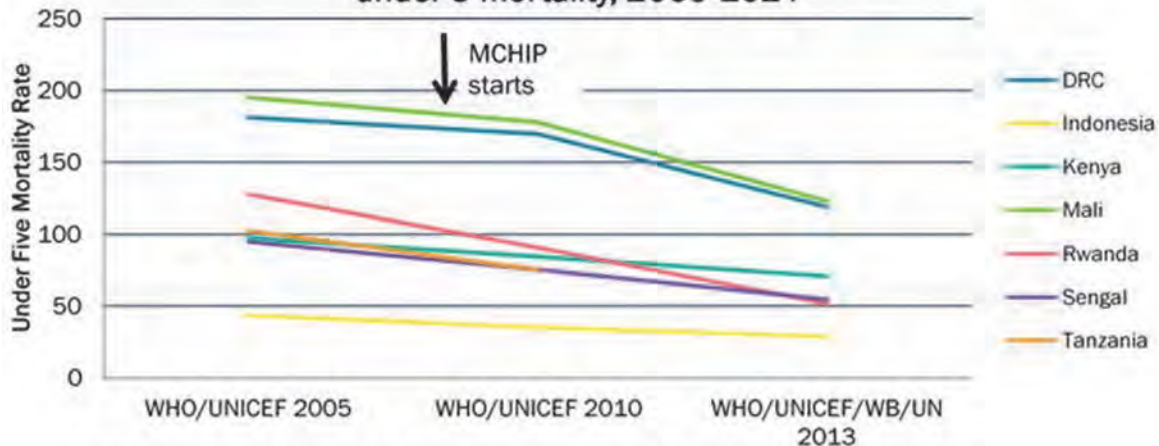
In most countries, MCHIP managed multi-year programs through local offices and staff who worked closely with Ministries and other partners. In other countries, technical assistance (TA) interventions were limited to one specific area, supporting a one-time study or conducting research. Country activities were achieved through direct MCHIP funds, Associate Awards (AAs), and partnership with CSHGP. Programs were based throughout Africa, Asia, the Middle East, and Latin America. Over the life of the program, USAID programmed a total of Redacted were field-driven investments.

MCHIP was instrumental in catalyzing and supporting progress in MNCH and contributing to reductions in mortality and morbidity. The following three graphs show notable reductions in maternal, child and newborn mortality in a selection of MCHIP countries. As MCHIP was not designed to directly evaluate impact, the country data source is from available World Health Organization (WHO)/UNICEF reports and demonstrates the result of multiple contributors to the mortality reductions.



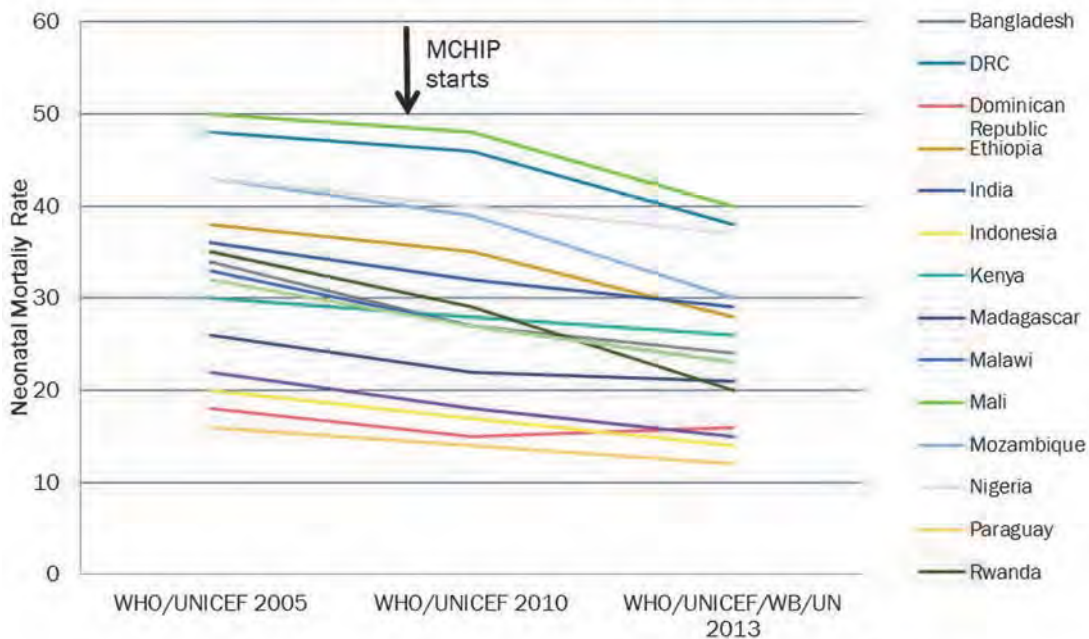
*Countries included in this graph reported two data points over the life of MCHIP. Due to the difficulty in measuring maternal mortality, country specific estimates have a large confidence interval and therefore are only an estimate. Any declines seen in maternal mortality cannot be attributed to work done by MCHIP as the project worked with other partners to contribute to these results.

Number of MCHIP countries demonstrating reductions in under 5 mortality, 2009-2014*



*Any declines seen in under five mortality cannot be attributed to work done by MCHIP as the project worked with other partners to contribute to these results.

Number of MCHIP countries demonstrating reductions in neonatal mortality, 2009-2014*



*Any declines seen in neonatal mortality cannot be attributed to work done by MCHIP as the project worked with other partners to contribute to these results.

By the end of the program in December 2014, MCHIP, working in close collaboration with other MNCH partners, will have met or exceeded certain key expected program outcomes as follows:

- More than 53 countries benefited from evidence-based practices and policies.
- More than 4 million women were counseled on FP as part of integrated essential care services.
- 1.7 million deliveries were attended by a skilled birth provider.

- 1.1 million women received active management of the third stage of labor.
- 830,000 cases of diarrhea in children were treated.
- 88 million children received diphtheria, pertussis, and tetanus vaccines from MCHIP-supported countries.
- 400,000 men were circumcised as part of the fight to prevent HIV, with 90% getting tested.

This end-of-project report has been developed to discuss the achievements, program learning, and recommendations for the way forward.

OVERARCHING KEY ACCOMPLISHMENTS

The first section, *Overarching Key Accomplishments*, highlights overarching accomplishments across the three strategic objectives of Scale-up, Global Leadership, and Community (PVO/NGO) support.

Strategic Objective 1

Within the first Strategic Objective, to achieve scale-up for increased availability and use of appropriate high-impact MNCH interventions, MCHIP successfully promoted learning and adoption of proven approaches to reducing mortality and morbidity, including postpartum intrauterine devices (PPIUDs) in 13 countries, newborn resuscitation through Helping Babies Breathe (HBB) in 25 countries, introduction of new and underutilized vaccines (NUVI) in 11 countries, and the three components of active management of the third stage of labor (AMTSL) including uterotonic use immediately following birth (UUIFB) to prevent postpartum hemorrhage (PPH) in 30 countries. In fighting human immunodeficiency virus (HIV), MCHIP emerged as USAID and the U.S. President's Emergency Plan for AIDS Relief's (PEPFAR's) single largest voluntary male medical circumcision (VMMC) implementing partner, with more than 400,000 men circumcised with MCHIP support, including 123,000 men in **Tanzania** alone.

As scale-up involves taking interventions to greater numbers of people, MCHIP supported task shifting as a viable and innovative strategy, with notable successes in multiple countries including such examples as **Bangladesh, Guinea, Kenya, Liberia, Madagascar, Mali, Rwanda, South Sudan** and **Tanzania**. Over the life of the program, MCHIP trained more than 282,000 health care workers, the majority in new tasks that expanded their roles and brought greater coverage to those in need.

MCHIP achieved other notable progress in scaling up through global advocacy, an essential tool to develop local ownership of scale-up and promote change at the country level. For example,

Country examples where MCHIP supported task shifting to increase scale-up:

- **Guinea, Liberia, Madagascar, Rwanda, and South Sudan:** Pilot projects in these countries engaged community health workers to deliver misoprostol, shifting this postpartum hemorrhage intervention from the facility to the household level.
- **Bangladesh:** CHWs have been trained and will fulfill the gaps of skilled birth attendants at community level. MCHIP provided support on critical gap management in this area through facility strengthening and capacity building at the community level.
- **Mali:** Ninety-eight community auxiliary midwives trained and operational in the insertion of implants, which convinced the government this was a safe and feasible option.
- **India:** As of 2012, nurses allowed to insert PPIUDs.
- **Kenya:** Community health workers (CHWs) trained to manage and monitor HIV-positive mothers and reduce the transmission of the virus to newborns.
- **Tanzania:** Nurses trained to conduct all surgical tasks related to VMMC; as a result, more than 123,000 circumcisions were performed by December 2012, with nurses, clinical officers, and doctors performing similarly.

MCHIP contributed substantially to increased interest in and refocused priorities on the “forgotten” killers of children—diarrhea and pneumonia. MCHIP brought integrated community case management (iCCM) to the country level in Kenya, working hand in hand with national ministries to advocate for openness to task shifting and the introduction of iCCM to reach communities without access to health facilities. Through MCHIP’s technical support in Kenya, the Ministry of Health (MOH) and its stakeholders conducted a rapid results initiative (RRI) to scale up use of oral rehydration therapy (ORT) and zinc in the management of sick children with diarrhea in 230 facilities across the county. While over-the-counter distribution of antibiotics is still not permitted in Kenya, results from the rapid results initiative showed tremendous improvement in the use of zinc and oral rehydration salts (ORS) in the facilities from 49% of children treated at baseline to 95% at the endline. In Namibia and Mali, policy changes were made to allow CHWs to distribute antibiotics and zinc. MCHIP also introduced zinc in DRC and promoted the use of zinc in other countries, including Guinea and Zimbabwe. MCHIP also strengthened routine immunization systems, and supported and implemented Reaching Every District (RED) and related strategies in nine countries.

Complementing these country-level efforts, MCHIP played a vital leadership role as the Secretariat of the CCM Task Force to increase the development and standardization of iCCM tools and support activities that fostered global learning for improved implementation and iCCM scale-up.

Over the life of the program, MCHIP documented program learning about approaches that contributed to the success of MCHIP interventions and remaining gaps in programming. Through dissemination of the lessons learned in this global End-of-Project (EOP) report, as well as through program-generated reports, peer-reviewed publications, and other dissemination platforms, MCHIP strives to positively influence future efforts to combat maternal, newborn, and child mortality and morbidity.

Strategic Objective 2

In Strategic Objective 2, MCHIP exercised global leadership across MNCH by convening key actors, influencing the global agenda in policy and guidance, developing and disseminating tools, monitoring and evaluating results, and documenting key program learning. Participation in Global Development Alliances (GDAs)—notably Helping Babies Breathe (HBB) and Survive and Thrive (S&T)—was instrumental for MCHIP to engage at the global level and harness resources and skills from disparate groups to achieve greater impact.

One notable accomplishment under this objective was MCHIP’s contributions to improving routine and periodic measurement of MNCH outputs and outcomes. MCHIP co-led the multi-agency “Strengthening Immunization Systems Performance and Monitoring” working group and successfully advocated to include certain indicators in the Global Vaccine Action Plan (GVAP). MCHIP supported the development of assessment toolkits and frameworks that address monitoring and evaluation (M&E) of MNCH interventions and services by developing the *Quality of Care (QoC) for Prevention and Management of Common Maternal and Newborn Complications* facility survey, which was implemented in seven countries with MCHIP support. MCHIP supported country-level efforts to use assessment findings to address service delivery gaps and developed indicators and data collection tools that can be used in multiple countries. Specifically, in Kenya, QoC assessments have become part of the national Service Provision Assessment, and regional workshops were developed based on the findings from the QoC. Encouraging greater efficiency through the use of technology, MCHIP applied the use of mHealth tools for M&E activities. MCHIP successfully used mobile phones and Android tablets for data collection, including observational assessments such as the QoC facility assessments in **Tanzania** and client and provider questionnaires to assess client satisfaction with PPIUDs in the **Philippines**.

MCHIP was also particularly successful at furthering global engagement through international conferences, which served as valuable forums for sharing the latest evidence and program learning. Among the 29 global and regional conferences that benefited from MCHIP participation, the *Global Newborn Health Conference* (GNHC) exemplifies USAID’s critical global leadership role through MCHIP in fostering multi-donor engagement that is essential to garnering support for global practices. Taking the lead in organizing this first conference of its kind, MCHIP brought together more than 450 researchers, health officials, policymakers, experts, and advocates from over 50 countries. Through technical assistance (TA) provided before, during, and after the conference, MCHIP catalyzed country action to advance newborn health and also informed a global action plan aimed at reducing the annual global death toll of nearly three million babies during the first month of life—now known as the “Every Newborn Action Plan” (ENAP). This global ENAP document—officially endorsed at the World Health Assembly and launched at the MNCH Forum in July 2014—as well as country-level plans will provide guidance and momentum for improving newborn survival through 2015 and beyond. In 2011 and 2012, MCHIP held two *Regional Meetings on Interventions for Impact in Essential Obstetric and Newborn Care* in Addis Ababa, Ethiopia and Dhaka, Bangladesh, respectively. These meetings brought together over 700 policy leaders, experienced clinicians, and program managers with a goal to support accelerated implementation and expansion of maternal and newborn health programs in countries throughout Africa and Asia, with a specific focus on prevention and management of postpartum hemorrhage, pre-eclampsia/eclampsia (PE/E), and newborn asphyxia.

As part of its overall strategy and to ensure sustainability and acceptance of its programs, MCHIP sought out opportunities for global engagement with key development partners, in particular, WHO and the United Nations Children’s Fund (UNICEF). MCHIP has worked closely with WHO to ensure that information from new WHO guidelines for several important topics, including the prevention and treatment of PPH, the prevention and treatment of PE/E, and postnatal care for mothers and newborns, were translated into practical materials and disseminated at global, regional, and country levels. MCHIP, in collaboration with WHO and other partners, contributed to WHO’s “[Statement for Collective Action for Postpartum Family Planning](#)” to emphasize the importance of postpartum family planning (PPFP) and offer general approaches for addressing unmet need and expanding the range of contraceptive options during the postpartum period. The global health community rallied in support of this obvious, but often overlooked, group of women in need of services and the statement received official endorsements from additional donor governments, including Australia and the United Kingdom, and from FP stakeholders, such as UNFPA and the International Planned Parenthood Federation.

MCHIP has served on numerous WHO technical committees and has been asked to lead sessions on the implementation of the guidelines at WHO guideline meetings, such as on preterm birth, PE/E, and postpartum hemorrhage (PPH), thus demonstrating that MCHIP is recognized by WHO and partners as a key implementer in countries where MNCH activities are under way. MCHIP also advised the Director of WHO’s Immunization Program on rotavirus vaccine introduction, training approaches, and other important aspects of vaccine program implementation. By forging these strategic partnerships, MCHIP maximized the impact of collective efforts to reduce maternal and newborn mortality and morbidity.

During the second year of the program, MCHIP identified five cross-cutting themes for program learning including scale, integration, community, quality, and equity. In collaboration with USAID, MCHIP identified global program learning questions to be answered by the end of the program. In addition, MCHIP selected 11 program learning priority countries and ensured that they were supported and able to document and disseminate their learning for use globally, regionally, or in country. Highlights from MCHIP program learning on QoC, Integration of Services, and Equity are detailed in this report in Table 3 within the Strategic Objective 2 section. Learning on Scale-Up is covered in the Strategic Objective 1 section and learning on

Community Action in the Strategic Objective 3 section. Although just the most salient highlights are covered in the body of this report, the program learning briefs for each of these topics are included in Annex 8.

Strategic Objective 3

Through leveraging the rigorous standards for design, monitoring, and evaluation of PVO/NGO projects funded by the CSHGP and President's Malaria Initiative's (PMI's) Malaria Communities Program (MCP), and through strategically partnering with the CORE Group and its expanded network of civil society partners, SO3 expanded the global evidence base on community-oriented health programming to strengthen health systems.¹ The main accomplishments under this SO related to expanding the global evidence base on community-oriented health programming to strengthen health systems through leveraging both the rigorous standards for design, monitoring, and evaluation of these programs and strategically partnering with CORE Group and its expanded network of civil society partners.

During the life of MCHIP, 94 CSHGP grantees implemented programs in 42 countries, reaching 4,691,666 children under five years of age, 8,721,868 women of reproductive age, and 124,816 clients being treated for TB. Twenty MCP grantees operating in 12 countries reached more than 4.7 million beneficiaries, including women of reproductive age, children under five years of age, and other groups such as people living with HIV. MCHIP analyses of CSHGP data documented that these programs not only effectively delivered lifesaving interventions, but also contributed significantly to reducing child mortality.

MCHIP advanced USAID's global leadership in community-oriented programming by contributing to the generation of evidence from grantees in CSHGP's OR portfolio of 30 projects in 23 countries, and facilitated the development of journal articles and briefing papers that have helped to position the CSHGP experience as an important part of the global evidence base. These efforts augmented learning on issues relevant to MCHIP's technical agenda, including health equity, FP integration, iCCM, community inputs to maternal and newborn care, and mHealth.

Through CORE Group, MCHIP leveraged a wider network and NGO community; capitalized on CORE Group's complementary household- and community-level development approaches; and linked directly to a well-established program learning platform that served as an effective vehicle for the dissemination of tools and knowledge to influence international practice related to community-based health programming. CORE Group provided a vehicle for rapid, action-oriented diffusion of lessons learned, tools, and new opportunities to increase positive health impact and contribute to global learning for community health.

Together, CORE Group and MCHIP, with support from collaborating partners, diffused dozens of collaborative community health program tools and resources, including first and second editions of the *CCM Essentials Guide* and the *HBB Implementation Guide*. CORE Group's participation in MCHIP resulted in the creation of several joint products, the cross-promotion of resources, and extended representation in global forums, thus elevating the importance of integrated community-focused interventions and the role of civil society in helping to end preventable child and maternal deaths.

The resulting achievements of this partnership illustrate the unique contributions that PVOs and NGOs can make, engaging communities and civil society to address priority health challenges with innovative solutions that contribute to ending preventable deaths.

¹ MCP achievements are highlighted in the Malaria section of this report.

ACHIEVEMENTS BY PROGRAM AREAS AND RESULTS PATHWAYS

The second section of this report summarizes achievements, learning, and recommendations for the way forward across 10 technical program areas: maternal health, child health, immunization, newborn health, FP, malaria, HIV, immunization, urban health, and WASH. All 10 areas are discussed in detail in the body of the report; below are a few selected highlights.

Maternal Health

One notable achievement in maternal health is MCHIP's contribution to the global evidence base on the effectiveness of community-based interventions to prevent PPH. MCHIP's extensive advocacy and programmatic efforts to promote advance distribution of misoprostol for self-administration at homebirth—through the development of a wide array of related tools, resources, and especially operations research (OR) in five countries—have widespread implications for reducing maternal mortality and the expansion of services to more women. MCHIP also helped shape global thinking to make PE/E a priority maternal health intervention by forging strategic partnerships with key development partners (WHO, FIGO, ICM, UNCoLSC, Accelovate) to generate global evidence and promote best practices for managing complications from PE/E. MCHIP's Multi Country Analysis (MCA) Survey of 37 countries in PY3 and PY4 and Quality of Care (QoC) assessments—conducted in seven African countries—have contributed to global evidence and advanced country-level efforts to reduce maternal mortality from PE/E (and PPH). Conducting research to address critical gaps in the Knowledge and Practices of PE/E Prevention and Management, MCHIP developed and widely disseminated a practical review article in *BMC Pregnancy and Childbirth* on the safety of magnesium sulfate for management of severe PE/E. In this review, MCHIP dispelled the myths that MgSO₄ is a dangerous drug and recommended that clinical leaders in maternal health adopt, promote, and support the use of MgSO₄ as the anticonvulsant of choice in treating and managing PE/E.

Newborn Health

In newborn health, MCHIP played a pivotal role in the launch and expansion of the HBB initiative, beginning in 2010 at its inception as a USAID GDA. MCHIP has supported the introduction and implementation of HBB to address birth asphyxia in 25 countries on four continents, primarily through in-service training and site strengthening. Mentoring, supervision, and the incorporation of HBB into pre-service education in selected countries have been areas of focus as well. While Kangaroo Mother Care (KMC) existed more than 30 years prior to MCHIP, few countries had adopted or adapted this innovative yet simple approach that saves lives. MCHIP introduced or strengthened KMC, a proven method for managing premature and low birth weight (LBW) newborns, in 20 countries over the life of the program. In addition to direct implementation support at the country level, MCHIP provided technical leadership for the development of implementation guidance and tools and documented the facilitators and barriers to KMC implementation in Asia, Africa, Latin America, and the Caribbean (LAC).

Child Health

Similarly, MCHIP also supported global policy change in child health through advocacy for the revitalization of oral rehydration therapy and use of low-osmolality oral rehydration salts (ORS) and zinc in diarrhea treatment at facility and community levels, including the reclassification of zinc as an over-the-counter drug. The resulting policy change allowed community health workers (CHWs) to use zinc for diarrhea case management and antibiotics for the treatment of pneumonia. Building on an existing malaria platform, MCHIP supported the initial introduction and scale-up of community case management of diarrhea, malaria, and pneumonia in 10 countries.

Immunization

MCHIP also influenced global policies in the area of immunization, frequently sharing country-level experiences via regional- and global-level mechanisms. Through strategic participation in selected working groups and committees, MCHIP amplified project learning and helped set international agendas for immunization. At the country level, MCHIP built country capacity to plan, implement, monitor, and learn from 19 new vaccine introductions of five antigens in 11 countries. Additionally, MCHIP built the capacity of MOHs and partners to strengthen the performance of their routine immunization programs, systems, and services in nine countries.

Family Planning

Exercising global leadership in FP, MCHIP developed the “Statement for Collective Action for Postpartum Family Planning,” calling for a renewed focus and commitment to meeting the FP needs of women in the postpartum period. Simultaneously, MCHIP’s work to highlight the evidence of unmet need among postpartum women helped catalyze a global response from WHO. Together with USAID, MCHIP and WHO developed the “Programming Strategies for Postpartum Family Planning,” which provides strategies for policymakers and program managers on how to design PFP programs. MCHIP worked in 21 countries to improve family planning access and services, 17 of which included PFP.

RECOMMENDATIONS AND THE WAY FORWARD

Following the section on health technical area accomplishments, this report features a section that discusses overall MCHIP lessons learned and recommendations for the way forward to shed light on post-MDG programming. This third section offers insight for future programming and is organized in four parts: (i) Technical areas; (ii) Cross-cutting themes (Equity, Community Engagement, Quality, Scale-Up, and Integration); (iii) Monitoring and Evaluation (M&E); and (iv) NGO Partnerships, Global Alliances, and Leadership.

The *Recommendations and the Way Forward* concludes the main body of the report, and is followed by a series of important annexes, including the Program Coverage Matrix (Annex 1), the Illustrative Funding Matrix (Annex 2) and the Global M&E Framework (Annex 3). Annex 4 contains Country Briefs that highlight the experience, achievements, and lessons learned in each of the MCHIP field-funded countries as well as Regional Summaries for LAC and Africa Bureau core-funded activities. Brief snapshots for each Associate Award that provide overviews of the strategies, activities, and achievements to date for each award are located in Annex 5. A list of all MCHIP research studies is found in Annex 6. Program Learning outputs are highlighted in Annexes 7 and 8, including the Program Learning Matrix and Program Learning Theme Summaries respectively. A sampling of MCHIP success stories across technical and cross-cutting areas is presented in Annex 9. Brief reports on accomplishments through PVOs/NGOs and CORE Group are found in Annex 10 and Annex 11, respectively. Annex 12 discusses the work of the Strategic Communications Team, demonstrating how MCHIP—in concert with implementing partner organizations—has strategically leveraged other existing platforms within the global community and harnessed a multitude of communications tools to effectively communicate the programmatic achievements in multiple areas. Annexes 13–16 provide lists of all peer-reviewed journal articles; national policy changes to which MCHIP contributed; presentations at international conferences; and publications, materials, and tools developed by the overall project (training curricula, job aids, etc.). Both the body of the EOP report and the annexes provide detailed accounts of the challenges, successes, lessons learned, and way forward of MCHIP.

Overarching Key Accomplishments

The Maternal and Child Health Integrated Program (MCHIP) was the United States Agency for International Development (USAID) Bureau for Global Health’s flagship maternal, newborn, and child health (MNCH) program from 2008–2014. Designed to bring together multiple technically specific programs in maternal, newborn, and child health/family planning (MNCH/FP) under one mechanism, MCHIP had a diverse portfolio and provided technical assistance in more than 50 countries. MCHIP received field funding in 41 countries, bureau and other funding in an additional eight countries, and supported Child Survival and Health Grants Program (CSHGP) grantees in five countries where MCHIP had no formal presence. The expansion of country-level MCHIP activities over the first five years of implementation is illustrated in the map below. MCHIP gained valuable insights on the pathways and complexities of achieving impact at scale and for leveraging the talents of multiple partners.

Figure 1. Countries with MCHIP Presence/Activity

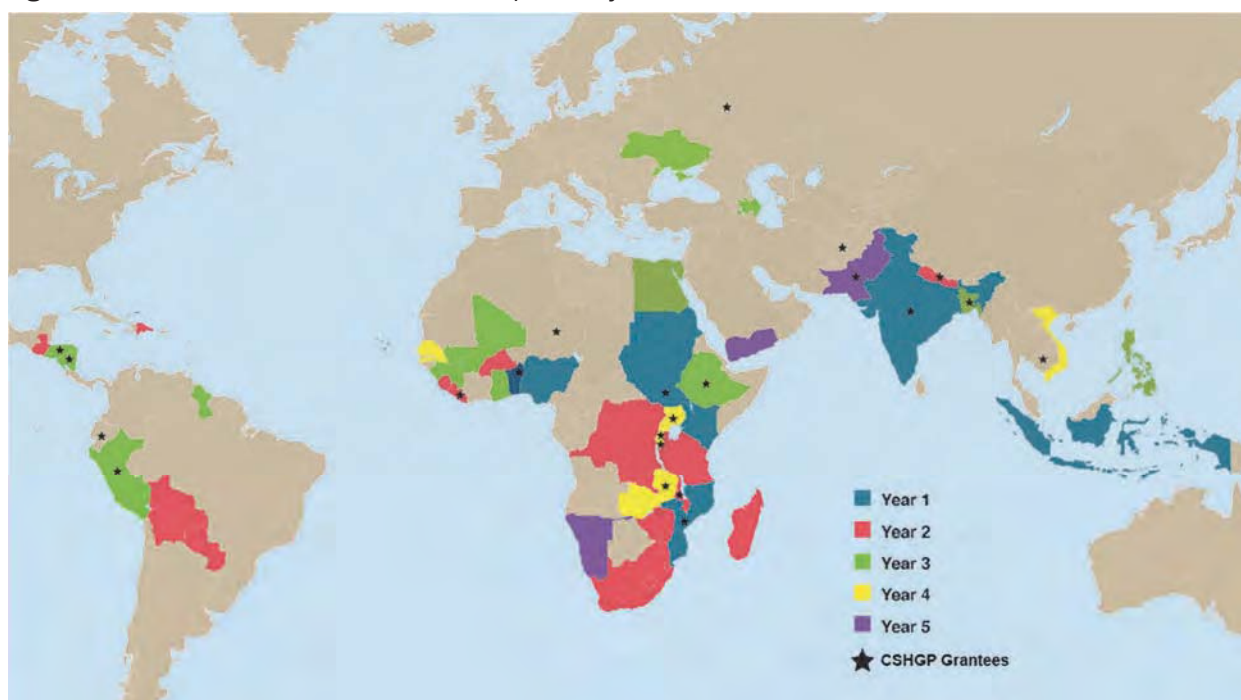
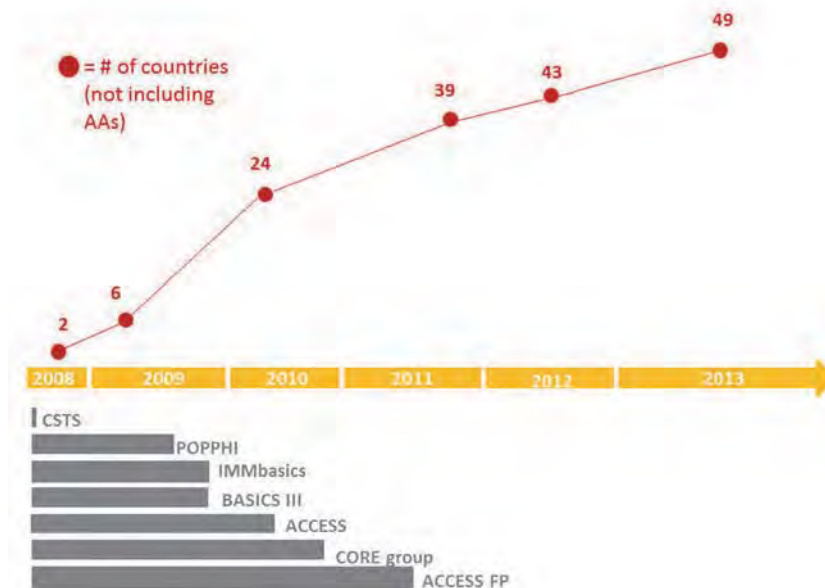


Figure 2 details six global USAID-funded projects that were woven into MCHIP over time, as well as the inclusion of CORE Group as a central partner.² The red line shows the expansion of the number of countries that MCHIP reached. In seven of these countries, MCHIP also managed a total of nine Associate Awards (AAs), some of which will continue several years beyond MCHIP’s end date.³

² Child Survival Technical Support Program (CSTS); Prevention of Post-Partum Hemorrhage Initiative (POPHI); Immunization basics (IMMbasics); Basic Support for Institutionalizing Child Survival (BASICS III); Access to Clinical and Community Maternal, Neonatal and Women’s Health Services (ACCESS); CORE Group: was rolled in after the start of MCHIP as a key partner within MCHIP; Centrally funded Associate Award to the Access to Clinical and Community Maternal, Neonatal and Women’s Health Services (ACCESS-FP).

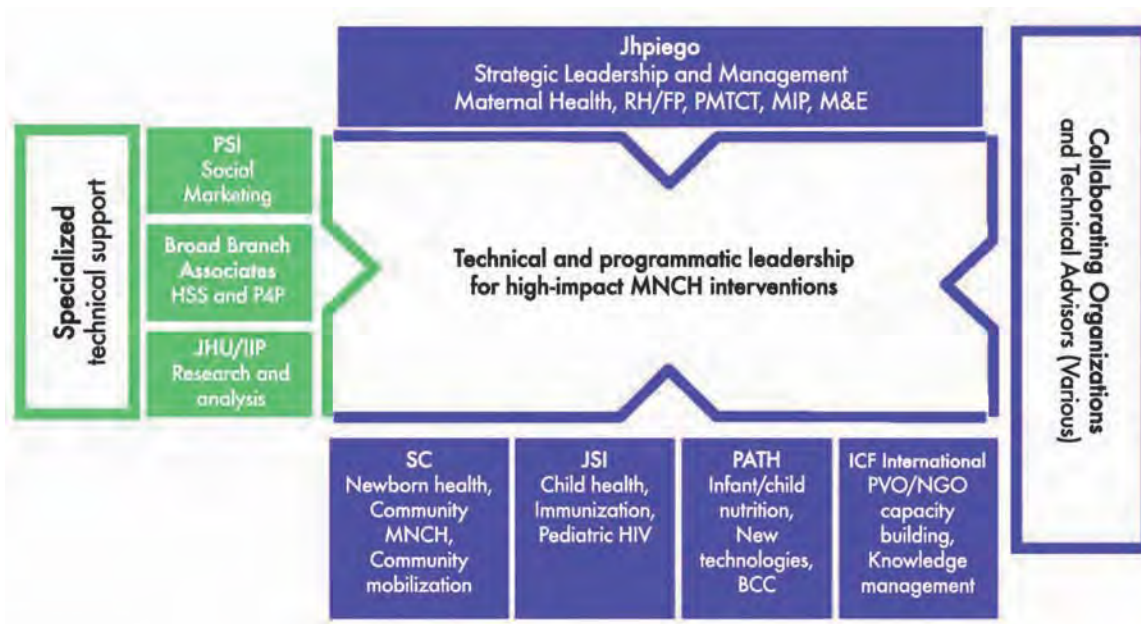
³ Associate Awards were implemented in Bangladesh (Mamoni 2009–2013; HSS 2009–2013), Pakistan (Fata-KP [2012–2017], MNCH [2012]), Mozambique (2010–2015), Malawi (2013–2017), South Sudan (2012–2017), Zimbabwe (2014–2016), and Yemen (2014–2019).

Figure 2. Six Years in the Making: Number of Countries Reached through MCHIP



MCHIP was a Leader with Associate Award, granted in 2008 to a group of partners, led by Jhpiego, including Save the Children, John Snow, Inc. (JSI), ICF International (which acquired Macro International at the start of the project), the Johns Hopkins University Institute for International Programs (JHU-IIP), the Program for Appropriate Technology in Health (PATH), Broad Branch Associates, and Population Services International (PSI). MCHIP’s team combined technical leaders from across the spectrum of MNCH/FP intervention areas with operations experts in health care financing, quality assurance (QA), private voluntary organization/nongovernmental organization (PVO/NGO) capacity building, social marketing, public-private partnerships, logistics, management information systems, behavior change communication (BCC), social mobilization, and high-quality research, analysis, and evaluation.

Figure 3. MCHIP Consortium



MCHIP's overall goal was to help achieve reductions in mortality and morbidity among women and children under five, and to accelerate progress toward reaching Millennium Development Goals (MDGs) 4 and 5. The MDG 5b, which focuses on improving FP, was also an integral part of the project and MCHIP provided assistance for FP to more than 22 countries. Working in concert with other MNCH partners, MCHIP was expected to contribute to the following outcomes:

- Reductions in maternal and under-five mortality in 30 countries
- Saving an estimated 118,000 mothers and 7.2 million children under five in high-burden countries
- Demonstrated improvements in coverage in use of MNCH services in 20 countries, with five of these benefiting from an integrated package of high-impact MNCH interventions
- Demonstrated greater equity in coverage of MNCH services in five countries
- All 68 MDG Countdown countries benefiting from MCHIP-promoted learning tools and approaches

Examples of MCHIP-Supported High-Impact Interventions That Were Introduced and Expanded:

- Use of chlorhexidine in newborn care
- Newborn resuscitation
- Kangaroo Mother Care
- Postpartum contraceptive choices, including IUDs
- Community distribution of misoprostol for PPH
- Emergency obstetric care, including treatment and management of PPH and eclampsia

MCHIP was designed with three overarching strategic objectives (SOs):

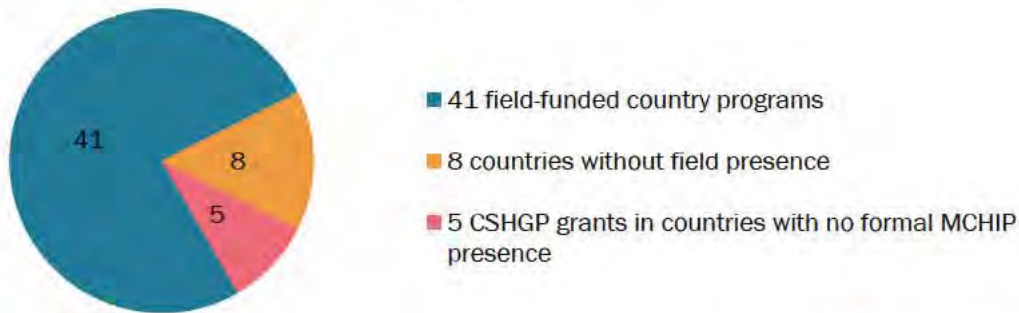
- **Strategic Objective 1:** Increased availability and use of appropriate high-impact MNCH interventions, including supportive FP interventions;
- **Strategic Objective 2:** Global leadership in MNCH, including further development and promotion of improved approaches; and
- **Strategic Objective 3:** Assist PVO/NGOs and their local partners supported by the CSGHP and PMI MCP programs to design, implement, monitor, and evaluate innovative, effective, and scalable community-oriented strategies that deliver integrated, high-impact interventions to vulnerable populations.

MCHIP's technical scope was broad, reaching across 10 technical areas of intervention:

- | | |
|--|--|
| ▪ maternal health | ▪ human immunodeficiency virus (HIV) (including voluntary medical male circumcision [VMMC] and prevention of mother-to-child transmission [PMTCT]) |
| ▪ child health | ▪ nutrition |
| ▪ newborn health | ▪ water, sanitation, and hygiene (WASH) |
| ▪ immunization | ▪ urban health |
| ▪ FP (with particular emphasis on postpartum family planning [PPFP] options) | |
| ▪ Malaria (with an emphasis on malaria in pregnancy [MIP]) | |

Overall, MCHIP provided technical assistance to 54 countries, receiving field funding in 41 countries and regional bureau and other funding in eight countries although it was initially designed to work in only 30. Success in early countries led to a marked increase in country and field Mission demand, which drove the rapid growth of MCHIP's coverage.

Figure 4. Number of MCHIP Intervention Countries

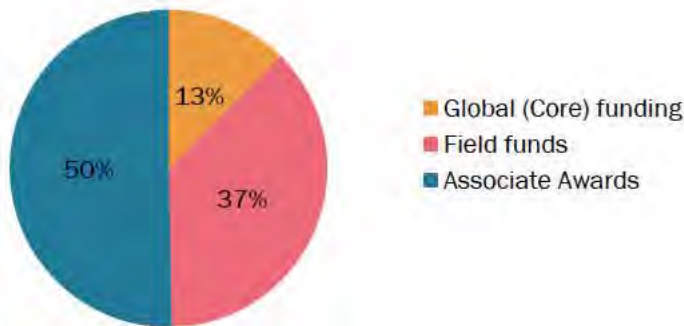


In most countries, MCHIP managed multi-year programs through local offices and staff who worked closely with ministries and other partners. In other countries, technical assistance (TA) interventions were limited to one specific area, supporting a one-time study or conducting research. Country activities were implemented through MCHIP core and field funds, Associate Awards (AA), and partnership with the CSHGP. Programs were based throughout Africa, Asia, the Middle East, and Latin America. Over the life of the project, MCHIP programmed a total of Redacted in core funds, field funds, and AAs to meet its objectives, of which nearly 90% were field-driven investments.

MCHIP Achievements:

- Over 4 million women counseled on FP as part of integrated essential care services
- 2.3 million couple years of protection to avert pregnancy supported by MCHIP FP services
- 1.7 million deliveries attended by a skilled birth provider
- 1.1 million women received active management of third stage of labor (AMTSL)
- 830,000 cases of diarrhea in children treated
- 88 million children received DTP3 from MCHIP-supported countries
- 309,000 newborns received antibiotics
- 229,000 children with pneumonia treated with antibiotics

Figure 5. Breakdown of MCHIP Funding



MCHIP prioritized five principal strategies in its effort to achieve maternal and child health impact:

- Taking high-impact interventions to scale
- Creating change through global and regional influence
- Ensuring country ownership
- Improving measurement and use of data at the country and global levels
- Expanding coverage through integrated approaches

As part of its overall strategy and to ensure sustainability and acceptance of its programs, USAID through MCHIP worked in concert with Ministries of Health (MOHs) and other Ministries, donors, and local and international NGOs (INGOs). This multi-faceted partnership approach was also evident in the relationships USAID forged through MCHIP with the World

Health Organization (WHO) and the United Nations Children’s Fund (UNICEF). In some instances, MCHIP had a small role, such as providing feedback on proposed policies. In others, MCHIP played a much larger role, such as contributing to the development of WHO’s *Programming Strategies for Postpartum Family Planning*. In every case, USAID’s flagship project was an integral part of a complex, inter-connected effort to reduce maternal and newborn mortality, and opportunities for global engagement were welcomed.

Discussion of Strategic Objectives

S01 Strategic Objective 1

Strategic Objective 1: Increased availability and use of appropriate high-impact MNCH interventions, including supportive FP interventions

Overview

Strategic Objective 1 focused on increased availability and use as well as the institutionalization in country health systems of appropriate, high-impact MNCH interventions, including FP interventions. MCHIP focused on a set of evidence-based, high-impact interventions across the MNCH-FP spectrum to reduce maternal and child mortality, as delineated by USAID at the outset of the program. This section provides highlights of the strategies and results; within Annex 8, the Program Learning Theme Summary for Scale-Up provides a detailed explanation of the analysis framework, elements, strategy, and results of countries with scale-up efforts that received the most MCHIP support. Table 1 below illustrates the 10 high-impact interventions on which MCHIP focused its efforts and the number of countries where MCHIP focused its support for scale-up of each of them.

Table 1. High-Impact Interventions MCHIP Supported for Scale-Up

INTERVENTION	NUMBER OF COUNTRIES
Uterotonic use immediately following birth (UUIFB) to prevent postpartum hemorrhage (PPH)	30
Magnesium sulfate for pre-eclampsia/eclampsia (PE/E)	15
Newborn resuscitation (Helping Babies Breathe or [HBB])	25
Kangaroo Mother Care (KMC)	24
Essential newborn care (ENC)/postnatal care (PNC)	13
Integrated community case management (iCCM) for childhood illnesses	10
PPFP with postpartum IUD (PPIUD)	13
Introduction of new and underutilized vaccines (NUVI)	11
Prevention of MIP	7
VMMC with HIV testing and counseling	4

Some of the interventions changed over time as new evidence came to light. For example, with the new global consensus in support of antenatal corticosteroids (ACS) to improve survival of preterm babies, MCHIP embarked on a three-country pilot project in **Cambodia**, the **Philippines**, and **Indonesia** to increase the use of ACS among providers. In the maternal health realm, WHO issued guidance in 2012 that put greater emphasis on uterotonic use at every birth, including the use of misoprostol when oxytocin is not available. As acceptance increased regarding the use of misoprostol at the community level to prevent PPH, MCHIP adapted programming to include misoprostol within its portfolio of supported interventions.

MCHIP selected six of the 10 high-impact interventions in Table 1 to document country experience with scale-up.

1. Uterotonic use immediately following birth to prevent PPH
2. Newborn resuscitation (HBB)
3. Integrated community case management of childhood illnesses
4. Postpartum family planning
5. Introduction of new and underutilized vaccines
6. Prevention of malaria in pregnancy, focusing on intermittent preventive treatment in pregnancy

MCHIP carried out operations research (OR) on prevention of PPH through community-based misoprostol provision in five countries—**South Sudan**,⁴ **Madagascar**, **Liberia**,⁵ **Rwanda**, and **Guinea**. Promising results from **Liberia** and **South Sudan** have already been published, with studies from **Madagascar** and **Rwanda** expected in late 2014.

MCHIP adjusted programming to complement existing country efforts, focusing on bringing policy and practice in line with international standards in countries that already had a solid maternal and newborn health (MNH) platform or that were redoubling nascent efforts. Understanding the political landscape of each country gave efforts at scaling up practices a better chance of success. For each country, MCHIP based its programming on existing resources, government interest, USAID Mission requests, and the possibility of interest from

other donors to aid in eventual resource mobilization in scale-up efforts. MCHIP's original mandate did not explicitly include health systems strengthening (HSS); however, MCHIP did take a systems approach when assessing the environment in support of scaling up. In order to achieve impact at scale, the contribution of the newly scaled intervention will only be as strong as the weakest link in the health system—including system governance, commodity procurement/logistics, information systems, and human resources. Published literature regarding one of MCHIP's target interventions supports this principle. When HBB was rolled out in **Tanzania**⁶ through initial training and regular post-training workplace follow-up, some providers demonstrated improved simulated performance of newborn resuscitation, but failed to perform those same skills when their actual clinical practice was observed. Thus, regular reinforcement of skills through supervised clinical practice, rather than just demonstrated competence at a single offsite training, was determined to be crucial for effective scale-up. This was in addition to the multiple system elements to be addressed to increase coverage and institutionalization such as inclusion in pre-service curricula, supply of needed commodities, and regular reporting in the health information system.

Mali's success in building the capacity of *matrones*, or auxiliary midwives, to insert implants is another example of how efforts to scale up a technical intervention and consideration of health systems intersect. *Matrones* are auxiliary midwives with limited skills, who serve large populations and are instrumental in providing access to multiple services. As modern contraceptive prevalence is low, particularly for long-acting methods, the Government of **Mali** was open to trying innovative approaches. MCHIP first trained 30 *matrones* in Diema, the Kayes region, on the insertion of implants. Post-training follow-up and supervision showed that 19 out of 24 *matrones* scored 80% or better on measures of quality of service provision. Government observers noted that the skills of the *matrones* were on par with or better than those of midwives and physicians, the usual service providers. As a result, the Government's *Norms and Procedures in Sexual and Reproductive Health* were modified to institutionalize a new national policy allowing *matrones* to continue inserting implants. This task-shifting

⁴ Smith JM et al. 2014. Clinical article: Advance distribution of misoprostol for the prevention of postpartum hemorrhage in South Sudan. *International Journal Of Gynecology And Obstetrics*; doi:10.1016/j.ijgo.2014.05.016

⁵ Smith JM et al. 2014. Advance distribution of misoprostol for prevention of postpartum hemorrhage (PPH) at home births in two districts of Liberia. *BMC Pregnancy and Childbirth* 14 (189); <http://www.biomedcentral.com/content/pdf/1471-2393-14-189.pdf>.

⁶ Ersdal HL et al. 2013. A one-day "Helping Babies Breathe" course improves simulated performance but not clinical management of neonates. *Resuscitation* 84(10); <http://dx.doi.org/10.1016/j.resuscitation.2013.04.005>

exercise can help overcome the bottleneck of a severe shortage of human resources needed for family planning service provision.

The majority of countries where MCHIP worked had multiple health systems bottlenecks that needed to be addressed in order to assist in a successful scale-up process. In **Malawi** the MCHIP Immunization Team helped the national Expanded Program on Immunization (EPI) address cold chain weaknesses to help pave the way for successful introduction and national scale up of PCV and Rotavirus vaccines. Using scale-up maps⁷ developed by MCHIP as a planning tool to identify system constraints across the various health system components needed for new vaccine introduction and scale up, MCHIP helped to identify those areas of the national EPI system most in need of improvement so that Pneumococcal Conjugate Vaccine (PCV) and Rotavirus vaccine could best be successfully scaled up. MCHIP's support for the successful introduction of the PCV and Rotavirus vaccine resulted in national-level coverage equivalent to other antigens, with PCV3 national-level coverage at 89% and Rotavirus 2 coverage at 81% by two years after their introduction (end of 2013). The fact that system issues were addressed means that these rapid coverage gains are more likely to be sustainable within the improved national EPI system.

Implementation Strategies for Scaling up High-Impact Interventions

MCHIP employed the following five main strategies that can contribute to scaling up: 1) advocacy and coalition building; 2) attention to organizational processes and capacity building; 3) resource mobilization; 4) M&E and data use for action; and 5) client and community engagement.

Advocacy and Coalition Building

Advocacy is an essential tool to build consensus among key global and country-level stakeholders that an intervention should be scaled up. The MCHIP experience has demonstrated that advocacy at a global level can translate to change at the country level and that such advocacy can indeed have a role in cultivating in-country champions for the introduction and scale-up process. Most of the MCHIP program teams invested in global advocacy, which ultimately resulted in decisions at the country level to introduce and expand proven, evidence-based interventions by national governments. At the global level, as a member of the Global Development Alliance (described in more detail in the section on Strategic Objective 2), MCHIP contributed to the design and refinement of the HBB implementation guide to make it user-friendly and compatible with national systems. As demonstrated through MCHIP experiences with successful introduction and expansion of HBB in various countries, including **Bangladesh, Malawi**, and several countries in the LAC region through the LAC Neonatal Alliance, MCHIP contributed to advocacy by engaging stakeholders and key decision-makers in the discussions about the benefits, and promoting country ownership of the intervention. The regional advocacy through the LAC Neonatal Alliance also contributed to mobilization of resources devoted to introduction and scale-up of HBB in several countries in which MCHIP did not have a presence (e.g., Colombia). This will be covered in more detail on the section on Resource Mobilization.



⁷ Please refer to Program Learning Scale-Up Theme Summary, Annex 8, for more details.

MCHIP teams also supported advocacy by contributing to the development of WHO guidelines, created opportunities for knowledge-sharing virtually and at regional forums, and assisted in creating an evidence base for successful implementation strategies. As an example, the Immunization Team worked with WHO and other global partners on the guidelines and operational principles for the adoption of several new vaccines including PCV, Rotavirus, and meningococcal vaccine. The Maternal Health Team also worked with WHO on guidelines for use of misoprostol for PPH prevention for home births and helped to promote this and other key maternal interventions through regional forums in Addis Ababa (2011) and Dhaka (2012). Post-meeting surveys with participants from the various MOHs confirmed that the decision to introduce and in some cases scale up misoprostol was a direct consequence of attendance at one of these meetings and learning of the new guidelines and other countries' experiences.

Through global advocacy, MCHIP contributed substantially to refocused interest in the “forgotten” killers of children—diarrhea and pneumonia. MCHIP brought iCCM to the country level in **Kenya**, working hand in hand with national ministries to advocate for openness to task shifting and the introduction of iCCM to reach communities without access to health facilities. MCHIP helped establish a national iCCM implementation plan, referred to as the iCCM Roadmap, and coordinated efforts by all partners involved in iCCM, resulting in coordinated operations research efforts between MCHIP, WHO, and UNICEF on the scalability of iCCM. By advocating for zinc to be available without a prescription, the Kenya Ministry of Medical Services and Ministry of Public Health and Sanitation officially changed the pharmaceutical classification of zinc from prescription medicine to an over-the-counter drug. This policy change paved the way for expanded community access to zinc and is expected to contribute significantly to child health improvements through iCCM efforts and beyond. In **Mali** MCHIP was also part of a coalition with UNICEF, Save the Children, and others that advocated for iCCM implementation through the newly developed SEC⁸ community primary health care system. MCHIP's experience in supporting iCCM and this advocacy contributed to the MOH's decision in March 2014 to release its plan for national SEC and iCCM roll out.

When the advocacy process contributed to government ownership and especially to the commitment of resources, programs progressed quickly. This was dramatically illustrated in the PFPF program in **India**. The repositioning of the IUD being advocated by MCHIP and other development partners fit well with the government's reinvigoration of PFPF services. It also dovetailed with the Government of India's (GoI) Janani Suraksha Yojana (JSY) program that had been initiated in 2005 through the National Rural Health Mission (NRHM). JSY promotes institutional delivery among poor women and had resulted in dramatic increases in institutional delivery and therefore large increases in potential clients for facility-based PFPF services. The GoI folded PFPF/PPIUD services into this larger scheme, thereby achieving rapid gains in service delivery for PFPF/PPIUD. A total of 43,000 PPIUDs were inserted in the three MCHIP states between early 2010 and July 2014. The GOI scaled up MCHIP-supported PFPF/PPIUD activities nationwide with the support of other donors and was able to perform an additional 257,000 insertions by July 2014 outside of MCHIP-supported states. The MCHIP India team ensured that this service expansion was done with quality by creating a program that included PPIUD performance standards, which the GoI incorporated into national policies and standard operating procedures. The MOH tracked the post-insertion expulsion rate as a sentinel indicator of quality during the expansion process. Expulsion rates remained low; key informants in the MOH attribute this success to the fact that there were dedicated counselors, a strengthened service delivery program at the facility level, and good follow-up. The government continues to build on this scale-up success. They are currently allowing task shifting to nurses to further increase access to IUD insertions.

⁸ The integrated essential community-based maternal, newborn, and child health/FP package.

Some MCHIP teams developed tools to help focus advocacy and coalition-building around coordination of efforts to address specific tasks in the scale-up process. An example of this was the use of scale-up maps to identify key scale-up tasks as well as gaps. The Maternal Health Team used these maps (an example is shown in Annex 8) as a centerpiece for its assessments of 37 country programs in its Multi-Country Analysis (MCA) for the prevention and management of PPH and PE/E. This process revealed that partnership arrangements in the majority of countries are based on broad collaboration among USAID programs, projects, and other partners, as well as collaboration between the local MOH and other partners. Through work on institutional adoption of policies, training systems, and use of information systems, MCHIP and other donors facilitated country ownership. Similar mappings were done by the Newborn Team for Helping Babies Breathe and Kangaroo Mother Care.

Organizational Processes and Capacity Building

MCHIP assisted various MOHs to identify and address the main organizational bottlenecks to scale-up. One of the main bottlenecks was the lack of sufficient numbers of adequately trained providers. Training of currently authorized providers was a large MCHIP focus (over 280,000 health workers were trained over the life of the project). MCHIP also advocated successfully for task shifting and for training of these newly authorized personnel to assume their additional tasks. In addition to examples already mentioned in **Kenya** (iCCM), **Mali** (FP), and **India** (FP), some other examples in which MCHIP supported task shifting as a scale-up strategy are the following:

- **Tanzania:** Nurses were trained to conduct all the surgical tasks related to VMMC; as a result, more than 123,000 circumcisions were performed by December 2012 and the performance of nurses, clinical officers, and doctors was of similar quality.
- **Kenya:** CHWs manage and monitor HIV-positive mothers and reduce the transmission of the virus to newborns.

While continuing to support task shifting as a viable strategy to increase scale-up, MCHIP's assessment of this practice has signaled some aspects that need to be addressed globally. These include:

- The role of incentives, whether monetary or non-monetary, as an important way to facilitate the adoption of new practices by providers;
- The importance of keeping in mind that one will reach a saturation point for provision of quality services as additional tasks are added to providers' current responsibilities;
- The need for advocacy aimed at currently authorized health care providers who may be resistant to task shifting; and
- The imperative to provide follow-up for at least one to two years to ensure that the new skills are being used and performed with sufficient quality.

Resource Mobilization

A combination of resources from national governments and development partners needs to be mobilized for technical support and to finance the additional costs associated with scaling up. Assuring sufficient funding is one of the more difficult aspects of scale-up to achieve, given the complex development landscape globally and in most countries, with multiple initiatives competing for attention.⁹ This creates program tension and requires efforts to identify ongoing funding mechanisms to ensure sustainability. Some countries are able to increase their

⁹ Larson A, Ricca J, Posner J, and Raney L. 2014. *Lessons Learned from the Scale Up Experience of Six Key High Impact Interventions in Reproductive, Maternal, Newborn, and Child Health (RMNCH)*. Washington, D.C.: MCHIP.

financial support: the Government of **India** supported resource mobilization by shouldering a significant part of the cost of expanding the program to introduce PPIUD. **Malawi**, however, demonstrates the challenges associated with sustaining interventions; there is a \$31 million projected funding gap for the continued scaling up of the immunization program, and the 2012–2016 budget lists MCHIP as a donor, despite the fact that MCHIP is a program reliant on donor funds and ended in 2014.

Given its global, regional, and in-country presence, MCHIP had many options to advocate for resource mobilization. As an example of a regional resource mobilization initiative, MCHIP supported HBB through the Latin American and Caribbean Newborn Alliance. Even though MCHIP had no country presence in Colombia, clinical leaders and medical universities joined the coalition, and the effort benefited from the work of the Pan American Health Organization. National teams were supported by the American Academy of Pediatrics (AAP), one of the lead partners in the HBB Global Development Alliance.

Alliances worked very effectively when they were formed with a coalition of powerful groups. To advance the scaling up of UIIFB, MCHIP worked in partnership with a high-level coalition that included WHO, the Bill & Melinda Gates Foundation, United Nations Population Fund (UNFPA), UNICEF, the United Nations Commission on Life-Saving Commodities, bilateral donors, in addition to USAID, representatives of national governments, British and American researchers, and drug manufacturers.

These experiences demonstrate that the success of mobilizing partners for scale-up depends on existing global alliances, the strength of the government in the particular sector, and the vibrancy of the civil society sector. Working with a wide range of partners enabled MCHIP to leverage funds and allowed for the inclusion of technical information and services in new geographic areas, health care settings, and cadres.

While MCHIP achieved great success through some of these partnerships, MCHIP also learned that involving multiple NGOs and technical agencies can result in competing agendas and uncoordinated scale-up. For example, scale-up efforts in **Burkina Faso** to combat MIP proved problematic due to the numerous coordinating committees for malaria, each reflecting national or development partner priorities and made up of representatives of those agencies. The National Malaria Control Program (NMCP) participated in all of the committees, but NGOs involved in malaria control and reproductive health did not. Given that many NGOs provided health services either independently or by supporting the government services, lack of coordination was an obstacle to scaling up the effort to fight MIP. The coordination process worked better in **Ghana**, where the coordinated engagement of faith-based organizations was crucial to the government's ability to increase coverage. From 2008 to 2011, there was a 7% increase in the use of insecticide-treated bed nets (ITNs), thanks to the collaboration among partners.¹⁰

M&E/Data Use for Action

MCHIP successfully used data to convince decision-makers to take action and scale up effective interventions. For example, as a foundational step for scaling up the use of uterotonic, MCHIP implemented a uterotonic estimation exercise in **Mozambique, Tanzania, Jharkhand State of India, and Yemen** to measure coverage of UIIFB. In a transparent, consultative forum, experts reached a consensus about national coverage for the use of uterotonic in the third stage of labor using this novel methodology that combined expert opinion with available data for both facility and home births. Importantly, this exercise enabled stakeholders to develop estimates of coverage where none were available previously. In highlighting gaps in coverage at the

¹⁰ 2013 Ghana Malaria Operational Plan.

community level, this UIIFB exercise engendered advocacy around the idea of greater UIIFB coverage for all births regardless of delivery location. Results stimulated key policy and programmatic changes: driving efforts to get better data on uterotonic use and availability in **Tanzania**, and stimulating and reinforcing plans in Jharkhand State of **India** and **Mozambique**, respectively, to move forward with community-based distribution of misoprostol programs and to improve storage conditions for oxytocin.¹¹

MCHIP was also successful in using data to scale up MIP prevention. MCHIP helped lead a data collection exercise with USAID’s Malaria Action Coalition to create an MIP readiness framework. The framework examined eight key areas of MIP programming: integration, capacity building, policy, community awareness and involvement, commodities, M&E, QA, and financing. Using the framework and stakeholder interviews, MCHIP facilitated an in-depth analysis of **Zambia’s** MIP progress for future implementation readiness, and identified lessons learned to inform future efforts. MCHIP used **Zambia’s** case study as a model in the hope that other African countries can evaluate their progress in MIP prevention and control and determine next steps, adapted to specific local situations. Multi-country analyses were also developed for PPH, PE/E, HBB, and KMC; these were previously described.

MCHIP’s learning on scale-up highlighted the challenge of obtaining good coverage data on the impact of scale-up. In future programming, it will be important to assure relevant baseline data and monitoring to track the changes in service expansion. Ideally, monitoring efforts should track indicators of quality as well—as was done with PPIUD in India, described earlier in this section.

Community/Client Engagement

Though often scale-up efforts tend to focus on improving the supply of services, engagement of clients and communities can strengthen demand for, strength and quality of delivery, and sustainability of services. In **India**, the JSY program resulted in dramatic increases in the numbers of clients coming for institutional deliveries. The majority of PPIUD providers interviewed in India reported that the growth and sustainability of the project was bolstered by increasing community demand through the involvement of community mobilizers. In **Mali**, community health associations are responsible for health care at the local level, but they were not involved in the design of the new primary health care program that included iCCM activities. This hindered scaling up services for three important reasons: 1) many of the CHWs were not selected from within the community, but instead were brought in from other districts or regions of the country, and cultural differences and issues of lack of trust for these previously unknown providers have led to under-utilization of services; 2) CHWs themselves often do not feel accepted by the local community and as such turnover can be very high; and 3) the package of services that the new CHWs can provide has not been communicated well to the community and, as such, expectations have not been met. However, community desire for improved primary

Uterotonic Estimation Exercise

The process for calculating an estimate depends on conducting a desk review of existing data, calculating new data, and disseminating the data. Experts take into account the following four factors:

- **Context:** Use existing documents to determine what policies, norms, scopes of practice, etc. exist regarding the use of uterotonics.
- **Distribution of births by location:** Use available survey data to understand the distribution of births in public facilities, private facilities, or at home, and who attends the woman in each setting.
- **Uterotonic use in each birth location:** Use data such as quality of care surveys to assess uterotonic use in each setting. Where data are not available, participants debate the likely level of practice.
- **Adjustment of estimates based on various factors:** Use additional available information, such as frequency of stock-outs, attendance at birth by cadres not authorized to use uterotonics, or quality of oxytocin supply, to adjust coverage estimates to reflect the real picture of service provision.

¹¹ For more details on MCHIP efforts in PPH, please refer to the Maternal Health Technical Section.

health care services in some previously poorly served rural areas was strong, and sustained the SEC efforts through a difficult time for the Government of Mali.

The MCHIP experience in VMMC also demonstrated that sound demand creation and community mobilization are essential for reaching national goals for VMMC. When only a single partner was given the task of community mobilization, they were not able to adequately cater to differing information needs at the district level. In addition, when demand creation and service delivery were separated, results were not as strong. The MOH in Malawi has guidance that demand creation should happen at least two weeks prior to the onset of a campaign and MCHIP supports this. When demand creation activities start only days before a campaign, it limited the number of participants coming in for services. MCHIP supported the government's first VMMC campaign in **Malawi**. In the four-week campaign, 4,516 men received VMMC, accounting for a 225% increase over the number of circumcisions performed in the country over the two years preceding the campaign (less than 1,000 circumcisions per year). HIV testing uptake was high in Malawi, with 4,237 (97.4%) clients accepting testing. Of these, 2.1% of clients tested HIV-positive. Across four countries, **Swaziland, Lesotho, Malawi, and Tanzania**, 400,000 men were circumcised with MCHIP support, providing evidence for the feasibility of scaling up in this area.

Scale-Up Outcomes: Service Expansion (Coverage) and Institutionalization

The eventual goal of any scale-up process is achievement of sustainable impact at scale, not simply newly trained providers or the presence of a new service. Achievement of this goal requires *both* expanded coverage *and* institutionalization of the intervention into country health systems. The intervention should ideally reach all those in need of it, close to universal coverage. In order to sustain this expanded service delivery, the intervention should be institutionalized in country health systems. Achievement of institutionalization implies the application of a systematic approach from the beginning that strives to address all six of WHO's Health System Building Blocks: governance (policy, coordination, leadership, planning), financing, personnel including training, service delivery (supervision, quality improvement, and demand), health information systems, and logistics systems.¹² Since the achievement of sustainable impact will only be as strong as the weakest of these components, improvement and maintenance in all of these areas, while challenging, is essential to assure quality and sustainability, and achievement of the ultimate goal of "sustainable impact at scale."

Institutionalization

In PY6, MCHIP took a health systems view and adapted its original scale-up map¹³ to include assessment of institutionalization of an intervention using WHO's six Health System Building Blocks. To describe the nature of scale-up for the six key technical interventions studied, MCHIP undertook a landscape analysis in 14 countries utilizing the scale-up matrices, further probed the process in four in-depth case studies,¹⁴ and reviewed program learning studies from individual technical teams.¹⁵

The challenges of institutionalization can be described through the example of iCCM. As a strategy to increase access by extending case management of childhood illness beyond health facilities, it had several key components. These key components included task shifting to CHWs, integrating several services that may be delivered and funded separately, and developing new

¹² Please refer to Program Learning Scale Up Theme Summary, Annex 8.

¹³ Please refer to Program Learning Scale Up Theme Summary, Annex 8.

¹⁴ Additional in-depth investigation was done in India, Mali, Malawi, and Bangladesh.

¹⁵ Citation of paper: Larson A, Ricca J, Posner J, and Raney L. 2014. *Lessons Learned from the Scale Up Experience of Six Key High Impact Interventions in Reproductive, Maternal, Newborn, and Child Health (RMNCH)*. Washington, D.C.: MCHIP.

or updated policies promoting the development of cadres of workers who can provide specific medications. Each aspect of iCCM required attention in order for the intervention to reach sustainably high levels of coverage and progress on each of these components moved at different rates. This sometime resulted in a slow progress but ultimately a more sustainable program.

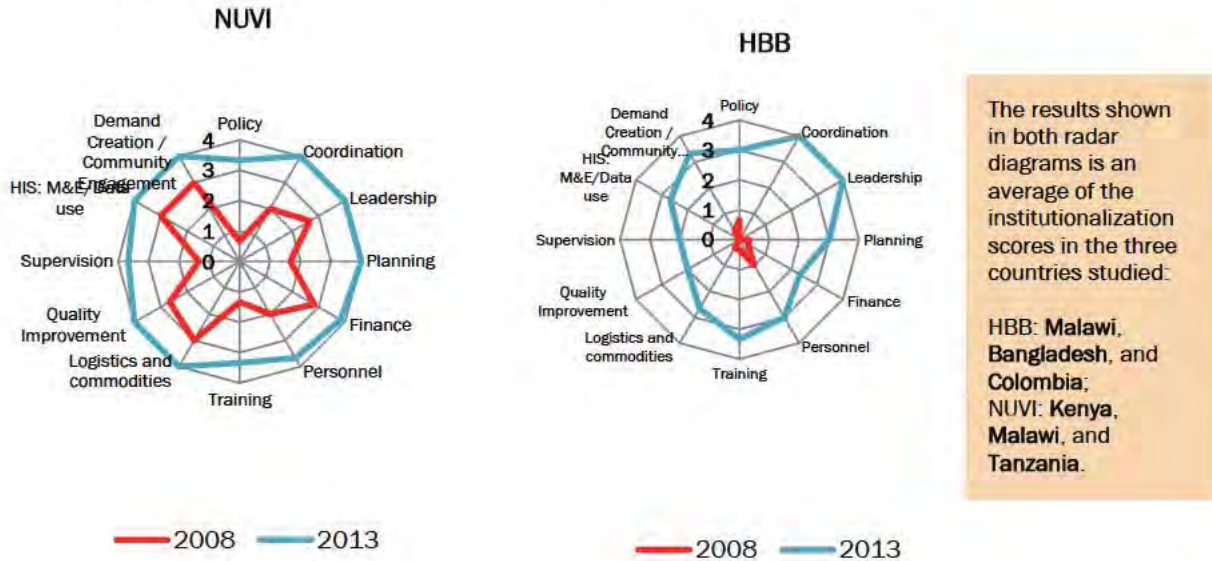
An analysis across all six studied interventions (explained in more detail in Annex 8) showed that institutionalization improved significantly over the last five years over the various health system building blocks. The health system building blocks showing the most progress were governance (i.e., policies) and human resources (i.e., training). There was less reported progress on financing, supervision, and health information systems (HIS). Financing is still not receiving sufficient attention in a number of settings, and there is continued reliance on development partners for financing the scale-up effort and ongoing program delivery. The inclusion of new indicators in registers, and especially reporting and use of these indicators, is a slow process in many places that is dependent on country HIS revision processes that occur on a different timeline that is often not in synchrony with the process of introducing the new intervention.

To illustrate differences in the progress on institutionalization across interventions, radar diagrams of progress for two very different interventions are shown illustratively below—for the new vaccine PCV (NUVI) and for HBB. The results shown in both radar diagrams are an average of the institutionalization scores in the three countries studied (HBB = **Malawi, Bangladesh, and Colombia**; NUVI = **Kenya, Malawi, and Tanzania**).

Dramatic progress in scaling up NUVI and HBB is presented below by each of 10 essential components for sustainable programming: policy, coordination, leadership, planning, finance, personnel, training, supervision, health information systems, and demand. Figure 6 shows the results of institutionalizing these two interventions over five years across each of the three countries studied per intervention.

Aggregated institutionalization scores show that the governance components of policy development, coordination, leadership, and planning increased significantly between the beginning and end of the review period and rose to the highest levels. Although the differences are not great, there was less reported progress on financing, supervision, and M&E. A lower mean score for financing indicates that the intervention is still not receiving a line item in a number of settings, and there is continued reliance on development partners for financing the scale-up effort and ongoing program delivery.

Figure 6. Progress in Institutionalization for NUVI and HBB from 2008 to 2013



NUVI built on the existing immunization delivery platform. It therefore started from a level of institutionalization in 2008 that was already significant. Progress was made on all components by 2013. The financing institutionalization score only depends on having a line item on the country budgeting process. There is still dependence on outside financing for this. HBB rolled out in a more “vertical” fashion—in other words, it initially had separate trainings and was not immediately incorporated within existing supervisory and logistic systems. There was progress toward similar institutionalization scores for governance (policy, coordination, leadership). But the lag in institutionalization was greater in terms of service delivery support (supervision, QI) and commodities.

HBB coverage rose in all three study countries:
Burkina Faso: 1% to 39%
Kenya: 15% to 29%
Ghana: 46% to 65%

Service Expansion (Coverage Changes)

Systematic documentation of service expansion and coverage changes was more difficult to obtain for the six studied interventions. Some interventions like UUIFB and iCCM are complex and have several component parts. Others, like HBB, are facility-based and not easily amenable to population-based coverage estimates. Due to varying country contexts and competing priorities, baseline and final coverage surveys were not systematically done for any of the interventions. Table 2 below provides an indication of the service expansion changes achieved by the studied countries for each of the six interventions. This information can be summarized briefly as follows:

- **NUVI:** The most dramatic and best documented changes in coverage were achieved for this intervention. Routine EPI systems in all three countries achieved PCV coverage rates at or near national DPT3 rates within two years of introduction.
- **HBB:** In both **Bangladesh** and **Malawi**, there were large increases in the number of districts and facilities with trained and equipped personnel deployed (in both cases, there were facilities with providers trained and equipped in HBB in 2011 and by 2013 80% were in **Bangladesh** and 90% in **Malawi**). Providers in both countries were already performing resuscitation in 2011, so the question of what is being measured should be considered. In addition, impact evaluations in both countries showed that although providers had

improved knowledge and skills, they had not substantially changed their clinical practices. Further action in support and study of the scale-up process is warranted.

- MIP/Intermittent preventive treatment in pregnancy, second dose (IPTp2): Rates of coverage rose from 14% to 38% in comparably collected IPTp2 in national DHS, MICS, or Malaria Indicator Survey data from at or near 2008 to 2012/13. There were multiple initiatives occurring that contributed to this increase, with financing from PMI, Global Fund, and others.
- UIIFB was composed of two interventions: oral misoprostol for home births and the use of injectable oxytocin for facility-based deliveries. The groundwork for scale-up of misoprostol was laid in both **India** and **Mozambique**—pilot projects were done, policies developed, and initial discussions for national plans held. Coverage has not changed yet; it has remained minimal in both settings. The other technical intervention under UIIFB is use of injectable oxytocin in facilities. With previous work promoting AMTSL in both countries as a foundation, the coverage among facility-based deliveries was already above 80% when MCHIP began and remained relatively unchanged over the life of the project.
- iCCM started at zero or near zero coverage in all three countries studied in depth (**Rwanda**, **DRC**, and **Mali**). As iCCM is a complex intervention that often involves the need for policy changes, establishing or strengthening a CHW cadre, solving health system bottlenecks for logistics, supervision, and HIS. Increasing coverage levels, as measured by the percentage of districts covered, is a lengthy process. **Rwanda** has made steady progress toward national coverage. An important consideration is the measurement of the true level of population coverage within districts with a CHW/iCCM program. Measuring and reporting this population coverage is not done in any of the three countries on a regular basis. Implementation data have revealed that the average caseload for June 2012 to May 2013 was approximately 342 per 1,000 children under five for the three diseases. In comparison to the other five countries being evaluated, **Mali** has achieved the third highest iCCM treatment rate. Based on routine data, health care workers treated 18% of all under-five cases treated in the public sector, with 32% of diarrhea cases, 20% of pneumonia cases, and 15% of malaria cases treated by health care workers in comparison to the health facilities.¹⁶ There is ongoing research in the global iCCM community concerning the question of whether iCCM programs are in fact extending coverage to previously unreached children or simply causing shifts from facility- to community-based care. Based on this lack of important information, a Maternal and Child Survival Program (MCSP) priority is to help countries collect population-level coverage information feasibly and on an ongoing basis and analyze it in ways that can answer this question.
- PFP/PPIUD coverage was also near zero when MCHIP started in all three countries studied in depth (**India**, **Tanzania**, and **Philippines**). Coverage rose in the areas supported by MCHIP, and in the case of **India**, the number of insertions rose quite dramatically to over 40,000. Only **India** currently has a national scale-up plan and has already inserted over 400,000 PPIUDs in additional states. However, national coverage in all three countries is still estimated in the single digits.

¹⁶ Summative report on the external evaluation of the Catalytic Initiative (CI)/Integrated Health Systems Strengthening (IHSS) program in Mali. Undertaken by the Medical Research Council, South Africa, in partnership with the University of the Western Cape and Save the Children, USA. UNICEF, May 2014.

Table 2. Service Expansion (Coverage Changes) for Six Interventions in 14 Countries

INTERVENTION	EXPANSION OF THE INTERVENTION TO FACILITIES, AREAS, AND HEALTH WORKERS	COVERAGE OF INTERVENTION AMONG INTENDED BENEFICIARIES
PPFP	<ul style="list-style-type: none"> ▪ In India, PPIUD introduced in at least two sites in 19 states and in all district-level facilities in six states. ▪ In the Philippines, 40% of districts have a PPFP program, and the 10 facilities with PPIUD services reach 31 of the country's 81 provinces. ▪ In Tanzania, 500 health workers have been trained and 14% of districts are implementing PPFP. 	<ul style="list-style-type: none"> ▪ By 2013, PPIUD acceptance rates in sites where the service was introduced in India averaged between 5% and 10%. ▪ In Philippines, the percentage of women counseled ranged from 6% to 80% in the 10 facilities where PPIUD service was introduced.
HBB	<ul style="list-style-type: none"> ▪ Almost all skilled birth attendants in Bangladesh, one-third in Malawi, and those in priority sites in Colombia attended the two-day, competency-based training. 	<ul style="list-style-type: none"> ▪ The intervention had expanded almost universally in all three countries. ▪ Impact evaluations in Bangladesh and Malawi found that the introduction of the intervention has not yet caused significant change in clinical practice.
UUIFB	<ul style="list-style-type: none"> ▪ A uterotonic is routinely provided for PPH prevention in almost all government facilities in India and Mozambique. ▪ Policy agreement in India and Mozambique to scale up misoprostol. 	<ul style="list-style-type: none"> ▪ About half of all births in Mozambique and India are in government public health facilities; utilization of uterotonic drugs in these settings was already high at the beginning of the period and did not change. ▪ Quality of service provision was a focus of effort in Mozambique, but no definitive data on improvement yet exist. ▪ Service delivery not started for misoprostol in India and Mozambique.
iCCM	<ul style="list-style-type: none"> ▪ CHWs were recruited, trained, and established in eligible communities in Rwanda and Mali. ▪ The program has been expanded from 10% to 20% of districts in DRC. 	<ul style="list-style-type: none"> ▪ iCCM programs are still at an early stage of service expansion in DRC and Mali, whereas Rwanda has extended services to all districts. ▪ A UNICEF evaluation in Mali showed that 60% of districts had introduced iCCM. CHWs were estimated to be treating 15–32% of cases of targeted illnesses in these communities. It is still not clear to what extent iCCM has expanded or replaced facility-based child illness services.
MIP/IPTp	<ul style="list-style-type: none"> ▪ Training in MIP reached 13,000 health workers in Ghana. ▪ Training reached most health workers in malaria-affected areas in Kenya. ▪ Training reached only one or two participants per facility in Burkina Faso. 	<ul style="list-style-type: none"> ▪ Recent household survey data not available, but there is evidence of increased coverage of at least two doses of IPTp in all three countries from comparably collected Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), or Malaria Indicator Surveys done in the last four years, compared with data from before 2008.

INTERVENTION	EXPANSION OF THE INTERVENTION TO FACILITIES, AREAS, AND HEALTH WORKERS	COVERAGE OF INTERVENTION AMONG INTENDED BENEFICIARIES
NUVI/PCV	<ul style="list-style-type: none"> ▪ PCV introduced through the national programs to all parts of Malawi, Tanzania, and Kenya. 	<ul style="list-style-type: none"> ▪ In the first full calendar year following introduction, Health Management Information System (HMIS) data reported to UNICEF showed that all three countries, Malawi, Tanzania, and Kenya, achieved over 95% of eligible children fully vaccinated with PCV through the routine immunization system.

S02 Strategic Objective 2

Strategic Objective 2: Global leadership in MNCH, including further development and promotion of improved approaches

MCHIP's second Strategic Objective aimed at positioning MCHIP and USAID through global leadership to translate its experience into international advocacy, policy, tools, and guidance, and in turn influence country programs and accelerate progress toward MDGs. Global leadership was defined as a broad-based set of actions, including the ability to convene key actors, influence the global agenda in policy and guidance, develop and disseminate tools, and monitor and evaluate results. To complement these efforts, MCHIP worked to document the collective wisdom and learning from field experience as program learning so it could be used to improve policies, guidance, and tools supporting community work, quality of care (QoC), integration of services, and scale-up. MCHIP's experiences with global leadership and program learning are discussed below.

Global Leadership

Convening Key Actors

By assembling key actors, MCHIP created opportunities for global dialogue on important and pressing issues in the MNCH arena. MCHIP employed a number of strategies to convene key actors that drew upon inclusive practices, such as frequent consultation with partners and shared ownership of processes that expanded the types of actors contributing to global and national discourse. In addition, MCHIP's involvement with CORE Group widened the sphere of influence of global civil society actors, and USAID's Global Development Alliances (GDAs) provided structures for dialogue and debate.

USAID through MCHIP dedicated resources to examining innovations and impact and garnering knowledge management; MCHIP documented and disseminated its vast learning to a broader audience. The level of expertise of MCHIP and USAID staff became a resource to the global community as evidenced by numerous invitations to participate in global working groups, serve as experts to policymakers, speak at conferences, and contribute to peer-reviewed journals.

Global Conferences

MCHIP supported global and regional conferences before, during, and after they took place, which increased learning and the use of new evidence. MCHIP's contributions included disseminating latest evidence in global meetings, assuring the attendance of key gatekeepers and agents of change, assisting country teams with the preparation of their conference materials, and funding follow-up activities. MCHIP staff presented at 29 different international conferences, sharing program results and evidence to support the use of high-impact interventions. These meetings had diverse representation, including many different countries, pan-donor support, and high attendance. The follow-up to global conferences, which included additional working meetings and further funding depending on the country context, was vital to ensuring that country-level efforts maximized the learning from meetings and resulted in tangible changes and actions, allowing countries to refine existing plans and initiate new interventions.

While the full list of conferences is discussed in detail in Annex 15, some highlights include:

- At the first *Latin America and Caribbean Annual Conference on Kangaroo Mother Care*, held in December 2011 in the Dominican Republic, participants debated how to overcome reluctance in the medical community to embrace such a low-tech intervention. A significant outcome from this conference was the initiation of the regional network and community of practice to support the continuation of doctor-to-doctor and implementer-to-implementer regional learning. This network of more than 250 members allowed countries to expand health services, grow stronger, and improve efficiency and care for mothers and babies throughout Latin America and the Caribbean.
- During the *Asia Regional Meeting on Interventions for Impact in Essential Obstetric and Newborn Care* held in Dhaka, Bangladesh, in May 2012, MCHIP presenters discussed global scientific and technical information on prevention, early detection, and management of PPH and PE/E, as well as special care for newborns. The presenters also shared programmatic experiences and progress in the implementation of newborn care and PPH prevention/management programs in Asia and the Middle East. There were 400 participants from 30 countries. Similarly, the *Africa Regional Meeting on Interventions for Impact in Essential Obstetric and Newborn Care* held in Addis Ababa, Ethiopia, in February 2011 brought together over 300 participants from 36 countries to help African countries pursue evidence-based interventions and strengthen national programs aiming to improve maternal and neonatal health. MCHIP was intensely involved in the [*2012 Child Survival Call to Action and A Promise Renewed*](#) Conference, jointly led by USAID and UNICEF, with the Governments of Ethiopia and India. The conference brought together more than 700 public, private, and civil society sector partners. It was followed by a smaller meeting in 2013 in India, which was attended by ministers from central and state governments, leaders from the private sector, civil society, media and multilateral organizations, members of academia, and funding agencies. Participants agreed on a set of actions and commitments to promote accountability and engage high-burden states to determine a follow-up mechanism to achieve India's goals for child survival and development.
- The *Global Newborn Health Conference: Accelerating the Scale-Up of Maternal and Newborn Health Interventions to Reduce Mortality*, held in Johannesburg, South Africa, in April 2013, typified the multi-donor engagement that is essential to garnering support for global practices. In addition to MCHIP backing, other donors included Save the Children's Saving Newborn Lives group (supported by the Bill & Melinda Gates Foundation), UNICEF in collaboration with WHO, and additional support from JSI, the Laerdal Foundation, and Jhpiego. Two outcomes of the conference were global commitments to follow the Every Newborn Action Plan and a private sector engagement policy that featured a series of meetings between USAID, MCHIP, and groups such as the GSM Alliance, GSK Pharmaceutical, and Becton Dickinson.
- During FP conferences, such as the *Women Deliver Conference* in Malaysia (May 2013) and regional meetings in Zambia (April 2013) and Burkina Faso (February 2013), MCHIP helped facilitate discussions on PPF and PPIUD use. MCHIP held the sixth annual PPF technical meeting in Malaysia as a satellite event to the *Women Deliver Conference*. This was the first time the meeting had been held outside of Washington, D.C., a deliberate strategy to ensure more representation from the field and hear from a wider array of actors. The pre-conference meeting had more than 100 participants. This diversity of voices, along with the participation of USAID, WHO, and a senior official from the Indian government, helped to give even greater credibility to the need to expand PPF access. At the *International Conference on Family Planning* held in Addis Ababa, Ethiopia, in November 2013, with 4,000 people in attendance, MCHIP presented a roadmap that outlined a tracking system of postpartum contraceptive use, easy-to-understand information materials for families, and recommended practices for health workers.

Global Online Engagement

MCHIP fully utilized social media and new media technologies with great success for the *Asia Regional Meeting on Interventions for Impact in Essential Obstetric and Newborn Care* and the *Global Newborn Conference 2013*. MCHIP employed a number of tools for online engagement to reach audiences that were unable to attend the conferences because of time, fiscal, or travel restraints; reach atypical publics; elevate MCHIP's online presence; and develop a reputation for innovation, as well as engage those online and act as their "voice" at the conference.

For the Asia Regional Meeting, MCHIP had more than 3,700 views of the webcast from over 13 countries, including Cambodia, Afghanistan, Japan, and the UK; social media (new followers on Facebook increased 700% and on Twitter 300%, with 313,490 impressions); an online depository of presentations via Scribd (over 21,000 views); a guest blogger series (read over 3,800 times); and YouTube videos (85) of the meeting in its entirety. Building off of the lessons learned from this meeting, MCHIP had even greater success employing the use of online engagement at the Newborn Conference, where the *live webcast* was viewed over 16,000 times by online participants from 90 different countries.

MCHIP worked with field offices to arrange satellite viewing parties in countries such as **Bangladesh, India, Nepal, Malawi, and Madagascar**; live tweeted the entire conference; and acted as the on-site voice for the numerous questions and comments of online participants. The #Newborn2013 hashtag was widely used and with over 28,000 contributors on Twitter, the online conversations reached 48 million people across the world. The Scribd page has been viewed over 58,000 times. For knowledge management, MCHIP captured knowledge shared at the conference, encouraged ongoing discussions, and developed our second conference survey to capture knowledge-sharing habits of participants and provided support for the Daily Digests created each day to capture conference highlights.

- On June 26, 2014, more than 400 colleagues—including Ministers of Health from 23 countries and USAID Administrator Dr. Rajiv Shah—gathered in Washington, DC, to celebrate MCHIP successes at the *Close-Out Event: Critical Concepts for Ending Preventable Maternal and Child Deaths*. The event explored and disseminated learning on three key themes—scaling up, community-level activities, and quality of service provision—from the broad experiences of MCHIP, as well as the broader reproductive, maternal, newborn, and child health (RMNCH) community.

Global Development Alliances

In the last decade, USAID has promoted the GDA practice as a way to harness resources and skills from disparate groups and achieve greater development impact. MCHIP participation in selected GDAs provided an opportunity for key actors to coordinate and extend the reach of their individual efforts. The bullet points below highlight alliances in which MCHIP was most active.

- **Helping Babies Breathe (HBB):** HBB is an evidence-based, educational program aimed at teaching neonatal resuscitation techniques in resource-limited areas. It is an initiative of the AAP in collaboration with WHO, USAID, Saving Newborn Lives, the National Institute of Child Health and Development, and a number of other global health organizations. USAID has directly contributed through MCHIP to introduce and expand HBB in 25 of the more than 60 GDA countries: 16 of these countries have national implementation efforts coordinated by local governments. This GDA has



Photo credit: Joel Bobeck, Jhpiego

One Zambian clinician stated, "I have managed a number of emergencies using the skills and knowledge I acquired from the EmONC training and the intensive mentorship we are receiving from district mentors."

changed practices in the treatment of newborn asphyxia: 103,000 health care providers in 60 countries have completed HBB training since March 2010, according to the HBB website updated in April 2013. It has been taught in 14 languages over 460 times. In **Madagascar**, 924 providers from professional associations, faith-based organizations, and private health associations have been trained to implement the tenets of HBB in their daily practice.

- **Survive and Thrive (S&T):** MCHIP, in partnership with WHO, USAID, AAP, American Congress of Obstetricians and Gynecologists (ACOG), and the American College of Nurse-Midwives, which serves as the Secretariat, has catalyzed action on country adoption and scale-up of the use of ACS to accelerate fetal lung maturation during spontaneous or induced preterm labor or elective cesarean section for maternal conditions such as PE/E. The MCHIP Newborn and Maternal Teams are also members of the Survive and Thrive GDA Preterm Working Group, and collaborated with other partners to develop a learning package for countries to adapt and use as they seek to improve care for preterm births. At the time of this report, the learning package is undergoing field-testing and finalization in **Bangladesh** and **Malawi**, and is set to be launched in August 2014.

Saving Mothers/Giving Life (SMGL): is a public-private partnership with the (ACOG), [Every Mother Counts](#), the [Government of Norway](#), [Merck for Mothers](#), [Project C.U.R.E.](#), and the U.S. Government. This GDA, which was launched just two years ago, has already had an impact. MCHIP's effort in **Zambia** is an example of a program focused on skills strengthening and mentoring, and was designed to improve the quality of MNH services and reduce maternal deaths by 50% in seven target districts.

Mobile Alliance for Maternal Action (MAMA): MAMA, a GDA with the mission to engage an innovative global community to deliver vital health information to new and expectant mothers through mobile phones, has launched two country programs in **Bangladesh** and **South Africa**, with a third launching in **India**, in late summer 2014. MAMA is a partnership between MCHIP, United Nations Foundation, Johnson & Johnson, and BabyCenter; the United Nations Foundation is the Secretariat. MCHIP directly manages the grant to MAMA **Bangladesh**, which was launched in December 2012, and currently reaches more than 210,000 subscribers. Results of a preliminary phone survey show that 63% of MAMA **Bangladesh** subscribers attended four ANC visits (national average 32%), 45% had a facility-based birth (national average 29%), and 83% exclusively breastfed for six months (national average 64%). MAMA now offers messages on PMTCT, infant feeding, and PFP. It also offers messages designed for other household decision-makers in communities where phone ownership is often shared. MAMA's adaptable messages are based on WHO and UNICEF guidelines and have been developed in close collaboration with a group of global health experts who make up MAMA's Health Content Advisory Council. MCHIP provides TA to the MAMA global team for messaging content and dissemination of learning from the project's progress. MCHIP has provided M&E support to MAMA **Bangladesh** and MAMA **South Africa**, and helped the MAMA global team hire and train a full-time M&E consultant. MCHIP participated in a panel discussing MAMA's global M&E framework at the American Public Health Association annual meeting in November 2013.

mPowering Frontline Health Workers: mPowering Frontline Health Workers' (mPowering) goal is to accelerate the use of mobile technology to improve the skills and performance of frontline health workers, as part of a global effort to end preventable child and maternal deaths. mPowering focuses on four areas to achieve its goals: global tools, country programs, research, and advocacy. The mHealth Alliance, serving as the partnership secretariat, coordinates and amplifies the resources and expertise of its 16 members: MCHIP, UNICEF, Qualcomm Wireless Reach, Vodafone, Intel, MDG Health Alliance, GlaxoSmithKline, Praekelt Foundation, Frontline Health Workers Coalition, Barr Foundation, World Vision, Dalberg, Futures Group, 1 Million Community Health Workers Campaign, Accenture Development Partners, and the

mHealth Alliance. MCHIP, as project secretariat, has provided financial management, human resources, communications, and administrative support. In addition, MCHIP provided technical opportunities to mPowering and helped to identify potential points of collaboration between the two initiatives. In 2014, mPowering provided direct support to programs in seven countries, supported research to build the evidence base for mobile health solutions, began development of a content delivery mobile platform for CHWs, and worked to improve practices related to costing, designing, and delivering mobile training for CHWs. In **Ethiopia**, mPowering supported the adaptation of print-based content to develop an mHealth training program for 300 Health Extension Workers; this content is being further adapted by UNICEF for CHWs in **Uganda**.

Contributing to Setting the Global Agenda

Over six years, MCHIP actively influenced the drafting, amending, dissemination, and uptake of more than 150 guidelines and policies across all of its technical areas of intervention. The process by which MCHIP implemented its policy work included developing partnerships with key players who shared the same agenda, participating actively in technical working groups (TWGs), and providing expert testimony based on research and evidence. While MCHIP used advocacy as a tool in implementing country-level programs, it also used advocacy to engage with global partners, such as WHO and UNICEF, as a way of contributing to policy discussion. MCHIP programs also worked at the regional and national levels to improve policies and guidelines that promote maternal and child survival. A few select examples are highlighted below (a more comprehensive list is captured in Annex 14).

- MCHIP convened the technical advisory group (TAG) meeting to solicit input on the topic of **CHWs Performance at Scale**. The objective was to advance the field of practice and support quality community-based work, including policy change. Outcomes included identification of remaining gaps, the need for a better taxonomy that captures the different classifications of community workers, and tools that can support managers in the field. MCHIP worked with the group that included representatives from USAID, URC, UNICEF, World Relief, World Vision (WV), HCI, Management Sciences for Health, CORE Group, Johns Hopkins Bloomberg School of Public Health (JHSPH), and Food for the Hungry. MCHIP also developed an important reference guide for program managers and policymakers called *Developing and Strengthening Community Health Worker Programs at Scale*. The contents draw particularly upon experiences from large-scale, public sector CHW programs and seek to provide useful lessons that can impact country programs. The guide looks comprehensively across a range of factors determining the effectiveness of community health service and takes a pragmatic view, promoting no single model, given that CHW programs serve different purposes depending on context.
- As the Secretariat of the Integrated Community Case Management (iCCM) Childhood Illness Task Force, MCHIP provided technical leadership and strategic management to facilitate enhanced partner coordination and centralize and disseminate key **global learning through CCMCentral.com**. MCHIP coordinated the work of thematic subgroups that compiled the body of evidence and existing tools to guide country uptake and implementation, generated new learning, and developed new tools. Other child health policy initiatives involved providing TA to the development of the [“2013 Integrated Global Action Plan for Pneumonia and Diarrhea \(GAPPD\).”](#)
- As a member of the PEPFAR TWG, MCHIP strategized and planned for **the approval of VMMC device(s)** and the implementation/repercussions of using the devices to improve the scale-up of VMMC in 14 priority countries.
- MCHIP, in collaboration with WHO and other partners, contributed to WHO’s [“Statement for Collective Action for Postpartum Family Planning”](#) to emphasize the importance of PPF and offer general approaches for addressing unmet need and expanding the range of

contraceptive options during the postpartum period. The global health community rallied in support of this obvious, but often overlooked, group of women in need of services. The statement received official endorsements from additional donor governments, including Australia and the United Kingdom, and from FP stakeholders, such as UNFPA and the International Planned Parenthood Federation.

- MCHIP advocated successfully for measles and measles-rubella vaccines in **5-dose vials, which will soon become available** from the UNICEF Supply Division for international tender. Inactivated polio vaccine—slated for introduction in 125 countries over the next three years—will also be available in 5-dose vials for the first time in late 2014, thanks to MCHIP’s efforts. Health workers in poor, remote settings are sometimes reluctant to open 10-dose measles vials for fear of wasting doses, which likely results in missed opportunities to vaccinate children against measles, late immunization, and increased risk of outbreaks.
- MCHIP collaborated with WHO, Pre-EMPT, and USAID to complete a brief related to the WHO guidelines called *Recommendations for Prevention and Treatment of Pre-eclampsia and Eclampsia*—a resource that aims to improve the quality of care and health outcomes related to PE/E. Published in 2013, this brief has been disseminated to country teams to use in programming and is given out at workshops, conferences, and TWG meetings. Individuals and groups can use the brief to develop job aids, including facility posters and treatment flowcharts to help providers maintain their skills in PE/E management and care.

Development and Dissemination of Tools

MCHIP used an updated evidence base, along with field experience, to develop and improve tools that can be used to drive changes in practice and policy. MCHIP’s team of technical experts developed or contributed to more than 350 resources and toolkits that MCHIP disseminated or promoted widely. The increased use of web-based resources, which MCHIP has fully exploited, has greatly increased the rapid dissemination of toolkits. Toolkits are inanimate unless they are used and MCHIP has been determined in its follow-up and implementation of tools to catalyze significant change. A comprehensive list of MCHIP-supported resources and tools is found in Annex 16. The list below provides some highlights of these important developments that MCHIP supported to provide global leadership and influence across a range of technical areas.

- MCHIP designed the [Respectful Maternity Care \(RMC\) Toolkit](#) to provide clinicians, trainers, managers, and other stakeholders with the necessary tools to begin implementing RMC in their area of work or influence. The toolkit contains: the results from a survey of 19 countries; an assessment instrument; program briefs and reports providing examples of how RMC has been implemented; training and advocacy materials; operational standards for RMC; illustrative indicators for monitoring RMC; job aids; and a resource list. MCHIP launched the RMC toolkit on Knowledge for Health (K4Health) in June 2013, introducing RMC implementation materials to a broad audience and providing needed guidance to program implementers looking to strengthen RMC in their countries. As of April 2014, there were 1,624 toolkit site visits, with 6,805 pages viewed by people from 106 countries.
- MCHIP updated the [PPH Prevention Toolkit](#), with a new section dedicated to the advance distribution of misoprostol and an associated [Program Implementation Guide](#) in 2013. The implementation guide provides step-by-step instructions and resources on how to implement, improve, and expand misoprostol distribution programs.
- As a member of UNICEF Cold Chain Logistics (CCL) Task Force, MCHIP helped revise the [Effective Vaccine Management](#) (EVM) tool, which guides cold chain and logistics management and is required for countries to receive GAVI support.

- The [Essential Obstetric and Newborn Care \(EONC\) Toolkit](#) was created to collect and package resources that are useful to country programs for developing, implementing, monitoring, and scaling up maternal health-related interventions at various levels. It contains an annotated bibliography of selected journal articles on EONC and a program implementation guide (in English and French) for developing and scaling up EONC programs. MCHIP has released two toolkits—one on [Postpartum Hemorrhage](#) and another on [Pre-eclampsia/Eclampsia](#)—both of which are organized around key programmatic steps, providing lessons learned and relevant resources to assist country programs, donors, and governments in the development of focused interventions and programs.
- MCHIP coordinated the work of thematic subgroups that compiled the body of evidence and existing tools to guide country uptake and implementation of iCCM, generated new learning, and developed new tools including [Community Case Management Essentials—Treating Common Childhood Illnesses in the Community—A Guide for Program Managers](#), new [CHW training and supervision materials and job aids](#), the [iCCM Benchmarks Framework](#), the generic [iCCM Implementation Guide](#), and the [iCCM Indicator Guide](#).
- CORE Group’s collaboration with MCHIP began with their shared CCM initiatives and continued to be the main focus over the course of the project. CORE Group and MCHIP have disseminated nearly 2,500 hard copies and hundreds of downloads of the first, second, and French editions of [Community Case Management Essentials—Treating Common Childhood Illnesses in the Community—A Guide for Program Managers](#). This guide was widely disseminated through CORE Group biannual meetings, CSHGP, MCHIP, and CCMCentral.org and CHWCentral.org—at regional and global levels. In addition, more than 300 guides went to UNICEF and CORE Group member African regional meetings, through regular Roll Back Malaria (RBM) Case Management Working Group (CMWG) meetings, and at the iCCM Evidence Review Symposium in Ghana. For every direct dissemination effort, MCHIP and CORE Group have co-hosted regular learning sessions, TAGs, and coaching and connecting of practitioners to resources, helping to drive the global agenda for CCM. The *CCM Essentials Guide* was referenced in the [“WHO/UNICEF Joint Statement for iCCM.”](#)
- In 2014, MCHIP spearheaded the development of the [Latin America and Caribbean \(LAC\) Newborn Health Alliance Toolkit](#) to introduce readers to the history and successes of the organization and its significance as a structural model for global health work of alliances. The toolkit also aims to support those actors interested in forming their own national-level newborn alliances. To this end, case studies were conducted in PY5 in three of the region’s longest-running alliances—**El Salvador**, **Bolivia**, and **Peru**—to gain insights into their successes. The case studies are included as a section in the toolkit and are being used to distill best practices and lessons learned to share with other groups interested in forming newborn alliances in Latin America and beyond. With TA and support from the LAC Neonatal Alliance, new national newborn alliances have been formed in **Bolivia**, **El Salvador**, **Peru**, **Haiti**, and **Paraguay**.

Project Website: www.mchip.net

From March 2010–June 2014, there were more than 345,000 sessions (formally known as visits) to the MCHIP website. The sessions from the last six months included a 17% increase in page views over the prior six months, demonstrating the website’s increasing relevance to the RMNCH community. This increase in page views can be attributed in part to the high volume of content posted to the website. *In total, MCHIP produced 292 feature articles, 290 blogs, 127 event announcements, 99 “in the news” pieces, 31 multimedia pieces, and 29 news releases over the life of the project. Specific samples of stories that demonstrate MCHIP’s successes as well as a comprehensive list of said stories are available in Annex 9. The MCHIP website has been accessed in over 208 countries worldwide with highest visitation coming from the United States, **India**, **Kenya**, United Kingdom, **Philippines**, **Pakistan**, **Ethiopia**, Canada, **Indonesia**, and **Bangladesh**.*

- As a member of the working group, MCHIP reviewed and informed the development of the [Scaling Up Lifesaving Commodities for Women, Children, and Newborns: An Advocacy Toolkit](#), which was launched by the United Nations Commission on Life-Saving Commodities Advocacy Working Group. This new resource provides information about the Commission, its [13 priority commodities](#), and provides examples of how its 10 recommendations to improve access and availability are being applied globally and within countries. This toolkit is part of the [Every Woman Every Child](#) alliance, an unprecedented global movement to mobilize and intensify global action to improve the health of women and children around the world.
- At the request of USAID, MCHIP created the [Integrated Anemia Prevention and Control Toolkit](#), which was reviewed by nutritionists and malaria specialists from USAID-funded projects and other international organizations. The toolkit provides guidance to policymakers and program managers on the prevalence of anemia in women and children, its impact on survival, and programs to address the problem. The toolkit is updated quarterly with information on the latest anemia research and new information, program implementation, and lessons learned. It serves as a consolidated source of information for people working to reduce anemia, the most prevalent public health problem in the world. Since its launch at the International Congress of Nutrition in September 2013, it has been disseminated to more than 200 people and visited by over 400 people, with nearly 1,000 page reviews.
- The [Developing and Strengthening Community Health Worker Programs at Scale: A Reference Guide for Program Managers and Policy Makers](#) is a comprehensive manual developed by MCHIP, Johns Hopkins Bloomberg School of Public Health, CORE Group, and the Norwegian Knowledge Center for Health Service. The guide provides a lens through which to look at the global experience of CHW programs and serves as an authoritative resource for issues that policymakers and program leaders should consider as they develop, expand, or strengthen large-scale CHW programs. There are plans to keep it as a living document by soliciting comments and new updates, and hosting webinars on particular chapters.
- The [Maternal, Infant and Young Child Nutrition and Family Planning \(MIYCN-FP\) Integration Toolkit](#), available since 2012, was compiled by the MIYCN-FP Technical Working Group and is designed to assist efforts to integrate nutrition and family planning efforts.
- [Considerations for Incorporating Health Equity into Project Designs: A Guide for Community-Oriented Maternal, Neonatal, and Child Health Projects](#) is a guide developed in 2011 to give those who design and implement community-oriented health programs a systematic way of ensuring that equity is incorporated into program designs and that its improvement can be better demonstrated and explained. It focuses on equitable health outcomes.
- The [Clinical Observer Learning Resource Package](#), available since 2013, is designed to prepare clinical trainers and other clinicians to be observers and assess the quality of clinical services in an objective and standardized way. Uses for the learning include participation in observational evaluation studies, quality improvement assessments, or other collection activities that involve observing client-provider interactions.

MCHIP designed the *Clinical Observer Resource Package* to prepare health professionals to participate in observational assessments of health service delivery. The resource package includes practice observing client-provider interactions in the classroom through clinical simulations using anatomic models and role plays and in health facilities during direct observation of actual clients and providers.

Monitoring, Evaluation, and Research

MCHIP contributed to global efforts to improve routine and periodic measurement of MNCH outputs and outcomes. MCHIP's work included providing global leadership by promoting the use of M&E best practices, indicators and resources, strengthening HMIS, and developing and revising M&E data collection tools and resources. These efforts have led to stronger M&E systems and higher-quality data for informed decision-making in 28 countries across MNCH interventions.

Strengthening Health Management Information Systems (HMIS)

To improve country-level programs, key indicators must be tracked and monitored for quality. MCHIP made undeniable progress in empowering Ministries of Health and other partners to improve their data collection systems and compilation of essential indicators. Ongoing efforts to improve HMIS will increase country and global access to information-rich systems to support MNCH program strengthening. MCHIP documented their efforts in the report "[Strengthening Health Management Information Systems for Maternal and Child Health: Documenting MCHIP's Contributions](#)." The report highlights MCHIP's contributions to strengthen HMIS and examples of where these have been integrated and institutionalized in national HMIS systems, and describes lessons learned. As an example, MCHIP in **Mozambique** supported the MOH to increase their efficiency to track six key MNH indicators across labor and delivery (L&D), sexually transmitted infections, and newborn health. Priority MNH indicators and data sources were included in the updated maternity register, integrating what was previously five separate registers into one. In addition, three cervical cancer prevention (CECAP) indicators were created and data elements were integrated into FP data collection tools, including the woman's health passport, FP register, and facility monthly summary report, as well as a daily summary form to track CECAP services.

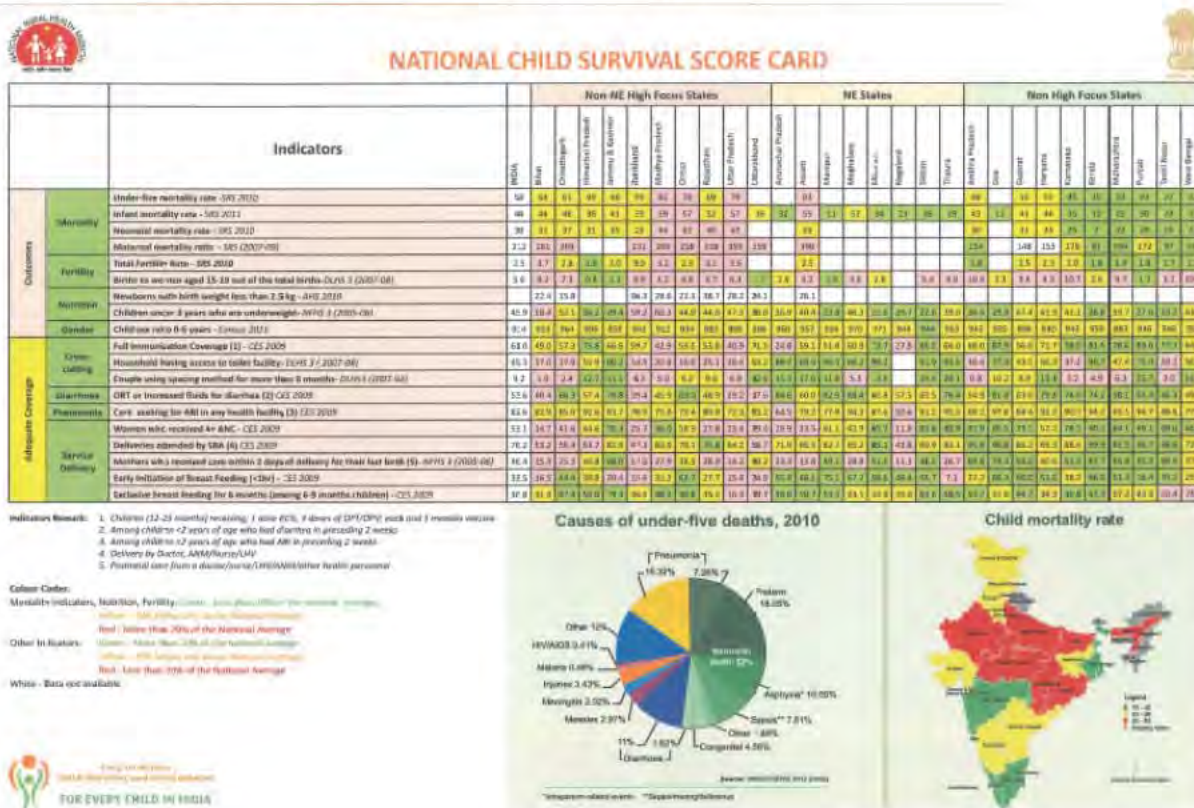
Supporting Country-Level Measurement and A Promise Renewed (APR)

MCHIP promoted the use of information products that provide visual images of data, such as results posters and scorecards in 13 countries—**Ghana, Guyana, India, Kenya, Liberia, Mozambique, Nigeria, Rwanda, Tanzania, Uganda, Zambia, Zimbabwe, and Uganda**—leading to routine use of data for program monitoring and planning. These resources allow for quicker action, increased accountability, and revitalization of commitments to improve health outcomes. The products cover areas such as immunization, cervical cancer, newborn health outcomes, and FP.

One important example is the introduction and use of scorecards and dashboards in **India**. This initiative was made as part of the *A Promise Renewed Call to Action*. While India has made significant progress in reducing maternal and child deaths, rates of progress within the states and districts are unequal. The India Call to Action plan emphasizes the effective use of data for planning and implementing interventions to reduce health disparities. National child survival scorecards using data from national and state survey data were prepared. Dashboards based on the GOI's health management and information system have been developed and are updated quarterly. These tools facilitate comparative assessments between states and districts and identify action plans based on the analysis of available data.

The survey-based child survival scorecard captures both public and private sector data and is used to assess outcomes and service delivery performance at national and state levels. Scorecards are updated as new survey data become available. The HMIS-based dashboard monitoring system allows states to use HMIS data to improve decision-making in real time because it can be updated quarterly. The scorecards and dashboards improve accountability in the public health system, enable comparative assessments of state and district performance, and monitor the major components of the national reproductive and child health program and strategy.

Figure 7. Example of India's National Child Survival Score Card



MCHIP also supported the application of the Lives Saved Tool (LiST), a tool that was developed by the Johns Hopkins Bloomberg School of Public Health and others to estimate the impact of scaling up maternal, newborn, and child health interventions. MCHIP performed LiST analyses in 24 priority countries to model the impact of coverage of key RMNCH interventions on lives saved and future projections. In Bangladesh, DRC, Mozambique, Nigeria, and Senegal, the LiST analyses compared an historic trend and best performer models and four scenarios for each to examine the contributions of MNCH versus family planning interventions for reducing child mortality. In Nigeria, LiST models were used to compare UNICEF-WHO estimates of vaccine coverage to estimates of vaccine coverage from the most recent Demographic and Health Survey (DHS) report. In Pakistan, a sub-national model for KP and models of scale-up of various MNCH interventions were done in order to prioritize targets for social and behavioral change communication (SBCC) efforts. Results of the 24 LiST analyses were included in the USAID report "Acting on the Call" for the June 2014 USAID meeting, and will be used to guide country plans and monitor progress moving forward. MCHIP has also supported the CSHGP grantees to use LiST to estimate the number of lives saved of children under five among the grantee program intervention areas.¹⁷

The LiST analysis in the MCHIP-supported CSHGP countries estimated the number of lives saved among children under five:

Nepal – 3,504 children (CSHGP, HKI 2008–2012)

Uganda – 18,188 children (CSHGP, ERD 2008–2012)

Ethiopia – 8,784 children (CSHGP, Save the Children 2007–2012)

India – 11,382 children (CSHGP, WorldRenew 2007–2012)

¹⁷ The 24 USAID priority countries are: Afghanistan, Bangladesh, Democratic Republic of Congo, Ethiopia, Ghana, Haiti, India, Indonesia, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Nigeria, Pakistan, Rwanda, Senegal, South Sudan, Tanzania, Uganda, Yemen, and Zambia.

Encouraging greater efficiency through the use of technology, MCHIP applied the use of mHealth tools for M&E activities. Rapid advances in mobile technology, hardware, software, and connectivity, especially in sub-Saharan Africa, offered opportunities for greater use of mHealth for data collection under MCHIP. MCHIP successfully used mobile phones and Android tablets for data collection, including observational assessments such as the **Quality of Care (QoC)** facility assessments in **Tanzania** and **Madagascar** and client and provider questionnaires to assess client satisfaction with PPIUDs in the **Philippines**. In **Pakistan**, Android tablets were used for the collection of supervision data, facility assessments, and other routine data. Mobile phones and Android tablets were used for large program evaluation data collection in **Guinea**. In **India** and **Kenya**, MCHIP used mobile data collection to facilitate an evaluation of PFPF integration models. MCHIP evaluated the use of mobile technology as a means to mentor providers after training in West Africa. In **Ghana** and **Guinea**, mobile phones were used to provide post-training follow-up and reinforcement of key knowledge using both voice and text messages.

Global Research

MCHIP has supported the development of assessment toolkits and frameworks that address M&E of MNCH interventions and services. An important example is the development of the Quality of Care (QoC) survey for prevention and management of common maternal and newborn complications, which has been implemented in seven countries with MCHIP support. This QoC survey has now been incorporated into the MEASURE DHS Service Provision Assessments (SPAs) as an optional module. MCHIP pioneered these QoC surveys to improve understanding of MNH and integrated elements into the SPAs, which will continue to be used long after the end of MCHIP. Key findings from the surveys can be found in the following box.

Quality of Care Survey Highlights:

- Conducted in **Ethiopia, Kenya, Madagascar, Mozambique, Rwanda, and Tanzania** (including Zanzibar) and **Zimbabwe**;
- Guided QI activities for maternal and newborn care at the facility, regional, and national levels;
- Provided baseline estimates for countries to monitor improvements in care;
- Developed indicators and data collection tools that can be used in multiple countries; and
- Collected data through survey using mobile technology Smartphones and tablets.

Results Include:

- Partographs were not correctly completed in a majority of cases in any country, and in many cases they were completed only after delivery.
- Oxytocin was included in the essential drugs list in all countries surveyed and was available for use in delivery rooms in 77%–100% of hospital facilities.
- Administration of a uterotonic during the third stage of labor was observed in the majority of deliveries in all countries (average 95%), but practices varied widely.

Use of Findings:

- **Ethiopia:** Increased the use of MgSO₄
- **Kenya:** Developed regional workshops based on findings
- **Madagascar:** Used findings to advocate for national adoption of HBB and improve the use of maternal interventions (e.g., partograph)
- **Mozambique:** Highlighted the need to improve newborn resuscitation; MCHIP advocated for HBB to be rolled out as national policy
- **Tanzania:** Increased linkage to Venture Strategies Innovations to improve misoprostol supply; stock data helped galvanize tracking for maternal health drugs
- **Zimbabwe:** Findings used in national QoC assessment
- **Rwanda:** Supply of MgSO₄ made available in all hospitals, influenced development of three major documents

MCHIP also implemented studies in numerous countries in order to better understand programs and interventions and create aligned tools for the global community. A list of these studies can be found in Annex 6. MCHIP conducted some evaluations that spanned multiple countries; the study tools and results were thus able to be used to compare related areas of interest. Studies included operations research in five countries to provide global evidence for the use of misoprostol for the prevention of PPH and to increase uterotonic coverage at all births.

Standardized tools were developed and can be adapted for countries where studies will be conducted. Details on these MCHIP-funded programs can be found under Objective 3 (Page 34) and in the Maternal Health technical section (Page 46). Another example of MCHIP's work in developing tools and frameworks for global consumption was the evaluation of the quality, coverage, and impact of HBB on newborn mortality in **Bangladesh** and **Malawi**. A synthesized report was developed to provide overarching recommendations on HBB scale-up for the global community. See the Newborn Health technical section for more details (Page 58). PPIUD services were also explored through studies in **India**, **Paraguay**, and the **Philippines**. Results and lessons learned were shared across countries and can be used for FP programming across the globe. (See Family Planning technical section for more details [Page 90].)

In collaboration with other partners, MCHIP has contributed M&E guidance that provides a foundation for partners to move monitoring efforts from measuring contact to quality. M&E tools and guidance were included in multiple toolkits, which are delineated in the previous section *Development and Dissemination of Tools*.

MCHIP also helped revise and support the application of data collection tools developed by partners, as well as tools that were developed before the start of the program. Some examples include the [*Knowledge, Practices and Coverage \(KPC\) Survey*](#) and the [*Rapid Health Facility Assessment Tool*](#). MCHIP worked to ensure that these tools are up-to-date, reflecting state-of-the-art technical content, and that they remain consistent with WHO-recommended indicators, the LiST tool, MDGs, and information needed by USAID.

In addition to toolkits, MCHIP also created new frameworks for analysis of secondary and qualitative data pertaining to MIP programming and intended to generate practical information for use by policymakers and program planners in low-resource settings.

Partnership to Improve Measurement and M&E

To promote M&E best practices, indicators, and resources, MCHIP contributed to the work of multiple M&E working groups, including the MDG Countdown Coverage Working Group and several TWGs. For example, MCHIP partnered with WHO on the Maternal Health Indicators working group, to promote moving away from merely counting ANC visits to measuring the technical content of each visit and its impact, which is based on the QoC provided.

MCHIP worked with partners to identify gaps in the available resources for conducting MNCH monitoring, evaluation, and research (MER), such as indicator compendia, M&E guidance documents, assessment toolkits, and M&E training resources. In turn, MCHIP identified opportunities to work with critical global partners, such as WHO, the International Confederation of Midwives, the International Federation of Gynecology and Obstetrics, and other USAID-implementing agencies to contribute to the development of new indicators, data collection tools, and other resources to address these gaps. For example, MCHIP has initiated a new effort to work with WHO and others to identify “benchmark indicators” for maternal health that can be integrated into national HMIS.

MCHIP also participated in ongoing efforts of M&E TWGs to review MNCH indicators used in nationally representative household surveys, such as USAID's DHS, the Malaria Indicator



Photo credit: Kate Holt, Jhpiego.

Survey, and the UNICEF-supported Multiple-Indicator Cluster Survey. MCHIP combined two approaches, including toolkit development and improved measurement, when it developed the [Indicator Guide: Monitoring and Evaluating Integrated Community Case Management](#). This guide aims to encourage iCCM programs to more effectively monitor and evaluate iCCM implementation and results across all of the iCCM benchmark components. The guide is intended for program managers, M&E officers, researchers, and organizations supporting and implementing iCCM. It was disseminated during the last months of MCHIP, and future USAID projects will track the adoption of the manual and its impact on practices. Through the establishment of the iCCM Benchmarks and Indicators, MCHIP provided normative standards for iCCM implementation so that data can be compared across country programs.

Program Learning in Support of Global Leadership

From the onset, MCHIP tested new approaches and tools for more effective implementation and conducted analyses to determine the most effective programmatic approaches. Learning collected from these efforts was applied to continuing field efforts, creating a cycle of knowledge and improvement in practice. It was also disseminated outside of the project through conferences and workshops, presentations, self-published monographs, and peer-reviewed articles. The project had five key learning topics: scale-up, community action, QoC, integration of services, and equity. Highlights from MCHIP program learning are detailed in Table 3 below for QoC, Integration of Services, and Equity. Learning on Scale-Up is covered under SO1 and learning on Community Action under Strategic Objective 3. Thorough analyses for each of the program learning topics are located in relevant briefs and an expanded results table in Annex 8.

Table 3. Program Learning Highlights for Quality, Integration, and Equity Themes

LOCATION	IMPLEMENTATION OUTCOME HIGHLIGHTS	LEARNING OUTCOME HIGHLIGHTS/STRENGTH OF EVIDENCE
Quality		
India	In Uttar Pradesh, India , through the RAPID approach, 39 health facilities moved from 85% poor designation after round 1 to 53% good after round 4. Similarly, in Jharkhand, 11 facilities moved from 36% poor designation in round 1 to 73% good after round 6. RAPID was scaled up with local funding to 5 other Indian states.	Early lessons from RAPID found that RAPID is: <ul style="list-style-type: none"> • easily adaptable to the local context • requires consensus and participation of government and facility staff • uses simple, low-tech tools appropriate to existing field realities • provides an immediate quantification of quality and existing gaps • enhances facility staff's ability to demonstrate and validate their need for resources or additional support

LOCATION	IMPLEMENTATION OUTCOME HIGHLIGHTS	LEARNING OUTCOME HIGHLIGHTS/STRENGTH OF EVIDENCE
Mozambique Ethiopia Kenya Madagascar Rwanda Tanzania Zimbabwe	In seven African countries MCHIP designed and conducted quality of care (QoC) assessments in health facilities providing maternity services. In Ethiopia these findings were used to advocate for the increased use of magnesium sulfate. In Kenya , the assessments became part of the national service provision assessment, and regional workplans were developed based on findings. In Mozambique , these assessments highlighted the need to improve newborn resuscitation and MCHIP advocated for HBB to be rolled out as national policy. Similarly, in Madagascar they were used to advocate for the national adoption of HBB, as well as improved the use of key maternal interventions such as partograph use.	QoC assessment findings across all seven countries demonstrated: <ul style="list-style-type: none"> • Continue policy, advocacy, and provider education, training, and support to promote the wide-scale use of essential lifesaving interventions. • Emphasize HSS to ensure that drugs and commodities are available to implement best practices. • Organize services so that critical supplies and equipment are accessible and ready for use when needed. • Encourage supportive supervision to ensure adequate monitoring of service provision in clinical decision-making, management, and reporting. • Conduct research to understand factors that limit or encourage implementation of proven lifesaving interventions. Learning about the QoC tool: <ul style="list-style-type: none"> • The extra effort that direct observation requires is justified to further characterize actionable gaps in quality of service provision. • Simpler QoC tool is needed that could be incorporated into supportive supervision.
Integration		
Liberia	Partial integration of FP and immunization services in Liberia demonstrated an increase in the total number of contraceptive users at all facilities, and an increase in measles vaccination coverage from 45% to 97% from baseline to endline.	Programmatic evidence in Liberia highlighted the importance of implementing programs that are supportive of government policies and programs, working in close partnership with MOHs and other partners at the national and local levels to ensure that: commodities and equipment are in place for targeted services, capacity of health care providers is built, monitoring of quality of care is strengthened, and communities are engaged through IEC/BCC materials and campaigns.
Cambodia	Partial integration of IYCN and MNCH services in Cambodia (implemented by CSHGP grantee IRD) led to improved nutritional status in 122 out of 183 malnourished children and an additional 1,852 households with access to an improved drinking water source.	Combining IYCN, water and sanitation, and healthy timing and spacing of pregnancy interventions was both feasible and effective at moderate scale in Cambodia .
Bangladesh	Integration of FP with MNH services at the community level in Bangladesh using the Healthy Fertility Study (HFS) model led to a decrease in the incidence of pregnancy within the first 36 months of delivery. HFS activities were also associated with a 21% reduction of probability of shorter birth intervals and 20% lower risk of preterm birth.	The quasi-experimental study in Bangladesh gave strong evidence that FP can be feasibly and effectively integrated with MNCH services delivered by CHWs.

LOCATION	IMPLEMENTATION OUTCOME HIGHLIGHTS	LEARNING OUTCOME HIGHLIGHTS/STRENGTH OF EVIDENCE
Equity		
Tanzania	MCHIP's VMMC program in Iringa, Tanzania , which identified a particularly vulnerable group of hard-to-reach men—migrant field workers—increased the prevalence of VMMC in the region from 29% in 2009 to 50% in 2012. The Iringa region has become one of the few VMMC programs coming close to achieving the 80% coverage target.	Based on preliminary evidence from Tanzania , it appears that it is possible to increase VMMC utilization among vulnerable populations through focused campaigns.
Malawi	In Malawi , 3,000 MCHIP-supported CHWs who were recruited and trained to diagnose and treat the most common childhood illnesses and identify children in need of immediate facility referral covered 3,500 out of 4,000 hard-to-reach areas (defined as areas more than 8 km from the nearest health center).	Community-based service provision in Malawi can be strengthened using community-based health workers.
Nicaragua	In Nicaragua , Catholic Relief Service, a CSHGP grantee supported by MCHIP, tracked changes in the behavior of men in terms of the degree to which they actively participate and make decisions with their wives about pregnancy and newborn care. Data showed statistically significant increases in the antenatal care, SBA, joint decision-making, and men's participation in ANC, delivery, and newborn care, and decreases in domestic violence.	Nicaragua's experience shows that male involvement appeared to lower the barriers for women to access needed services, and can be effective to reduce gender violence and improve maternal health indicators.

S03 Strategic Objective 3

Strategic Objective 3: Assist PVO/NGOs and their local partners supported by the CSHGP and PMI MCP programs to design, implement, monitor, and evaluate innovative, effective, and scalable community-oriented strategies that deliver integrated, high-impact interventions to vulnerable populations

Under this objective, MCHIP provided TA to 94 PVO/NGO projects funded by the CSHGP and 20 PVO/NGO projects funded by the President's Malaria Initiative's (PMI's) Malaria Communities Program (MCP).¹⁸ Support included technical input and strategic information and monitoring assistance to both programs and, in partnership with CORE Group, advancing global leadership through the analysis, synthesis, and diffusion of PVO/NGO best practices and innovations. Under Strategic Objective 3, MCHIP enhanced community-focused activities in 42 countries and augmented the global evidence base for community-oriented programming to strengthen health systems in several technical areas, including nutrition, malaria, immunization, FP, and MNCH.

Through CORE Group, MCHIP expanded its partnerships to a wider network and NGO community; capitalized on CORE Group's complementary household- and community-level development approaches; and linked directly to a well-established program learning platform that served as an effective vehicle for the dissemination of tools and knowledge to influence international practice related to community-based health programming.

This singular partnership led to strongly designed PVO/NGO programs that generated important evidence to inform community-oriented health programming. The partnership also leveraged a broader network of PVOs/NGOs to advance related global learning and leadership. The resulting achievements, outlined below, illustrate the unique contributions that PVOs and NGOs can make, engaging communities and civil society to address priority health challenges with innovative solutions that contribute to ending preventable deaths.

Innovative, Effective, Community-Oriented CSHGP Programs Designed and Implemented

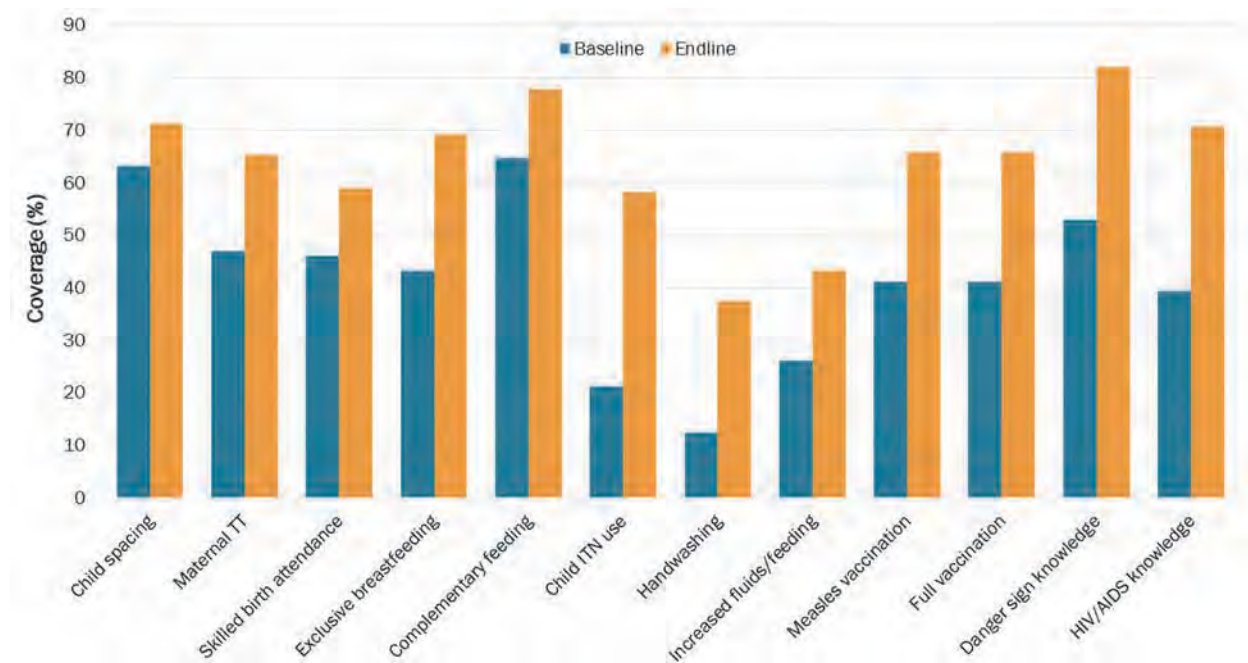
Over the life of MCHIP, 94 CSHGP grantees implemented programs in 42 countries, reaching 4,691,666 children under five years of age, 8,721,868 women of reproductive age, and 124,816 clients being treated for TB. The rigorous standards for program design, monitoring, evaluation, and implementation established by the CSHGP in its program guidance, and reinforced through MCHIP's technical support, allowed MCHIP to document that these programs not only effectively delivered lifesaving interventions, but also reduced child mortality.

MCHIP conducted an analysis of 129 projects completed between 2000 and 2010 that showed consistent improvements in coverage for critical intervention and in health status indicators (Figure 8). These data show the increases from baseline to the final evaluation in coverage of

¹⁸ MCP achievements are highlighted in the Malaria section of this report.

interventions such as use of skilled assistance at birth, exclusive breastfeeding, full vaccination, insecticide-treated net (ITN) use, postnatal visits, fever treatment, and pneumonia treatment. (See Annex 17 for complete definitions of these indicators.)

Figure 8. Grantees Improve Coverage in Lifesaving Interventions (2000–2011)*



* Inclusion criteria: Indicators were reported by at least 10 projects with a focus in an area relevant to the indicator (e.g., child ITN use was included only if a project included a level of effort related to malaria). Projects started between 2000 and 2008 and ended between 2003 and 2011.

Further analysis of these data highlight the ability of CSHGP projects to deliver results, including consistent increases in coverage of lifesaving interventions compared to national performance. Even though they often worked in districts and regions with lower than national levels of coverage, the CSHGP projects achieved levels of coverage of services and behaviors known to reduce deaths that exceeded national averages (Figures 9 and 10). Dramatic improvements in coverage of household behaviors were found, for example, in the oral rehydration therapy and exclusive breastfeeding practices, an intervention which by itself could reduce child deaths by more than 11% according to estimates reported in the *Lancet*.¹⁹

¹⁹ Black RE, Victora CG, Walker SP, and the Maternal and Child Nutrition Study Group. Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet* 2013; published online June 6. [http://dx.doi.org/10.1016/S0140-6736\(13\)60937-X](http://dx.doi.org/10.1016/S0140-6736(13)60937-X)

Figure 9. Trends in ORT—CSHGP Project Area vs. National Trends (2004–2007)

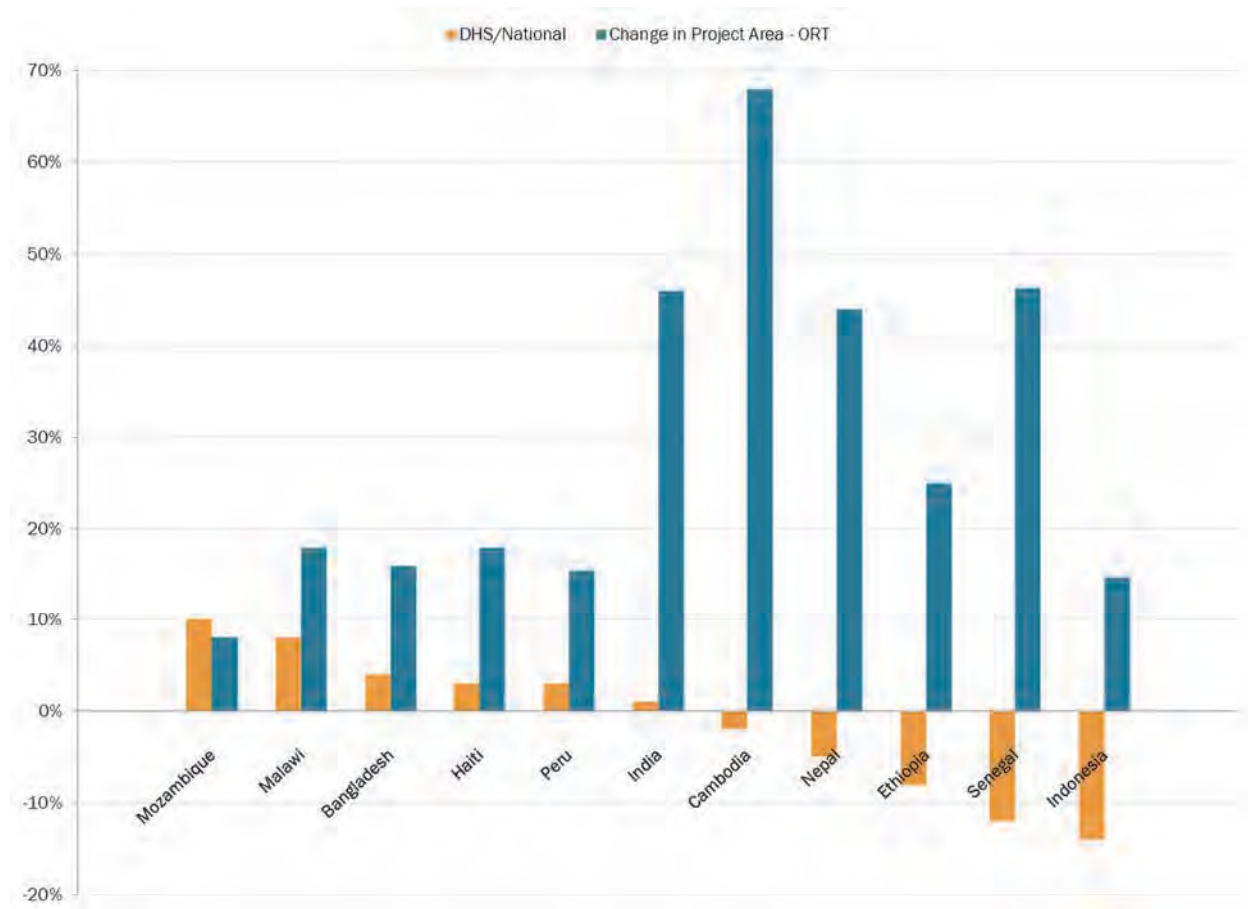
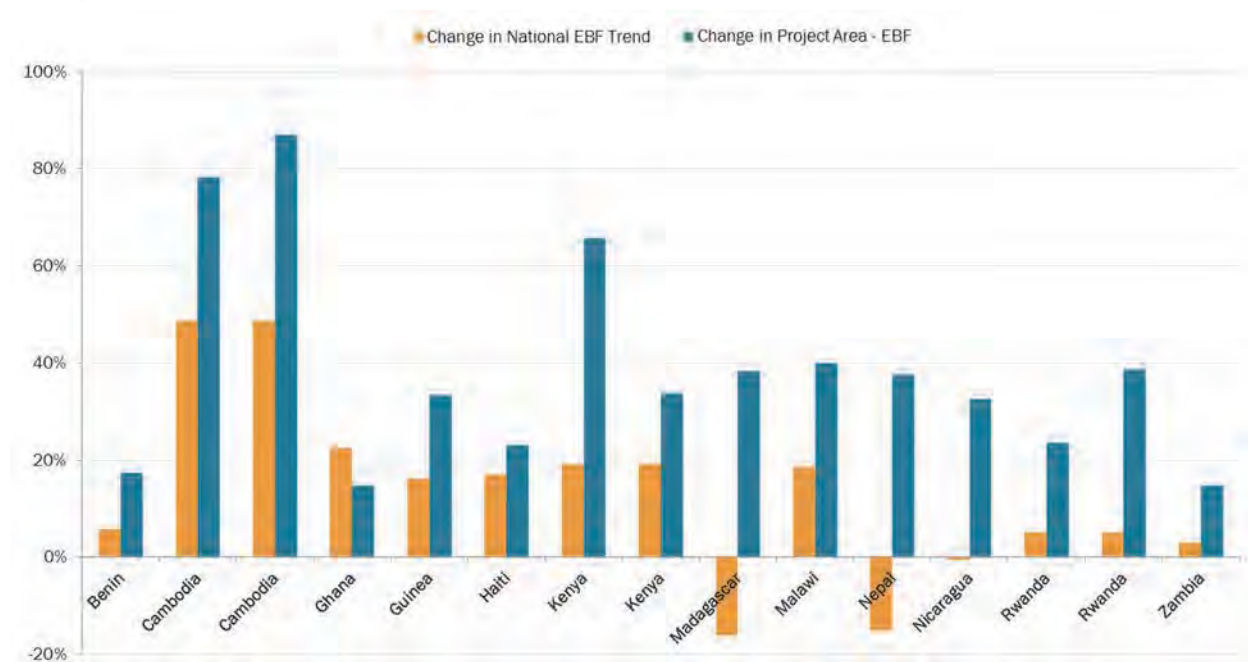


Figure 10. Trends in Exclusive Breastfeeding—CSHGP Project Area vs. National Trends (2004–2007)



Several other published articles generated through MCHIP support help tell the story of the mix of interventions that CSHGP partners strengthened and the results that demonstrate that the integrated PVO program efforts helped save lives in previously poorly performing districts and regions. Published evidence from 12 CSHGP projects shows that average under-five mortality rates in CSHGP project areas declined by 5.8% per year compared to only 2.5% in surrounding regions.²⁰ This doubling of child mortality reduction is exactly what countries would need to reach the Millennium Development Goal targets. The achievement reinforces the idea that governments and the global health community should dedicate greater efforts to the dynamic relationship between health systems and marginalized communities that must be engaged in the design and delivery of better health care. Most of the reduction in under-five mortality was estimated to have been accomplished through interventions delivered at the community and household levels and was correlated with the highly effective interpersonal approaches used by grantees.

While the coverage data changes and LiST analyses made it possible to estimate changes in mortality rates, a handful of CSHGP project teams were able to track mortality rates over time and during their evaluations they compared these rates to national-level improvements. These direct mortality reduction measures were consistent with trends calculated through LiST.²¹

Important Community-Health Evidence Generated and Disseminated

In addition to the portfolio-level analyses of CSHGP data outlined above, MCHIP advanced USAID's global leadership in community-oriented programming by contributing to the generation of evidence from grantees in CSHGP's OR portfolio of 30 projects in 23 countries, and facilitated the development of journal articles and briefing papers that have helped to position the CSHGP experience as an important part of the global evidence base. These efforts augmented learning on issues relevant to MCHIP's technical agenda, including health equity, FP integration, iCCM, community inputs to maternal and newborn care, and mHealth. In addition, MCHIP worked with USAID's CSHGP team to make all grantee final evaluation documents publicly available at www.mchip.net, so that others who wish to learn from the experience of CSHGP grantees have access to their reports.

Highlights from CSHGP's Operations Research Portfolio

Since 2008—the first year of MCHIP—USAID's CSHGP has supported 30 grants implemented by 19 international NGOs, in collaboration with academia, ministries of health, and other local partners in 23 countries. The CSHGP grants have been used to implement and test innovative approaches to end preventable child and maternal deaths through community-oriented interventions. MCHIP contributed to organizing and diffusing the findings from these programs, some of which are highlighted below.

From 2008 to 2012, research funded by CSHGP in **Nepal's** Baitadi district tested an Enhanced Homestead Food Production (EHFP) model to reduce the rate of stunting, wasting, underweight, and anemia. Through collaboration between the Government of Nepal's agricultural and nutritional sectors, the EHFP model was used to teach households improved techniques for the year-round production of diversified animal- and plant-source foods. In addition, interpersonal nutrition counseling and communication was conveyed by health volunteers to promote optimal nutrition practices. Although the EHFP model improved women's nutritional status, study results showed that a longer time frame or the use of EHFP along with other nutrition strategies might be needed to reverse child stunting in settings such as Baitadi,

²⁰ Ricca J, Kureshy N, LeBan K, Prosnitz D, Ryan L. Community based intervention packages facilitated by NGOs offer plausible evidence for child mortality impact. *Health Policy and Planning* 2014; 29(2):204–216.

²¹ Ricca J et al. Comparing estimates of child mortality reduction modelled in LiST with pregnancy history survey data for a community-based NGO project in Mozambique. *BMC Public Health* 2011; 11(Suppl 3):S35.

where the prevalence of malnutrition is extremely high. USAID and the Government of Nepal are using the findings to adapt and scale up this model in other areas of Nepal.

From 2009 to 2013, CSHGP funded an innovative essential obstetric and newborn care (EONC) model in collaboration with the Government of **Ecuador**. The EONC network model creates and uses a comprehensive provincial-level network that coordinates community- and facility-based services (public and private) and promotes coordinated service delivery along the continuum of care from household to facility. This network supports increased coverage and improved quality of care in vulnerable, indigenous communities, including in the health care centers and county hospitals, in these regions. The EONC network established in Cotopaxi contributed to improvements in behaviors such as exclusive breastfeeding, referral of complications by a traditional birth attendant to a facility (from 50% to 83%), and postpartum visits within two days of birth (from 4% to 70%), as well as significant improvement in reducing neonatal mortality. The evidence influenced a decision by the Government of Ecuador for country-wide expansion, as part of a national initiative to reduce maternal and newborn mortality, including a dedicated budget and staffing in all provinces of Ecuador.

From 2008 to 2012, the **Better Health for Afghan Mothers and Children** project tested the use of mobile phone technology (mHealth) as a job aid for community health workers (CHWs). The approach was based on the American College of Nurse-Midwives' Home-Based Life-Saving Skills for maternal and newborn care. It is used as a communication tool to make faster emergency responses possible and to create a comprehensive network that links community members, a health facility, and a maternity hospital. An evaluation of this project found an increase in pregnant women who: 1) received antenatal care, 2) received skilled delivery at a health facility, 3) coordinated with the facility for referral, 4) had a birth plan that involved a health facility, and 5) displayed increased knowledge of adverse pregnancy signs. Findings from this study indicate that using mobile technology supports CHWs in their daily activities of coordinating and providing care, and that the technology was easily used by non-literate female CHWs for promoting health knowledge in households. The findings are being communicated to local officials for consideration of uptake in remote areas, and mHealth is being adapted for use in Afghanistan and other countries.

Concern Worldwide partnered with the MOH in **Burundi** to establish and strengthen existing cadres of CHWs to implement malaria community case management (CCM) in a pilot study that tested whether the Care Group model, a well-documented innovation that has shown great promise in contributing to mortality reduction at the district and sub-district levels, could function just as effectively if it were facilitated by the MOH as part of efforts to implement CCM. Evidence from the project indicated that the MOH-facilitated integrated model performed as well as the NGO-led model for 36 of 40 child health and nutrition indicators. For example, in both intervention groups, exclusive breastfeeding until six months increased significantly from baseline to endline (from 36.4% to 92% in the NGO-led Care Group model and from 51.7% to 91.5% in the MOH-facilitated Care Group model). This suggests that the MOH-supported CHWs in the integrated Care Group model were just as effective at training and supervising their care groups as the NGO-paid promoters in the traditional Care Group model. The findings from this study were shared with the MOH, UNICEF, and other in-country development partners in September 2013. Concern Worldwide is continuing to work with the MOH, scaling up the approach in two new districts. The organization has developed an implementation guide for integrating the Care Group model into MOH structures. Other NGOs can use the guide to implement and further test MOH-facilitated integrated Care Groups.

In **Honduras**, ChildFund International tested a community-based model of integrated service delivery, which increased access to MNH services and reduced costs to consumers. The project collaborated with rural, low-income communities to establish health posts staffed by an array of

community volunteers, including trained traditional birth attendants, growth promotion monitors, and community health volunteers. In the final survey in 2012, child mortality in high-burden communities had decreased from 33 per 1,000 live births in 2009 to 27 per 1,000 live births. Ninety-four percent of those who benefited from the health posts were in the lowest socio-economic quintiles, and yet by the end of the project these communities enjoyed higher child survival rates than department- or national-level health posts. Results of a costing study conducted on the health posts found that when families found solutions to a child health problem at the community-level UCOS (community health units), they saved USD \$6.03–\$70.24 (as opposed to visiting a rural health post or hospital, respectively). Similarly, the costing study found that resources could be “saved” by the government as a result of strengthening medical attention at the community level. Savings ranged from USD \$6.07 at a rural health post to USD \$33.13 at a hospital (per visit averted).

In the high altitude and geographically remote Chitral district of KPK province in **Pakistan**, AKF’s CSHGP project partnered with the Ministry of Health and responded to the call to prevent maternal deaths. In a five-year period, the project improved skilled attendance at birth from 33% to 82% and skilled care across a continuum of care²² from 1% to 23% in areas of greatest need. An innovative intervention package included improved training and deployment of community midwives (CMWs), referral mechanisms, behavior change interventions, including male involvement, and community engagement and empowerment through village health committees (VHCs) and community savings schemes. Through training and an additional facility-based practicum, the project built CMW skills and confidence and bolstered relationships between community and facility health care providers. The project fostered CMW linkages with community members and other community health workers through VHCs, and ensured service quality by establishing a supportive supervision system. Community-based savings groups (CBSGs) were introduced and were found to hold promise for increasing utilization of skilled care: women who were associated with CBSGs were four times more likely than women with no association to access skilled care across a continuum of care. Referral mechanisms were strengthened. As a result of the connections fostered among community health workers and between community- and facility-level providers, referral mechanisms were strengthened. Women were referred to the CMW by other community health workers and were referred on time to secondary facilities (supported in some cases by the VHC for transport).

Other Portfolio-Level Analyses and Peer-Reviewed Publications

MCHIP facilitated or produced other important publications based on CSHGP experience, both in the published and grey literature, further raising the visibility of the program among global health practitioners and national policymakers. These efforts included the following:

MCHIP supported a review of the evidence on the effectiveness of community-based primary health care, which incorporated a review of a significant number of CSHGP grantee evaluation documents.²³ Overall, the findings of this review provide strong scientific support for the following three conclusions:

1. When proven interventions are implemented at the community level by locally trained and well-supervised health workers, coverage, impact, and equity can be favorably affected.
2. Under the right conditions, communities can become strong partners with established health delivery systems in improving the health of children.

²² A minimum of one antenatal care visit, skilled attendance at birth, and at least one postnatal care visit within two days of delivery.

²³ Perry H et al. How effective is community-based primary health care in improving the health of children? Summary findings report to the expert review panel, Community-Based Primary Health Care Working Group, International Health Section, American Public Health Association, July 2009.

3. Health programs can more effectively and sustainably improve the health of children by mobilizing the energy of local people for their own benefit.

In the context of both the project's overall focus on community case management and CSHGP's learning agenda, MCHIP supported a review of CSHGP implementation of CCM since 2000.²⁴ The review effort was undertaken in recognition of the powerful contributions that CSHGP grantees can make to advancing CCM. The 22 projects reviewed represent a sizeable investment of resources—**Redacted** match from grantees. The report found that while CSHGP grantees made important contributions in areas such as establishing an enabling policy environment, these contributions would be highlighted more effectively through a more systematic approach to documenting their CCM results against key benchmarks. The findings of this report were shared with grantees at CORE Group Spring Meeting (2012) in an effort to continuously improve grantee program design and documentation.

In addition to this review, MCHIP facilitated the development and publication of an article on the results from a CSHGP Expanded Impact in **Rwanda**.²⁵ Co-authored by MCHIP and a representative from the Rwandan Ministry of Health, the article described how, during national scale-up of iCCM in Rwanda, greater improvements in care-seeking were found in the districts where Kabeho Mwana (the CSHGP project) implemented its model than in the rest of the country. Success was attributed to an emphasis on routine data review, intensive monitoring, collaborative supervision, community mobilization, and, in particular, CHW peer support groups. This publication was the result of an MCHIP-facilitated "writeshop" that convened CSHGP grantee staff, MCHIP PVO/NGO Support team staff, and a Rwanda MOH representative.

Two other articles emerging from the writeshop were in the process of addressing feedback from journal review panels at the time of production of this report:

- Langston A et al. "The neglected value of small population based surveys: comparison of knowledge, practice, and coverage child health survey coverage and mortality modeling estimates with estimates from the Rwanda Demographic and Health Survey." Under review by *Journal of Health, Population and Nutrition* in 2014.
- Sarriot E. "Community case management in Rwanda: scenarios for sustainability and options for the health system and its partners." Under review by *Social Science and Medicine* in 2014.

Leveraging a Wider Network to Advance Global Leadership in Community Health

MCHIP's reach—through CORE Group and its network of 53 PVOs/NGOs, 23 Associate Organizations, and 28 Individual Associates—was significantly expanded, facilitating greater opportunities for increased collaboration and synergies with PVO/NGOs. By partnering with CORE Group, MCHIP gained access to an established program learning platform that fosters partnership, knowledge sharing, and advancement of best practices for ending preventable maternal, newborn, and child deaths. CORE Group and MCHIP hosted more than 30 webinars and at least a dozen trainings, which facilitated progress toward field-level impact. CORE Group also served as a catalyst for establishing strategic partnerships and inspiring effective practice across a wide variety of organizations, as evidenced by the broad participation at the seven semi-annual conferences CORE Group convened between spring 2011 and spring 2014. The conferences averaged 237 participants from 89 different organizations. Further evidence of

²⁴ Marsh D et al. What did USAID's Child Survival and Health Grants Program learn about community case management and how can it learn more? A review of 22 projects since 2000. Unpublished briefing paper; June 2012.

²⁵ Langston A et al. Plausible role for CHW peer support groups in increasing care-seeking in an integrated community case management project in Rwanda: A mixed methods evaluation. *Global Health Science and Practice* 2014; 2(3): 342–354.

CORE Group's impact over the course of the project was that the number of unique visitors to their website more than doubled, with an average of more than 16,500 visitors each year. CORE Group social media efforts began in 2011 and grew significantly, increasing MCHIP and CORE Group engagement and attendance by a much wider range of partners. These networking and diffusion mechanisms helped to ensure that the practical tools and resources developed through CORE reflected the wide range of experience of its network and were immediately applicable in the field.

CORE Group provided a vehicle for rapid, action-oriented diffusion of MCHIP's lessons learned, tools, and opportunities to increase positive health impact and contribute to global learning for community health. Together, CORE Group and MCHIP, with support from collaborating partners, diffused dozens of collaborative community health program tools and resources, including first and second editions of the *CCM Essentials Guide* and the *HBB Implementation Guide*. CORE Group's participation in MCHIP resulted in the creation of several joint products and the cross-promotion of resources, and extended representation in global forums, thus elevating the importance of integrated community-focused interventions and the role of civil society in helping to end preventable child and maternal deaths.

CORE Group Contributions to Advancing Community Health

CORE Group supported strategic collaboration with MCHIP by facilitating linkages between MCHIP, CORE Group, CSHGP, and the wider community health network to increase coordination, quality, and scale-up of high-impact, community-focused interventions and approaches with a focus on MNCH and nutrition. For **mHealth**, CORE Group supported an interest group and listserv for sharing best practices, resources, and learning, and contributed to increasing the engagement of NGOs through its membership in the TAG of the mPowering Frontline Health Workers GDA and the UNF mHealth Steering Committee. CORE Group also produced the *mHealth Field Guide for Newborn Health* with support from the private-sector firm DiMagi.

For **CHWs and systems**, CORE Group contributed to thought leadership and knowledge sharing. CORE Group also established and facilitated the MCHIP-led CHW Performance TAG and follow-on activities related to CHW typologies and community health systems. As an outcome of the CHW advisory group meeting, CORE Group led a multi-organization working group on community health systems and led the writing and dissemination of the discussion paper [*How Social Capital in Community Systems Strengthens Health Systems: People, Structures and Processes*](#). For the CHW handbook [*Developing and Strengthening CHW Programs at Scale: A Reference Guide for Program Managers and Policy Makers*](#), CORE Group authored a chapter on CHW relationships with the community, co-authored a chapter on CHW relationships with the health system, and reviewed the remaining chapters. At the global level, CORE Group participated on the advisory panel of a WHO TDR (Special Programme for Research and Training in Tropical Diseases) realist review of incentives and the recruitment, retention, and performance of CHWs; participated on the CHW Central TAG; and contributed to the USG Community Health Worker Evidence Summit.

Building on CSHGP and MCHIP synergies, the CORE Group supported the completion and dissemination of [*The Mortality Assessment for Health Programs \(MAP\) System: An NGO Field Manual for Registering Vital Events and Assessing Child Survival Outcomes Using the Care Group Model*](#). This manual is a guide for NGOs using the Care Group model for child health programming to assess under-five mortality rates and evaluate program effectiveness. As noted earlier, in the discussion of Concern Worldwide's CSHGP Operations Research program in Burundi, care groups are now being used by more 20 organizations in more than 20 countries. Training has reached more than 106,000 peer educators, who reach at least 1.275 million households. A care group consists of 10 to 15 volunteer community-based health educators who

regularly meet with a staff person for training, supervision, and support. Care groups achieve complete and consistent coverage of a specified area. The “saturation coverage” design ensures that every household with a child under age five or a woman of childbearing age receives a volunteer visit at least twice a month and helps develop deeper personal relationships for promoting behavior change and improved health impact. As part of its efforts to advance community coverage approaches, CORE Group also planned and facilitated the two-day Care Group TAG—including both Care Group practitioners and leading thinkers in community-oriented programming—which resulted in updating the Care Group Info website and training resources, and wider diffusion of the evidence-based methodology.

At the global level, CORE Group co-sponsored an NGO information reception at the 2012 launch of “A Promise Renewed” to encourage USAID, MCHIP, and country leadership to inspire greater engagement and harmonization across partners. CORE Group participated in the global iCCM Task Force and served as the Co-Focal Person for the Roll Back Malaria (RBM) CMWG Expanding Access to Treatment Workstream. Together, CORE Group and MCHIP disseminated and promoted the *CCM Essentials Guide*, the CCM Graphic, and CCMCentral.com, and supported the CCM Supplement Launch at the American Society of Tropical Medicine and Hygiene.

With CORE Group, MCHIP leveraged its role as co-organizer in the Global Newborn Health Meeting and the iCCM Evidence Review Symposium to ensure representation of community-oriented efforts.

CORE Group provided global leadership around the development of community health tools and guidance to influence program design and program learning related to equity, community health workers and systems, and social accountability. CORE Group featured **equity** in its semi-annual *Community Health Network* meetings, which contributed to resources developed by MCHIP PVO/NGO Support, [*Considerations for Incorporating Health Equity into Project Designs: A Guide for Community-Oriented Maternal, Neonatal and Child Health Projects \(September 2011\)*](#) and [*MCHIP Checklist for Health Equity Programming*](#). This guidance helps program planners assess health equity issues in their project area and create plans to address them. It was developed over years of dialogue with and learning from NGOs and other experts working with underserved populations. Through MCHIP, NGOs and CORE Group disseminated the successes of different technical interventions used in their projects to wider audiences. MCHIP’s comprehensive and integrated design contributed to a flow of learning from communities through the health system to the policy level and back again through the system to communities, with continual discussion, debate, documentation, and dissemination.

The key learning themes of behavior change, integration, and equity benefited from the work of CORE Group and the PVO/NGO Support team. CORE Group and PVO/NGO Support contributed to the collaborative MIYCN-FP toolkit completion and launch, and CORE Group developed and disseminated a complementary GSM-funded guide, [*Better Together –Linking Family Planning and Community Health for Health Equity and Impact*](#), and an “off-the-shelf” facilitator’s guide, [*Social and Behavior Change for Family Planning: How to Develop Behavior Change Strategies for Integrating Family Planning into Maternal and Child Health Programs*](#). The facilitator’s guide is for facilitators of a 2.5-day training for NGO and civil society staff in low-resource settings. (For more information, see PVO/NGO Support Annex 10 and CORE Group Annex 11.)

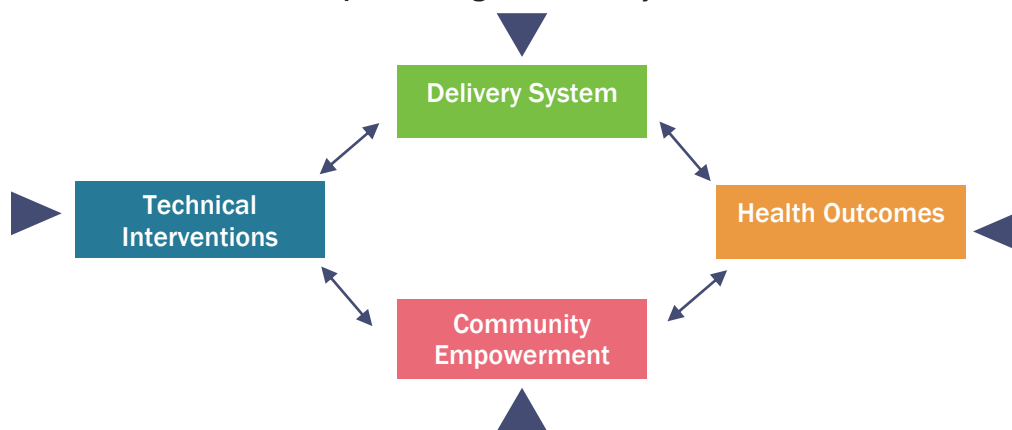
Community-Themed Program Learning Highlights

SO3’s focus on community-oriented programming delivered by PVOs/NGOs and their local partners both complemented and informed MCHIP-wide program learning efforts around the theme of *community*. After developing a policy brief on community engagement, the full text of which is available in Annex 8, and after a thorough literature review, MCHIP defined

“community-based approaches” as activities that take place outside of health facilities and that engage the community. Community-based interventions may occur at fixed points where community members gather, in the home or at a community-run facility, including a health hut, birthing hut, mosque, village hall, or any other place where a community-based provider gives services, such as the *Posyandu* in **Indonesia**. In addition, the term “community-based approaches,” which includes activities and interventions, suggests that communities be engaged as partners in the process of service delivery and health improvement. It is an umbrella term encompassing mobilization, outreach, and home visits, among others. MCHIP field activities tested many of these approaches. Overall, MCHIP implemented significant community-based work in 14 countries.

Learning generated by MCHIP country programs, the CSHGP, and MCP about effective community health programming at scale is described in this section in the following three categories corresponding to the framework used (shown in Figure 11): 1) support for implementation and study of community-based, high-impact interventions; 2) support for development and scale-up of community-based delivery systems; and 3) support for community empowerment and mobilization approaches.

Figure 11. Model for Maximum Impact through Community Health Interventions



Support for Implementation and Study of Community-Based, High-Impact Interventions

To provide national leaders with compelling evidence that PPH prevention strategies are effective at achieving high uterotonic coverage for prevention of PPH, MCHIP and the MOH collaborated on OR in five countries—**Guinea, Madagascar, Liberia, Rwanda, and South Sudan**. Specifically, MCHIP supported the MOH in each country to carry out the intervention, document the results, and disseminate the findings as part of an effort to scale up the program. Some of the major findings of these studies included the following: 1) programs that use home visits can achieve high rates of distribution and coverage; 2) the location and cadre used for misoprostol distribution affect coverage; 3) CHWs achieved higher coverage than ANC health workers; 4) advance distribution in late pregnancy (as opposed to distribution at the time of birth) results in higher coverage; and 5) CHWs are as effective as facility-based providers in delivering counseling and education to women.

Other evidence supporting the effectiveness of community-based, high-impact interventions include data obtained through the Healthy Fertility Study, a quasi-experimental study measuring the effectiveness of community-based PFP integrated with MNH care interventions. The goal of this study, which was implemented in eight unions of Sylhet district in **Bangladesh**, was to promote recommended MNH and FP practices by building an enabling environment and social support for these issues, with an emphasis on the lactational

amenorrhea method (LAM). The study found that the intervention caused a significant increase in contraceptive prevalence rates and uptake and an increase in the number of women who exclusively breastfed their infant (often in association with adoption of LAM). The intervention also produced a decrease in the probability of a subsequent birth within 30 months.

Support for Development and Scale-Up of Community-Based Delivery Systems

As discussed previously, one of the important innovations to emerge from the CSHGP is the Care Group methodology, which has led to widespread dissemination throughout the NGO child survival community. By supporting a paper about the use of CARE Group volunteers to communicate important health messages to mothers in **Mozambique**, MCHIP contributed to growing the evidence base around care groups.²⁶ This paper showed how using Care Group models can improve the level of undernutrition among children at scale and at low cost, and thus has implications for reducing under-five child mortality in priority countries. For example, in 2013, the nutrition impact of a Care Group project implemented in a population of 1.1 million people in rural **Mozambique** documented that more than 90% of beneficiary mothers reported that they had been contacted by Care Group volunteers during the previous two weeks, and that the annual rate of decline in childhood undernutrition was four times greater than in the country as a whole.³

Also, as mentioned previously, iCCM is another important strategy that demonstrates the effectiveness of community-based delivery systems. MCHIP has provided technical leadership through its role as Secretariat of the iCCM Task Force, an essential forum in which members coordinate advocacy efforts, share existing tools, develop common resources, and use a common organizing framework for CCM implementation. In addition, MCHIP has helped to introduce iCCM programs in four countries and supported the expansion of iCCM programs in seven countries. The program has contributed to formal iCCM assessments and evaluations in four countries, and the review of CSHGP grantee experience highlighted earlier in this section is another MCHIP effort in this area.

A final effective strategy that MCHIP has used to support the development and scale-up of community-based delivery systems is community mobilization through behavior change. By providing technical support to MCP grantees in 12 sub-Saharan African countries, MCHIP strengthened local capacity to undertake community-based malaria prevention and treatment activities; built local ownership of malaria control in partnership with communities and NMCPs; and extended coverage of PMI and NMCP interventions to reach larger beneficiary populations. Results indicate that these interventions, among others, led to an increase in ITN use among children under five in all except one of the project areas reporting survey data, and IPTp coverage increased by an average of 50 percentage points across the seven project areas where NGOs conducted surveys. In two projects that had serial DHS data for comparison of under-five coverage of ITNs (Malawi and Tanzania), the increases in coverage in the project area were larger than the trend of coverage increase measured by the serial DHS data. For example, increases from baseline to endline showed that ITN use in the project area in Tanzania increased from 5% to 67%, and IPTp coverage in the project area in Angola rose from 23% to 80%.

Support for Community Empowerment and Mobilization Approaches

Among countries where MCHIP worked, the Immunization Team partnered with district health services to strengthen capacity and build partnerships with communities for more effective planning. The team provided assistance in monitoring and improving the delivery and uptake of

²⁶ Davis T et al. Reducing child global under nutrition at scale in Sofala Province, Mozambique, using Care Group Volunteers to communicate health messages to mothers. *Glob Health Sci Pract* 2013;1(1):35–51.

routine immunization services. For example, to increase child immunization coverage, MCHIP partnered with the MOH to implement the Imunizasaun Proteje Labarik (Immunization Protects Children) project in seven districts of **Timor-Leste** from April 2011 to October 2013. The project supported the MOH and national partners in annual micro-planning at the district and sub-district levels. It helped the government to review and formulate policy papers and strategic guidelines for both the EPI and the wider health system. The project developed standard tools for supportive supervision and mentored local staff on reporting and registering. At the community level, the project trained community leaders on immunization and other health topics so that they could mobilize fellow community members and respond to their questions and concerns. It engaged communities in micro-planning and monitoring by introducing a new tool that enabled community volunteers to list all infants, record the dates of each of their vaccinations, and make home visits to motivate parents when a child fell behind in his/her immunization schedule. The project also gave immunization orientations in middle schools. Together, these interventions resulted in increased knowledge and improved capacity to provide immunization services at the community and health system levels among community leaders. The project also achieved increased levels of immunization coverage and demonstrated positive impact on timeliness of vaccination.

Another example of how MCHIP supported approaches that worked to empower and mobilize the community is the MaMoni project in **Bangladesh**.²⁷ This project created an interface between the community and the health system by using high-impact technical interventions, providing training, motivating and supporting CHWs, and ensuring that essential commodities were available. The project recruited female CHWs to provide routine systematic household-based counseling on MNH messages and also trained service providers on elements of the integrated package. Community engagement was achieved through community action groups and community volunteers. Volunteers raised awareness, promoted care-seeking, identified health problems, and addressed the problems with local resources. As a result of these efforts, monthly community-to-facility referrals rose from 20 per month to more than 180; the contraceptive prevalence rate rose from 39% to 46%; ANC1 rose from 32% to 76%; and institutional delivery nearly doubled, increasing from 13% to 22% of births.

In addition to country-level efforts to implement effective community engagement practices, MCHIP also contributed to global dialogue on the future of these efforts—for example, by contributing to the development of the previously mentioned reference guide for CHWs.²⁸ This guide was developed through an exhaustive literature review and field work, and it produced several key findings, suggesting that intervention delivery strategies such as home visitation, CCM, participatory women’s groups, and provision of services by mobile health teams at outreach points remain essential strategies for reaching communities. Some of the strongest mobilization strategies were outreach to non-traditional groups, such as micro-credit groups, and working with smaller health-oriented groups within the community.

²⁷ Additional discussion of the MaMoni project can be found in the section titled “Integrated Community Mobilization for MNH: The Bangladesh MaMoni Project” in *Prospects for Effective and Scalable Community-Based Approaches to Improve, Reproductive, Maternal, Newborn, and Child Health (RMNCH)* under Annex 8.

²⁸ *Developing and Strengthening Community Health Worker Programs at Scale: A Reference Guide for Program Managers and Policy Makers*.

Achievements by Program Areas and Results Pathways



Maternal Health

Introduction

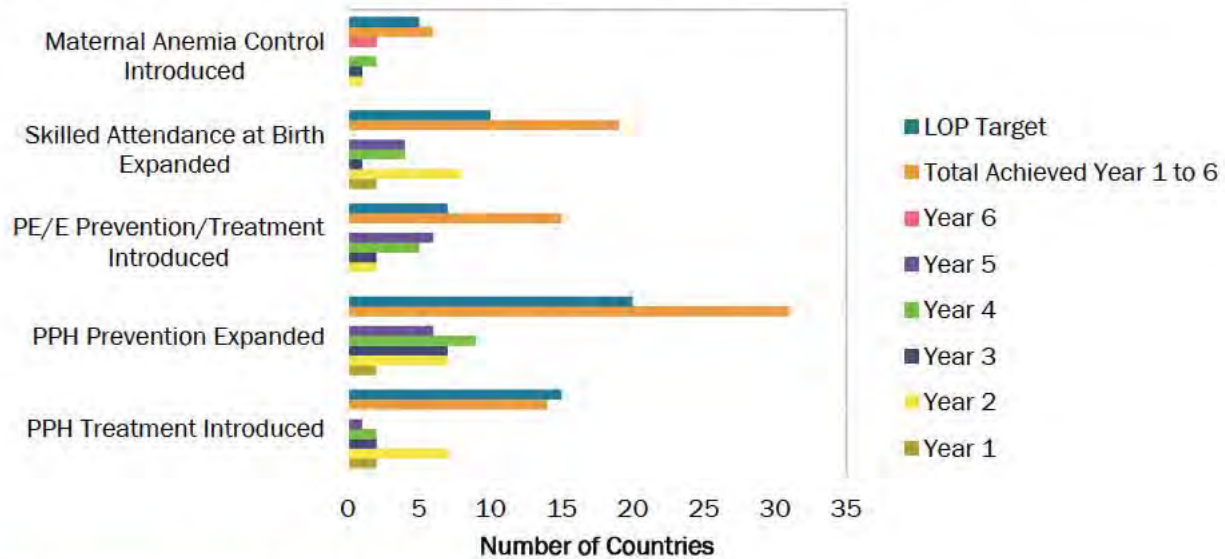
Over the past six years, the MCHIP Maternal Health Team has successfully capitalized on MCHIP's international platform to help reduce maternal mortality through targeted initiatives at the global and country levels. Providing direct technical assistance (TA) to country programs worldwide, MCHIP has helped countries work toward their goals of scaling up evidence-based maternal health approaches. Complementing work at the country level, MCHIP has helped define and drive the global agenda in maternal health through generating evidence,

promoting best practices, and forging strategic partnerships with key development partners, including WHO, UNFPA, UNICEF, FIGO, ICM, Survive and Thrive, Born Too Soon, BMGF, other donors, bilaterals, and implementers, to successfully improve maternal health outcomes on a worldwide scale.



Global leadership and country support efforts have centered on operationalizing and scaling up evidence-based maternal health approaches, focusing primarily on the prevention and management of postpartum hemorrhage (PPH) and pre-eclampsia/eclampsia (PE/E), as well as the promotion of skilled birth attendance (SBA). Recognizing that interventions at the community and household levels can have a significant impact on mortality, MCHIP has placed a high priority on producing the necessary evidence and tools to expand the range of high-impact interventions to include these community- and household-based approaches. For example, MCHIP has successfully promoted advance distribution of misoprostol for use at home birth, as part of a comprehensive approach to PPH prevention at home birth and in the facility.

Figure 12. Progress in Introducing and Expanding High-Impact Maternal Health Interventions



Key Achievements and Results

Global Leadership

MCHIP has contributed to advancing global thinking and country-level uptake of strategies to reduce maternal mortality from PPH and PE/E through strategic and robust engagement with key global partners, especially through technical support to Ministries of Health to build leadership and implementation capacity, and through partnerships with WHO and UNICEF. MCHIP worked closely with WHO to ensure that information from new WHO guidelines for several important topics, including the prevention and treatment of PPH, the prevention and treatment of PE/E, and postnatal care for mothers and newborns, were translated into practical materials and disseminated at global, regional, and country levels.

MCHIP has served on numerous WHO technical committees and has been asked to lead sessions on the implementation of the guidelines at WHO guideline meetings, such as on preterm birth, PE/E, and PPH, thus demonstrating that MCHIP is recognized by WHO and partners as a key implementer in countries where MNCH activities are under way. MCHIP also advised the Director of WHO’s Immunization Program on rotavirus vaccine introduction, training approaches, and other important aspects of vaccine program implementation. By forging these strategic partnerships, MCHIP maximized the impact of collective efforts to reduce maternal and newborn mortality and morbidity. In addition to leadership in the area of PPH and PE/E, MCHIP advanced global efforts to reduce morbidity and mortality from preterm birth through operations research (OR), the development of resource materials in partnership with the Survive and Thrive GDA, and contributions to global meetings and initiatives. Frequently participating on scientific/steering committees to set the agendas and themes, the Maternal Health Team led sessions at the Global Newborn meeting in Johannesburg in 2013 on maternal interventions for improved newborn outcomes, with a focus on prematurity.

MCA Findings Grouped by Themes:

- 1a. Availability of uterotonic medications
- 1b. Availability of MgSO₄ for the management of severe PE/E
2. Lifesaving medicines approved at the national level
3. National policies regarding AMTSL
4. Expansion and scale-up of misoprostol availability and PPH-reduction programs
5. Midwife and SBA scope of practice
6. Education and training in AMTSL and PE/E management principles
7. National reporting on selected maternal health indicators
8. Potential for scale-up and bottlenecks

To inform progress on scaling up PPH and PE/E programs, MCHIP undertook a Multi Country Analysis (MCA) Survey of 37 countries in [PY3](#) and [PY4](#).²⁹ In this survey, MCHIP assessed national programs for the prevention and management of PPH and PE/E, and conducted a sub-analysis of service delivery guidelines related to prevention of PPH and EMLs for oxytocin and misoprostol (the findings are presented across the eight themes shown on the previous page). This survey—and a corresponding manuscript published in *Global Health: Science and Practice (GHSP) Journal* in Q3 of PY6—contributed to the global evidence base, enabling donors and partners to use the MCA survey data and recommendations to identify barriers and more effectively prioritize efforts and funding to reduce morbidity and mortality from PPH and PE/E. Importantly, governments and implementing agencies have used the results of this MCA survey to identify and address gaps as they work toward scaling up interventions to reduce PPH and PE/E at the country level; most specifically, the United Nations Commission on Life-Saving Commodities (UNCoLSC) has cited the MCA survey repeatedly. Through this widely used survey and advocacy tool, which has been presented and disseminated at almost 10 national and international conferences, MCHIP has been able to identify availability issues related to key maternal health commodities. This information will aid in addressing some of the UNCoLSC recommendations. The MCA survey was used extensively in the “Key Data and Findings: Medicines for Maternal Health” report, filling critical information gaps on the availability and use of maternal health medicines and supplies at the country level. Given its scope and breadth, this survey has provided a large amount of useful data, helping the UNCoLSC identify potential issues that require attention and action so that essential lifesaving products reach those who need them most. MCHIP also worked with its partner PATH to support the development of the Advocacy Working Group’s (AWG’s) Advocacy toolkit *Scaling-up Lifesaving Commodities for Women, Children and Newborns*. Reflecting its commitment to providing advocacy resources for addressing commodity-related gaps in global and national plans, policies, and initiatives, MCHIP supported the launch of the toolkit in a workshop in Ghana during Q3 of PY6.

MCHIP organized two regional maternal health meetings in **Ethiopia** (November 2011) and **Bangladesh** (May 2012) that focused on interventions for impact in essential obstetric and newborn care. These workshops were critical in promoting evidence-based maternal health policymaking in **Liberia, South Sudan, Zambia, the Philippines, Burma, Pakistan, and India**. The MCA of PPH and PE/E programs was presented, encouraging numerous programs in countries across Africa, Asia, and the Near East to adopt evidence-based maternal health interventions that achieve impact at scale. For example, following the Asia meeting, Pakistani representatives of provincial departments of health, professional bodies, academic institutions, civil society organizations (CSOs), and development partners met and, as a direct result, adopted the inclusion of misoprostol on the EML for FATA-KP, Punjab, and Baluchistan.

Some participants used the information from these regional meetings to improve health care service delivery. For example, in Bangladesh, one participant, a training and capacity development expert from the Asian Development Bank, used conference information, particularly on PE/E and AMTSL, to draft an MNH training curriculum and to conduct trainings for doctors, paramedics, nurses, and medical technicians in her capacity as master trainer. She also organized staff training sessions as well as two days of faculty development training on HBB, a program she hadn’t used before the MCHIP conference. Another participant added a skills test for HBB in July 2012 to the clinical standardized service training for the clinical staff of the medical college in Jharkhand State, India. At the provincial health office in Central Java, Indonesia, participants held meetings to discuss how to use magnesium sulfate (MgSO₄) and led clinical practice sessions for midwives and doctors on neonatal resuscitation using NeoNatalie anatomic models.

²⁹ <http://www.mchip.net/globalstatusreport>

Similar to the MCA Survey, the Quality of Care (QoC) assessments conducted in seven African countries—**Ethiopia, Kenya, Tanzania, Madagascar, Rwanda, Mozambique, and Zimbabwe**—have contributed to global evidence and advanced country-level efforts to reduce maternal mortality from PPH and PE/E, with the added value on measurement of QoC using direct observation. MCHIP has shared the results of the QoC studies at international and national conferences and online, drawing greater attention to important, specific quality challenges, and contributing to a growing emphasis, at the global level, on quality—particularly for labor, delivery, and immediate postnatal care (PNC). The results from these assessments will be published in multiple peer-reviewed journal articles on several topics.³⁰

Importantly, these QoC studies spurred concrete action in all seven countries. In **Rwanda**, the QoC study influenced the development of three major documents, including the National Guidelines on Newborn Care, BEmONC training, and a policy on PAC, given that the QoC study data helped to inform the creation of a new policy. Additionally, the government included key medicines and equipment on national lists, such as supplies for newborn resuscitation, calcium supplementation and MgSO₄. Thanks to MCHIP, the government now understands the importance of access to MgSO₄ and has not only made it available at hospitals, but has also committed to providing training to ensure that providers are able to use it.³¹

Given the challenges associated with observation-based assessment of QoC, MCHIP has built on the QoC studies to develop and validate a subset of informative indicators that can be used for more rapid, ongoing, and cost-effective measurement of the quality of labor and delivery (L&D) care processes at health facilities. This task began with a global literature review to identify indicators used for the assessment of the quality of L&D care. A group of global maternal and newborn care experts then participated in a Delphi process to identify key dimensions of the quality of L&D care processes. Affiliated with MCHIP, USAID, and external organizations, these experts also rated the indicators used in the QoC studies for their importance and representation of important dimensions of QoC. Combinations of highly rated indicators were evaluated for their validity. A best-performing set of indicators was identified and piloted at seven health facilities in **Tanzania** to evaluate reliability and user experience. A shorter set of indicators, consisting only of actions performed at or immediately after delivery, was also evaluated for its validity. These two tools may facilitate the more rapid and effective assessment of the quality of maternal and newborn care services, and help target QI activities. Additionally, this shortened indicator set is an important tool for future programs to incorporate into their routine, sustainable quality assessment and improvement approaches. Four related manuscripts are under review and will contribute significantly to the current global focus on QoC and to program learning about which MNH indicators best measure the QoC.

MCHIP has shown leadership through close collaboration with the Newborn Team and partners to focus attention on the importance of integrated perinatal approaches that target key maternal health interventions to address prematurity and improve outcomes for newborns. In close collaboration with other key stakeholders, such as Born Too Soon, Survive and Thrive, and the BMGF, MCHIP has spearheaded the development and dissemination of materials on the reduction of newborn asphyxia and infection, as well as complications of prematurity, through improved L&D practices. In addition to promoting better intrapartum practices to reduce newborn infections and newborn death, other noteworthy products include an advocacy and technical briefer, as well as a job aid, all promoting the use of antenatal corticosteroids (ACS) for fetal lung maturation. MCHIP also conducted an innovative research study in three

³⁰ Planned articles on QoC assessments include an overview on the need for observation to assess quality of services; PPH prevention and management; PE/E prevention and management; RMC; and essential newborn care, including resuscitation.

³¹ Please refer to Global EOP Report Program Learning Annexes 7 and 8 for more information on QoC Assessment background, lessons learned, and country experiences.

countries (**Indonesia, Cambodia, and the Philippines**) to measure the results of an intervention to increase the use of ACS at facilities. With data collection ending in May 2014, findings from this study were disseminated in the third quarter of 2014, and provided evidence around the key elements and potential barriers to the success of the implementation of ACS interventions. In partnership with the UNCoLSC, MCHIP has demonstrated leadership in the appropriate use of ACS, spearheading the development of new training materials, and promoting the use of ACS at numerous global forums.

In addition to these global-level interventions, the Maternal Health technical staff provided national- and country-level TA, integrating maternal health interventions for improved newborn outcomes in several countries, including **Malawi, Nepal, and Bangladesh**. Adopting approaches that link maternal and newborn interventions to reduce newborn complications, MCHIP has made it a standard practice to integrate essential newborn care with clean and safe birth programs. In **Yemen**, for example, MCHIP supported the introduction of new AMTSL guidelines, which also included delayed cord clamping (DCC), skin-to-skin contact, and immediate breastfeeding. Similarly, MCHIP supported the integration of HBB with PPH-related trainings under the associate award in **South Sudan**.

As the lead implementing agency for USAID and a prominent participant in the global arena, MCHIP has been a valued TA organization for high-level global standards meetings convened by WHO, UNICEF, FIGO, and ICM. MCHIP has worked in close partnership with these global organizations to advance progress on critical maternal health issues, including preterm birth, PE/E, and AMTSL. MCHIP has contributed to the development and dissemination of briefers summarizing essential WHO guidelines on high-quality, high-impact interventions aimed at reducing maternal mortality, such as PE/E, PPH, and PNC. MCHIP translated and widely disseminated these briefers and guidelines at global meetings, and worked closely with partners such as ICM and FIGO to bring these global standards to the national level.

One effective vehicle for the wide dissemination of these guidelines and other useful resources has been several maternal health-focused toolkits developed by MCHIP on the K4Health website. One such toolkit is on Essential Obstetric and Newborn Care (EONC),³² which encompasses the full range of essential care for uncomplicated deliveries as well as comprehensive emergency care. Developed with a focus on Africa to support the MNH Champions, this toolkit was launched in 2012 for a broader audience. As of April 2014, there were 2,237 visits to this site from users in 116 countries, with a total of 18,715 pages viewed. This toolkit provides guidance on key programmatic steps, sharing lessons learned and relevant resources to assist country programs, donors, and governments to develop focused interventions and programs. Recognizing that Internet connectivity might be a problem in some developing countries, MCHIP distributed materials from EONC and other toolkits in the form of printed copies, USB, and CD-ROMs at regional and global conferences. Other toolkits on PPH, PE/E, pre-service education (PSE), and respectful maternity care (RMC) will be discussed in subsequent sections of this report.

Postpartum Hemorrhage

MCHIP has worked tirelessly to promote the prevention and treatment of PPH at country, regional, and global levels. Most important, MCHIP supported global policy change by contributing to the global evidence base on the effectiveness of community-based interventions to prevent PPH. In keeping with its extensive advocacy and programmatic efforts to promote advance distribution of misoprostol for self-administration at home birth, MCHIP has carried out OR on introductory PPH prevention programs in five countries—**South Sudan**,

³² <https://www.k4health.org/toolkits/eonc>

Madagascar, Liberia, Rwanda, and Guinea. All but the Madagascar³³ program supported a comprehensive PPH prevention approach, promoting AMTSL at the health facility and advanced distribution of misoprostol for home birth, with the goal of ensuring that all women are protected from PPH, regardless of where they give birth.

The studies provided Ministries of Health (MOHs) with compelling evidence on whether PPH prevention strategies (particularly misoprostol distribution and administration strategies) were effective at achieving the highest possible uterotonic coverage of all births. These studies also generated learning on the most effective PPH prevention approaches, which were captured in peer-reviewed publications through an article on **Liberia** published in [BMC Pregnancy and Childbirth](#) in Q3 of PY6,³⁴ and another on **South Sudan**, published in [International Journal of Gynecology & Obstetrics](#)³⁵ in Q3 of PY6. Thanks to highly promising results of some of these programs, MOHs have opted to expand them to varying degrees in **South Sudan, Liberia, and Madagascar**—protecting thousands more women from PPH.

These studies, along with an MCHIP article in [BMC Pregnancy and Childbirth](#)³⁶ and a corresponding [two-page briefer](#), have widespread implications for reducing maternal mortality and expansion of services to more women. Further contributing to the global evidence supporting advance distribution of misoprostol, this BMC article presents the results of integrative review of implementation strategies for the use of misoprostol for the prevention of PPH at home birth. This article revealed that advance distribution of misoprostol by community health agents during home visits late in pregnancy achieved the greatest distribution and coverage rates.

Complementary to these efforts to generate global evidence have been practical, hands-on tools, resources, and trainings developed by MCHIP to increase the capacity for prevention and management of PPH. An example includes the PPH toolkit on the K4Health³⁷ website. The K4Health website has proven an effective means of sharing program materials related to PPH, based on the large number of site visits related to PPH—5,316 as of April 2014, with 13,631 total pages visited by users from 147 countries.



Photo credit: Kate Holt, Jhpiego.

To promote the broad adoption of use of misoprostol in programs that prevent PPH at home births, MCHIP led a global effort to strengthen the capacity of partner organizations and local NGOs. In addition to updating the PPH toolkit with a new section aimed at helping programs initiate or expand PPH programming using misoprostol, MCHIP developed an updated [Program Implementation](#)

Wilma Ajiiba, a Home Health Provider in South Sudan, teaches women about the importance of giving birth in a health facility.

³³ MCHIP was not permitted to work in public sector facilities due to the Brooke Amendment, which restricted the U.S. Government from providing direct TA to the Government of Madagascar.

³⁴ Smith JM et al. 2014. Advance distribution of misoprostol for prevention of postpartum hemorrhage (PPH) at home births in two districts of Liberia. *BMC Pregnancy and Childbirth* 14:189; online at <http://www.biomedcentral.com/1471-2393/14/189>.

³⁵ Smith J M et al. 2014. Clinical article: Advance distribution of misoprostol for the prevention of postpartum hemorrhage in South Sudan. *International Journal of Gynecology and Obstetrics*, doi:10.1016/j.ijgo.2014.05.016.

³⁶ Smith JM et al. 2013. Misoprostol for postpartum hemorrhage prevention at home birth: an integrative review of global implementation experience to date. *BMC Pregnancy and Childbirth* 13:44; online at: <http://www.biomedcentral.com/1471-2393/13/44>

³⁷ <https://www.k4health.org/toolkits/postpartumhemorrhage>

[Guide](#)³⁸ designed to scale up misoprostol programs. In collaboration with VSI, PSI, and EngenderHealth, MCHIP also held three three-day workshops on comprehensive PPH prevention programs for program implementers working in PPH. At these workshops held in Washington, D.C., New Delhi, India, and Maputo, Mozambique, there were a combined total of 163 participants from 79 organizations and government agencies, representing more than 23 countries.

In addition to providing the knowledge and tools for successful implementation of PPH programs, MCHIP supported country-level progress in PPH prevention and treatment. For example, given the lack of AMTSL protocols in **South Sudan**, ISDP, the MCHIP Associate Award, supported the incorporation of AMTSL in the training on normal delivery and management of PPH for two states, and AMTSL is now part of the pre-service midwifery programs nationally. Furthermore, given that misoprostol was not on the EML for PPH prevention at home birth, ISDP also successfully piloted the use of misoprostol for the prevention of PPH in two counties of Western Equatoria state of **South Sudan**, and plans for national scale-up were under way before the security situation there deteriorated in late 2013. Similarly, in **Guinea**, MCHIP supported the incorporation of misoprostol on the EML and the inclusion of AMTSL in the HMIS, in addition to the launch of an introductory program piloting the use of misoprostol for the prevention of PPH at home birth. In **Ethiopia**, at MCHIP-, Jhpiego-, and some partner-supported sites, MNH service providers are being trained on AMTSL and prevention and management of PPH during pre-service and in-service training. Job aids on AMTSL are being given to BEmONC trainees during training and are distributed to health facilities. In **Kenya**, MCHIP has supported the Ministry with the development of national MNH standards, as well as job aids and posters on AMTSL.

Given the importance of uterotonic use immediately following birth (UUIFB), and the scarcity of information about UUIFB in most national health systems, MCHIP with collaboration from JHSPH, London School of Hygiene and Tropical Medicine (LSHTM), CDC, FHI, and others developed a novel methodology to measure coverage of UUIFB and undertook a rapid estimation exercise in **Mozambique**, **Tanzania**, Jharkhand State, **India**, and **Yemen**. A manuscript presenting national-level findings from these four pilot countries has been submitted to BMC Health Services Research. Results stimulated key policy and programmatic changes, reinforcing plans under way in Jharkhand State, **India**, and **Mozambique** to move forward with community-based distribution of misoprostol programs and to improve storage conditions for uterotonics, namely oxytocin. In **Tanzania**, the findings helped drive efforts to get better data on uterotonic utilization and availability (stock-outs), primarily oxytocin. The findings strengthened preliminary plans to ensure that these key data are part of the HMIS.

As a testament to the scope and impact of MCHIP's work in PPH, this UUIFB exercise, and the lower-than-expected estimates of uterotonic coverage, accelerated the inclusion of guidelines on advance distribution of misoprostol for home births in **India's** National PPH strategy. Also significant, the results from this exercise convinced the government to send representatives from 10 states to attend MCHIP's comprehensive PPH workshop in India to build their capacity to implement PPH programs.

This UUIFB exercise highlighted gaps in coverage at the community level and the need for more targeted programs. It also raised issues of uterotonic availability and quality, and potential policies and practices that inhibit high coverage. Finally, this exercise underscored the need to improve data gathering and data quality for UUIFB, both at the facility and household levels. Fundamentally, in making this method and the corresponding estimates available,

³⁸ *Advance Distribution of Misoprostol for Self-Administration: Expanding Coverage for the Prevention of Postpartum Hemorrhage*. 2013.

MCHIP has engendered advocacy around the idea of greater UIIFB coverage, for all births regardless of delivery location.

Pre-Eclampsia/Eclampsia

Just as with ongoing work in PPH, MCHIP has forged strategic partnerships with global organizations like WHO to build capacity in the management of PE/E. Making the most of its key role as a member of the WHO Guidelines Committee, MCHIP has effectively developed and disseminated valuable PE/E resources and guidance at global forums as well as through country-level TA. In addition to promoting the quality and availability of MgSO₄ through contributions to the UNCoLSC, MCHIP has provided TA to country programs, bilaterals, and other partners to strengthen and expand MgSO₄ quality and coverage for the management of PE/E. Launched at the Africa Regional Meeting in Ethiopia in February 2011, the PE/E toolkit is on the K4Health³⁹ website and is updated semi-annually. With 3,948 site visits and 10,612 pages visited from users in 143 developing countries to date, this toolkit has served as a useful resource for program implementers.

Through the provision of useful PE/E technical resource materials, in combination with direct technical support to country programs, MCHIP has facilitated notable achievements in **Indonesia, Mozambique, and Zimbabwe**. In **Zimbabwe**, MCHIP participated in the review of the RH and maternal health policy to support task shifting in the management of severe PE/E, for example, who can administer MgSO₄. MCHIP also helped outfit sites with emergency kits for severe PE/E in the two learning districts and advocated for use of these kits at the national level. Through competency-based BEmONC training starting in 2011, MCHIP helped build the capacity of nurses to identify and correctly manage cases of severe PE/E earlier, and to better stabilize these women prior to transfer to a higher-level facility. The combination of task shifting and competency-based training, along with a continuous QI process, has helped improved PE/E outcomes. Notably, there were significant declines in cause-specific maternal mortality rates in severe PE/E, which have decreased by more than 50% over the past two years at MCHIP-supported sites. Also highly significant, even with more PE/E cases reported in PY3 (see Table 4), up from 184 in Year 2 to 294 in Year 3, there was a notable drop in the number of deaths from 16 to seven in the same period, thus indicating better diagnosis of severe PE, and leading to better management and outcomes.

Table 4. MCHIP/Zimbabwe Supported Sites: PE/E Cases and Impact on Mortality

INDICATOR	BASELINE (JAN - DEC 2009 DATA; SOURCE: MOHCC, 2009)	Y2 (OCT 2011-SEP 2012) ACTUAL	Y3 (OCT 2012-SEP 2013) ACTUAL	Y3 (OCT 2012- FEB 2014) TARGET
Number of live births	MMR = 296/100,000 live births	14,646	15,369	MMR = 215/100,000 live births
Total of maternal deaths (ALL CAUSES)		34	42	
Number of cases of PE/E	no data	184	294	n/a
Number of deaths due to PE/E	no data	16	7	n/a

Similarly, MCHIP used the findings from the MCA and QoC studies to scale up best practices for prevention and management of PE/E in several countries. In **Malawi**, MCHIP supported the MOH to revise obstetric protocols, including management of severe PE/E, which were distributed to all maternity units countrywide and are posted in all maternity wards for easy

³⁹ <https://www.k4health.org/toolkits/preeclampsia-eclampsia>

reference. In **Kenya**, MCHIP helped the Ministry develop guidelines, including the National Guidelines for Quality Obstetrics and Perinatal care, as well as job aids and posters on the use of MgSO₄. In addition, MCHIP worked with the Ministry to develop national MNH standards. In **Ethiopia**, thanks to the support of MCHIP and other MNH partners, training on the administration of MgSO₄ is now included in BEmONC training and currently more than 75% of SBAs at hospitals have received this training.

Using innovative solutions to promote the use of MgSO₄ at the country level, MCHIP is piloting an active audit-feedback intervention to increase use of MgSO₄ among women with severe PE/E in six hospitals in **Ethiopia**. This intervention involves a technical update coupled with ongoing audit feedback of all severe PE/E cases at the facility. The technical update includes an interactive instructional video developed by MCHIP that focuses on the correct preparation and administration of MgSO₄. As part of the audit-feedback process, the labor/maternity ward team identifies and reviews all severe PE/E cases on a regular basis (weekly or twice monthly), and takes corrective action where necessary. Progress is monitored using simple maternity dashboards and posters. Through the provision of this country-level TA, MCHIP is playing a vital role in improving the quality of management of PE/E and appropriate administration of MgSO₄.

In addition to promoting best practices at the country level, MCHIP has helped shape global thinking to make PE/E a priority maternal health intervention through publications, including a practical review article on the safety of MgSO₄ for management of severe PE/E. In this widely disseminated [BMC Pregnancy and Childbirth article](#)⁴⁰ and corresponding two-page [summary brief](#), MCHIP dispelled the myths that MgSO₄ is a dangerous medicine and recommended that clinical leaders in maternal health adopt, promote, and support the use of MgSO₄ as the anticonvulsant of choice in treating and managing PE/E.

Further contributing to the global evidence base, MCHIP conducted a study in **Nepal** on calcium supplementation for pregnant women distributed during routine ANC at health facilities, in order to assess coverage, compliance, and effectiveness at preventing PE/E and inform scale-up. Calcium distribution through ANC produced very high coverage of calcium at 95%, and was found to be acceptable to ANC providers and feasible to incorporate into their current responsibilities. The study therefore recommended that this model of calcium distribution be scaled up to other districts in **Nepal**. At the national dissemination meeting in December 2013, analysis was presented on the programmatic success of the distribution, and the government of **Nepal** committed to the immediate scale-up in two districts in the Terai region where the prevalence of eclampsia is high.

For a more in-depth discussion of MCHIP's achievements in PE/E, please refer to the report entitled *Pre-Eclampsia/Eclampsia (PE/E): MCHIP's Key Accomplishments 2008–2014. Improving Maternal Health Care & Outcomes through Prevention, Diagnosis and Management* (Annex 18).

Skilled Birth Attendance

In collaboration with WHO, UNFPA, ICM, and other global partners, MCHIP developed and disseminated PSE resources and materials and created a toolkit on K4Health⁴¹ to enable country programs to strengthen their PSE institutions. MCHIP disseminated the PSE toolkit via multiple channels, such as at global meetings and CORE Group. As of April 2014, there had been over 18,461 visits to this toolkit from users in 191 countries, with 32,445 total pages

⁴⁰ Smith JM et al. 2013. An integrative review of the side effects related to the use of magnesium sulfate for pre-eclampsia and eclampsia management. *BMC Pregnancy and Childbirth* 13:34; online at: www.biomedcentral.com/1471-2393/13/34

⁴¹ <https://www.k4health.org/toolkits/pse>

viewed. MCHIP has also provided country-level TA to strengthen education of midwifery cadres in several countries, most notably in **Ethiopia, India, Burma, and Yemen.**

In collaboration with WHO, UNFPA, ICM, and others, MCHIP supported the expansion of midwifery in selected countries, contributed to midwifery symposia (Women Deliver 2013), and provided TA on the State of the World's Midwifery Report in 2011 and 2014. MCHIP worked closely with global- and country-level partners to promote skilled attendance at birth and midwifery models of care by advocating for the professionalization of midwife cadres in country contexts. In addition, MCHIP partnered with ICM to create, disseminate, and promote outreach materials on ICM's core focus on education, regulation, and association at ICM global and regional events.

As an implementer in RMC, MCHIP has made important progress in advancing RMC globally by developing and disseminating program tools, templates, and other materials to address factors compromising the quality of MNH care. MCHIP launched the RMC toolkit on K4Health⁴² in June 2013, introducing RMC implementation materials to a broad audience and providing needed guidance to program implementers looking to strengthen RMC in their countries. As of April 2014, there were 1,624 toolkit site visits with 6,805 pages viewed by people from 106 countries. Additionally, MCHIP has supported specific countries—namely **South Sudan, Pakistan, Yemen, Tanzania, Mozambique, and Ethiopia**—to integrate RMC activities with their work.

Consistent with its role in supporting and engaging in global advocacy efforts to elevate the importance of RMC with the White Ribbon Alliance and other collaborating partners, MCHIP led an April 2013 interagency workshop to help address the need for an illustrative set of RMC indicators. One important output of this workshop was an “Indicators Compendium,” RMC indicators that have been, and are being, used in MNH programs around the globe. Another key result of this RMC measurement workshop is that CSHGP grantees have included a set of RMC indicators in baseline surveys and indicators are being included in the revised MNC module of the KPC survey.

One key result of MCHIP's efforts to look at the development of RMC measurement approaches for routine program implementation, including creation of a logical framework, is that WHO is taking the leadership in this area and MCHIP continues to be an active participant. Also significant, MCHIP has produced materials for inclusion in the toolkit that support a shift away from medicalization of care. Other products that have expanded the evidence base on the use of unindicated and inappropriate practices include QoC research related to RMC, such as a poster showing study data on the quality of RMC, which was presented at the 2012 Global Maternal Health Conference in Arusha. A planned manuscript on this same topic will be developed and disseminated to inform best practices on the implementation of RMC. Finally, MCHIP collaborated with TRAction to develop a module to address RMC in pre-service and in-service training.

Finally, under MCHIP, the JHU IIP developed an evaluation methodology to model the impact of investments in PSE on reduced morbidity and mortality, and in PY6 Q3 published a manuscript in [PLOS One journal](#) on estimating lives saved through this investment in midwifery education.

⁴² <https://www.k4health.org/toolkits/rmc>

Africa Champions Program

In PY4, 5, and 6, MCHIP worked in collaboration with USAID, WAHO, ECSA, and WHO/AFRO to develop MNH champions in Africa for advocacy and training. This activity was designed to cultivate MNH champions to promote policies, practices, and programs that will help achieve MDGs 4 and 5 in their respective countries and regions through advocacy and action.

A cohort of 30 technical experts from 10 countries in West Africa and East/Southern Africa were selected in PY4 out of over 100 applicants. The 10 country teams of three champions each come from **Kenya, Liberia, South Sudan, Uganda, Zambia, Benin, Guinea, Madagascar, Mali, and Senegal**. E-learning courses and three regional workshops (three Anglophone trainings for the five East/Southern Africa champion teams and three Francophone trainings for the five West Africa champion teams) were held for the champions to develop skills to create country action plans, and action plans were refined for improving MNH outcomes in their respective countries. The trainings took place in PY4 and PY5 and included:

1. Clinical training update and standardization
2. Training and education competencies
3. Advocacy and technical updates in the prevention of mother-to-child transmission of HIV (PMTCT) and MIP

In PY5, champions led trainings in BEmONC, PMTCT, and long-acting, reversible contraception (LARC) and participated in evaluations of postabortion care (PAC) programs and integration of FP and cervical cancer screenings in their respective countries. Also in PY5, representatives of five of the 10 champions teams submitted and received acceptance of abstracts for presentations that took place in PY6 at the June 2014 ICM Triennial Congress. In PY6, MCHIP provided remote and regional TA to follow up with the champions' progress in-country and document their impact.

Challenges and Way Forward

As a key contributor to WHO recommendations on PPH, MCHIP's wide-ranging advocacy and programmatic work, in particular the introductory PPH prevention programs and the integrative review article on community-based distribution, will add to the growing body of evidence supporting advance distribution of misoprostol for self-administration at home birth. Ultimately, the impact of MCHIP's multifaceted efforts to promote misoprostol at home birth will be to ensure that more women are reached with this lifesaving intervention, regardless of where they give birth.

Future programming should continue the expansion of PPH prevention at home births and general PPH and AMTSL quality improvements, supporting the scale-up of this vital intervention through country TA and the measurement of coverage through the uterotonic estimation exercises.

Given that MCHIP's innovative approach to arriving at national-level UIIFB estimates was deemed feasible, transparent, and acceptable to stakeholders, MCHIP introduced this methodology in **Mozambique, Tanzania**, the state of Jharkhand in **India**, and **Yemen**. This exercise provided an important opportunity to use the commodities as a tracer to focus on health system issues that result in poor coverage and availability, and bring attention to the importance of maternal health metrics to track progress. This exercise also provided guidance on how to take action at the country level, with the goal of spurring efforts to ensure that key data on commodity use and availability are part of the national HMIS. If widely utilized in future projects, this methodology has the potential to help countless countries identify appropriate interventions to address health system gaps, including information gaps and opportunities to improve national-level metrics for maternal health, and to promote increased

access to and availability of these lifesaving commodities. The exercise in Jharkhand, India resulted in the recognition of a need for a comprehensive PPH program, including community-based distribution of misoprostol, and government representatives from 10 states attended a workshop held by MCHIP on how to implement such a program.

In the area of PE/E, country-level TA should continue to focus on improving the quality of management of PE/E and appropriate administration of MgSO₄. There should be a more comprehensive approach to PE/E programming at global, regional, and country levels, promoting approaches for prevention, early detection, and better management.

Future RMC programming should build on current momentum by expanding QoC study methodology to incorporate questions looking at RMC, as has been done for the **Pakistan** QoC assessment carried out in April 2014. The **Pakistan** team also conducted a Maternal and Neonatal Refresher Training for the first three days of the QoC observer training that included an RMC presentation and discussion. Future projects should also contribute to efforts under way for the refinement of research and measurement methods to determine prevalence of RMC and D&A, as the global community grapples with how to define these topics. Additionally, task sharing and task shifting and the refinement of midwifery scope of practice should continue to be promoted at country levels.



Newborn Health

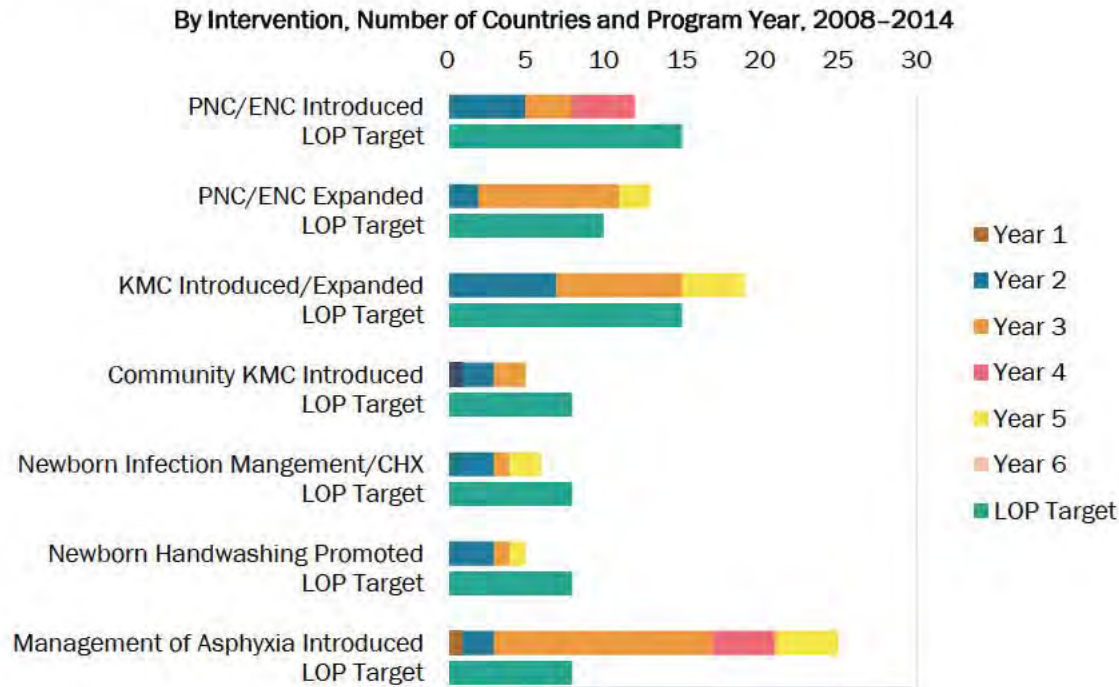
Introduction

From 2008–2014, MCHIP’s newborn health strategy focused on the introduction and expansion of access to evidence-based newborn interventions that address the three main causes of newborn mortality: birth asphyxia, preterm births, and newborn infections. Over these six years, MCHIP provided technical leadership to global newborn health advocacy and policy efforts, while also providing targeted TA at regional and country levels to increase coverage of these high-impact interventions.



Key achievements include: MCHIP’s leadership in planning the first-ever global conference on newborn health, which catalyzed follow-on action in numerous countries; support to the development of the Every Newborn Action Plan; introduction and expansion of facility and/or community-based Kangaroo Mother Care (KMC) in **20** countries; introduction and expansion of *Helping Babies Breathe* (HBB) in **25** countries with MCHIP support since 2010; essential newborn care and/or PNC home visits introduced in **12** countries and expanded in **13**; development of an essential newborn care curriculum, *Essential Care for Every Baby* (ECEB), to complement HBB; and increased country interest in four critical newborn health commodities—antenatal corticosteroids (ACS), chlorhexidine (CHX) for umbilical cord care, newborn resuscitation and a simplified antibiotic treatment (SAT) regimen; introduction of newborn infection/sepsis prevention and management in **six** countries; and the promotion of handwashing for newborn survival in **five** countries.

Figure 13. MCHIP-Supported High-Impact Newborn Health Interventions



It is important to note that these achievements were not realized by MCHIP alone but, rather, through collaboration and coordination with global-, regional-, and country-level partners. Since the program began in 2008, MCHIP helped shape the global technical agenda for the management of newborn birth asphyxia by working with USAID, the American Academy of Pediatrics (AAP), and other HBB GDA partners. The HBB GDA has served as a platform to improve birth asphyxia management and strengthen ENC in over 60 countries as of 2014, with MCHIP directly implementing or providing TA to HBB in 25 of these countries.

In addition, MCHIP benefited from the extensive experience and valuable lessons learned from the USAID-funded ACCESS Program and Save the Children’s Saving Newborn Lives program. Last but not least, MCHIP worked closely with MOHs in almost every country, except for in those countries where USAID advised otherwise, such as Mali, Madagascar, South Sudan, and Zimbabwe.

Key Achievements and Results

Global Leadership

MCHIP’s strategic and collaborative engagement of key partners, in both the public and private sectors, at global and regional levels over six years helped to increase momentum globally in support of newborn health. MCHIP played the lead role in organizing the **first-ever Global Newborn Health Conference (GNHC)** in April 2013, which brought together more than 450 researchers, health officials, policymakers, experts, and advocates from over 50 countries. They reviewed the progress made toward reducing newborn deaths and discussed what could be done



Photo credit: Rachel Taylor/MCHIP

Global Newborn Health Conference:
HBB skills session, April 2013

to address challenges in countries where the needs are greatest. The participants, including 70 officials representing health ministries from around the world, agreed to support the development of a new global action plan aimed at reducing the annual global death toll of nearly three million babies during the first month of life. The formal conference was followed by a one-day planning session in which multi-organization country teams (with representatives from MOHs, MCHIP, SNL, USAID, BMGF, and UNICEF) discussed their specific national strategies for scale-up of priority newborn health interventions. These discussions continued after the conference and connected newborn health programming with resources and political commitment associated with the UN Secretary General's global Every Woman/Every Child strategy, A Promise Renewed Call to Action to eliminate preventable child deaths, and the UNCoLSC. After returning from the conference, India announced significant policy changes to scale up the use of several key interventions including antibiotics to treat infections, ACS for preterm labor, and KMC for low birth weight (LBW) and premature babies. In addition, MOH representatives from Zambia, Liberia, Sierra Leone, Mozambique, and Yemen also indicated their intention to expand use of one or more proven interventions as a result of evidence and country experiences shared at the conference.

The conference also leveraged technology and social media to reach a much larger audience than the 450 individuals in attendance. Plenary sessions were live cast over the Internet, drawing a large international audience with over 16,000 views of the webcast in 90 countries. In addition, satellite viewing parties were held across the globe, including in Bangladesh, India, Nepal, and Madagascar. With more than 28,000 contributors on Twitter, online conversations regarding newborn health reached 48 million people around the world.

Importantly, the GNHC also served as a launch pad for the **Every Newborn Action Plan** (ENAP), which takes forward the UN Global Strategy for Women's and Children's Health by focusing specific attention on newborn health. UNICEF, WHO, PMNCH, USAID, MCHIP, Save the Children, BMGF, as well as other partners and representatives of health ministries in more than 20 low-income countries, have led the development of this plan. MCHIP Newborn Health Team members served on the global Core Team as well as the global Advisory Group. MCHIP provided TA to select country-level bottleneck analysis results, catalyzed country action to advance newborn health, and informed the global ENAP document. In May 2014, the ENAP was officially endorsed at the World Health Assembly and launched one month later at the Partnership for Maternal, Newborn & Child Health (PMNCH) Partners' Forum in Johannesburg, South Africa. The global document and country-level plans will provide guidance and momentum for improving newborn survival through 2015 and beyond.

Care for Preterm and Low Birth Weight Newborns

KMC, a proven method for managing premature and LBW newborns, is a key intervention that MCHIP introduced or strengthened the use of in **20 countries** over the life of the program. In addition to direct implementation support at the country level, MCHIP provided technical leadership to the development of implementation guidance and tools, and documented the facilitators and barriers to KMC implementation through country and regional assessments.

The rapid adoption of KMC services in Liberia offers one example of MCHIP's catalytic influence at the country level. In the West African nation, MCHIP supported the MOHSW to undertake a newborn health situation analysis in 2011, then applied SNL's scale-up readiness benchmarks in tandem with MCHIP's scale-up maps in a consultative process with key newborn stakeholders in September 2012. Based in large part on these efforts, which prioritized the establishment of KMC services, the MOHSW officially endorsed KMC "at National, Regional, County and health facility levels to ensure survival and optimal development of preterm and low birth weight babies" in 2013. Beginning in April of the same year, MCHIP and Save the Children established KMC units in five hospitals across three of the country's most populous counties

(Montserrado, Bong, and Margibi). In February 2014, an external consultant supported by MCHIP visited Liberia to review the status of KMC start-up and implementation in the five hospitals and provide recommendations to improve KMC services and expand them to other facilities in the country. Key findings focused on the need to continue to strengthen the quality of KMC care in the five facilities—especially through increased human resources—and noted that a seamless network of services for LBW infants was lacking and would be necessary to ensure that the provision of care meets the entire spectrum of LBW infants’ needs. The introduction of KMC messaging during ANC and development of a postnatal network for LBW babies requiring follow-up outside of facilities would strengthen and optimize implementation of KMC across the continuum of care.

Achieving high KMC coverage has proven a challenge in most countries, even for those that have been implementing KMC much longer than Liberia. **To document and understand the facilitators and barriers to effective implementation of KMC at scale**, MCHIP and partners undertook two regional assessments: one in Africa in 2012 ([Malawi, Mali, Rwanda, and Uganda](#)), and one in Asia in late 2013 (Bangladesh, India, Indonesia, Pakistan, and the Philippines; these findings will be finalized and published under USAID’s Maternal and Child Survival Program). Using an implementation progress model developed by the South African Medical Research Council’s Unit for Maternal and Infant Health Care Strategies, key findings included the need to integrate KMC into routine newborn care services, strategies, budgets, and plans to achieve quality at scale. Although the quality of KMC varied among facilities in all four African countries, key drivers of quality across the board included: “1) the quality of KMC training and in-service orientation for health workers; 2) the intensity of supervisory support; and 3) the ability to integrate KMC into existing quality improvement activities.”⁴³ A report on the Africa assessment was shared at the International KMC Conference in India in November 2012, and, in June 2014, [an article on the findings](#) was accepted for publication in *BMC Health Services Research*.

The Africa results were also shared at the GNHC in Johannesburg in April 2013, during which presentations and discussion of KMC featured prominently. It was in Johannesburg that MCHIP, SNL, BMGF, and WHO colleagues agreed to “reinvigorate” the KMC working group to harmonize and accelerate each partner’s efforts to scale up KMC implementation. Membership was expanded to include participants from the *Born Too Soon*-initiated preterm care group, and the new KMC TWG agreed to hold a global consultation in Turkey in October 2013. A key output from the meeting was a consensus statement by participants that called for KMC’s adoption and acceleration, and defined success as “augmented and sustained global and national level action to achieve 50% coverage of KMC among preterm newborns by the year 2020 as part of an integrated RMNCH package.” To achieve this goal, participants—including MCHIP global- and country-level newborn experts—highlighted nine necessary actions in what has been termed the “Istanbul Call to Action.”

⁴³ MCHIP/SC-SNL/MRC/University of Pretoria. Tracking Implementation Progress for Kangaroo Mother Care, 2013.

Figure 14. Istanbul Call to Action

Istanbul Kangaroo Mother Care Acceleration Meeting—October 2013—Call to Action:

- I. Revise WHO KMC guidelines and country-level government health agendas and policies to define KMC as standard of care for all preterm newborns.
- II. Incorporate high-quality KMC in national RMNCH and nutrition policies, plans, and programs.
- III. Engage health professional associations in high-income countries to adopt KMC as standard of care, to mitigate beliefs that KMC is only for low-income countries.
- IV. Address local and context-specific cultural barriers in the design of KMC guidelines, protocols, and education.
- V. Rally communities and families to support mothers in the practice of KMC and address misconceptions and stigma associated with preterm birth, early bonding, skin-to-skin practices, and breastfeeding.
- VI. Improve practitioner uptake of KMC by working with professional associations, Ministries of Health, and traditional leaders, who can work with local providers to overcome barriers related to workforce, skills, and cultural norms.
- VII. Develop a unified advocacy narrative that culturally and medically normalizes KMC, with messages that can be adapted in different contexts.
- VIII. Measure our progress against our definition of success, using robust metrics and indicators.
- IX. Conduct research to better understand optimal timing, duration, and conditions for KMC, its impact on development and survival segmented by gestational age, how to tackle barriers to KMC practice, change provider behaviors, and cost analyses of establishing KMC services.

Source: Engmann C et al. 2013. Consensus on kangaroo mother care acceleration. *Lancet* doi: 10.1016/S0140-6736(13)62293-X. Epub Nov 16. S0140-6736(13)62293-X

In preparation for the Istanbul meeting, MCHIP and SNL undertook another multi-country KMC review, this time in Asia: in **Bangladesh, India, Indonesia, Pakistan**, and the **Philippines** (the latter with WHO support). Preliminary findings were shared in Istanbul, while additional analysis was conducted and individual country reports were prepared and a draft consolidated report completed in June 2014. Findings indicate similar challenges, barriers, and opportunities as those observed in Africa. In Asia, it was also noted that there appear to have been three “phases” of uptake of KMC in facility-based services, albeit in different fashions. The first two phases—around the millennium and then between 2007 and 2012—correspond with Jeremy Shiffman’s (2010) observation of increased focus on and funding for newborn survival starting around 2005, with the publication of the Neonatal Survival Series in *The Lancet*. A third phase was observed to be currently under way, which commenced with the *Born Too Soon* report in early 2013 and the initial introduction of the global ENAP in the same year. MCHIP’s substantial involvement in these second and third phases—through policy and implementation support to 20 countries as well as through global technical engagement in *Born Too Soon*, ENAP, and the Istanbul meeting—are evidence of the program’s successful advocacy and leadership at both country and global levels.



Photo credit: Ida Neuman/
Laerdal Global Health

MCHIP-supported Francophone HBB training in Senegal, December 2012

Newborn Resuscitation

MCHIP played a pivotal role in the launch and expansion of the HBB initiative, beginning in 2010 at its inception as a USAID GDA. MCHIP has supported the introduction and implementation of HBB to address birth asphyxia in 25 countries on four continents, primarily through in-service training and site strengthening; MCHIP also supported mentoring, supervision, and the incorporation of HBB into pre-service education in selected countries. At the global level, MCHIP supported the initial training of trainers (TOTs) in HBB in Washington, D.C., in 2010 at the launch of the GDA, and the field-testing of HBB training materials in **Bangladesh** and **Kenya**. Thereafter, MCHIP supported regional TOTs in Anglophone Africa (**Ethiopia** 2011), Asia (**Bangladesh** 2012), Francophone Africa (**Senegal** 2012), and LAC (**Nicaragua** and **Paraguay** in 2011, **Trinidad** in 2012). Over the life of the project, MCHIP trained 25,007 participants in HBB (see Annex 3/PMP for details).

In addition to these activities, MCHIP provided financial and technical support to the AAP to develop supplementary HBB materials, including the *HBB Implementation Guide*. In the final year of MCHIP, AAP used program funds to engage an external consultant to chronicle the development of the HBB GDA and document the contribution of the GDA and its individual members, both at the country and global levels, to the adoption and scale-up of HBB in less-developed countries. It is expected that the findings from this exercise will be published early in 2015.

Two of the 25 MCHIP-supported countries—**Bangladesh** and **Malawi**—were selected for evaluation of the quality, coverage, and impact of HBB on newborn mortality. To complement these assessments, MCHIP engaged an external consultant to document the processes of HBB introduction and scale-up in order to capture lessons learned and identify recommendations to strengthen and guide the implementation of HBB. The process documentation exercise resulted in three reports: one for each country and a synthesized report that provided overarching recommendations, including the following:

“Investments in health system components that support HBB must be given priority equal to training and provision of equipment. HBB is described as a training program and scale-up efforts are prioritizing in-service training and equipment provision. Additional components such as partnership and financing structures, monitoring, and supervision and mentoring, demand equal priority. HBB may not succeed at scale until it develops a broader scope.”⁴⁴

The two-country synthesis reports also provided detailed recommendations for each of the following phases of HBB scale-up:

- Phase One: Preparing for scale-up:
 - Policy development leading to adoption of HBB
 - Macro-level planning: development of the HBB scale-up plan
 - Funding, inputs, and partnerships for HBB scale-up
 - Adaptation of HBB for the local context
- Phase Two: Implementation of scale-up:
 - HBB education
 - HBB equipment and logistics

⁴⁴ McPherson R. 2014. *A Joint Process Documentation of the Scale-Up of the Helping Babies Breathe Initiative in Bangladesh and Malawi*. MCHIP, published to www.mchip.net.

- Supervision of the provision of HBB
- Monitoring of HBB scale-up
- Phase Three: Institutionalization of HBB:
 - Assessment of implementation status
 - Integration and sustainability

It is anticipated that the lessons learned from Bangladesh and Malawi regarding their successes and challenges in scaling up HBB—as well those documented by MCHIP in 23 other countries—will be taken forward by MOHs, HBB GDA members, USAID’s Maternal and Child Survival Project, and other partners in order to implement quality newborn resuscitation at scale.

Essential Newborn Care

Postnatal Care Home Visits

In 2009, WHO and UNICEF published a Joint Statement on the use of PNC home visits to increase newborn survival. Leveraging this statement and the evidence that community-based interventions reduce newborn mortality, MCHIP supported MOHs to introduce or strengthen structured PNC home visits in **eight** countries over the life of the program.

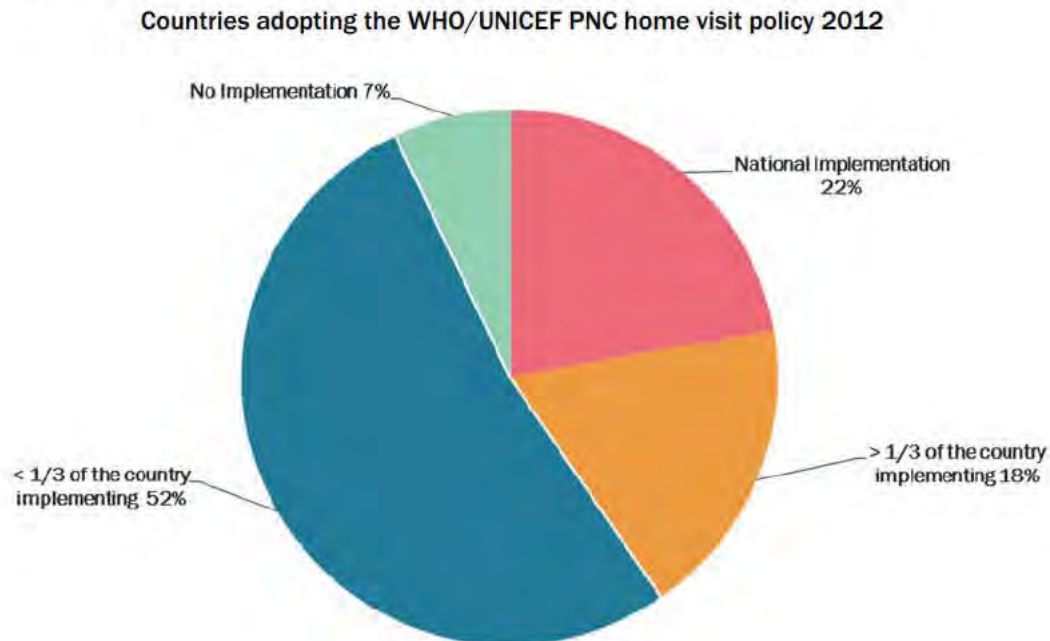
In February 2012, WHO convened a technical consultation, with support from MCHIP and others, to assess country progress in implementing the Joint Statement. In preparation for this consultation, MCHIP and SNL conducted a detailed review of PNC home visits in five countries (**Malawi, Nigeria, Rwanda, Bangladesh, and Nepal**) in 2011. These reviews included document and data review, country visits, and interviews with central MOH staff and stakeholders. Country-specific reports were written and a [synthesis report](#) compared and contrasted each country’s progress in the adoption and rollout of programs on the ground, including lessons learned. Selected findings from the PNC home visit synthesis report include:

- In early implementation areas, upward trends are noted in facility-based deliveries, deliveries with a skilled provider, and early PNC contacts for the mother and newborn—although the relative impact of community approaches on performance in each of these areas cannot be quantified. Improvements in early PNC home visits in implementation areas have so far been modest. An increasing proportion of deliveries by skilled providers have contributed more to improvements in early PNC contacts than home visits by CHWs.
- It remains a challenge to get CHWs to make household visits in most countries for a number of reasons. Early home visits—on the first day after delivery—remain the most difficult to achieve. A number of strategies to improve early household contacts have been used. The feasibility of achieving three PNC home visits in the first week of life needs to be further investigated.
- Quality of facility-based care is an increasingly important concern among program managers in countries implementing community maternal and newborn packages. An increase in demand for facility deliveries and referral care for sick mothers and newborns has placed increasing pressure on facilities. More data are needed on QoC, gaps, and approaches to addressing these gaps.
- Long-term sustainability will require an increasing shift of human, material, and financial resources to government systems required to train and support CHWs. So far, this has generally only been possible in most countries with the support of development partners.

In addition to this in-depth five country review, MCHIP supported WHO to administer an online survey to 53 countries regarding their PNC policies. Similar findings were reflected, i.e.,

that while many countries had established a policy, less than one-quarter were implementing that policy at scale.

Figure 15. Status of Implementation of Postnatal Care Home Visits Policy, 2012



Source: WHO Internet survey of PNC policies, 2012.

Data and findings from both exercises were synthesized with MCHIP support and a journal manuscript was submitted to the *WHO Bulletin* in late 2014. It is expected that USAID's Maternal and Child Survival Program, together with SNL, will use these findings to inform additional OR on PNC home visits for newborn survival and to adjust implementation strategies at the country level.

Essential Care for Every Baby

To address an identified gap in the ENC elements of the HBB curriculum, MCHIP collaborated with neonatologists and the AAP to develop the ECEB module of the *Helping Babies Survive* (HBS) curriculum. ECEB focuses on ENC services that health workers should provide in the first day of life and necessary preparation of the family for care of the newborn at home. ECEB is based extensively on the WHO ENC course, and materials are presented in a format similar to HBB, including a facilitator flip chart, action plan, simulated skill practices, observed structured clinical examinations (OSCEs), and knowledge test, plus a parent guide. MCHIP provided technical facilitation of the entire curriculum development process, technical review of documents, as well as financial support to hire the



After immediate care at birth
Continue skin-to-skin care and monitor breathing



To keep babies warm and identify problems early

educational designer and to convene meetings to review the draft materials. ECEB was field-tested by other partners in India and Kenya, with support from Laerdal Global Fund, demonstrated to WHO via an MCHIP-funded course in **Uganda** in January 2014, and used to train master trainers from 10 countries in a regional workshop in **Ethiopia** in May 2014. It is anticipated that the Maternal and Child Survival Program will support ECEB—and other modules of the HBS curriculum—to be taken up by countries interested in strengthening their ENC training programs.

Newborn Infection Prevention and Management

Management of Newborn Infection/Sepsis

To reduce the number of newborn infants dying as a result of infections, MCHIP exercised its global leadership through the Handwashing with Soap for Newborn Survival GDA and through participation in UNCoLSC working groups on 7.1% chlorhexidine digluconate (CHX) for umbilical cord care and simplified antibiotic treatment regimen; supported country introduction of CHX; and attempted to catalyze management of newborn infection at community and peripheral health facility levels.

In northern **Nigeria**, MCHIP succeeded in initiating a program to implement—and document—the management of newborn sepsis at peripheral health facilities. In partnership with the FMOH, the Nigerian Society of Neonatal Medicine (NISONM), SNL, and others, MCHIP supported a rapid situation analysis in areas where neonatal infection management services would be improved. Sites were selected, training was conducted, and services established. Unfortunately, due to the deteriorating security situation in the north—and the conclusion of the field-funded MCHIP Nigeria program—final data collection could not be completed nor could MCHIP identify a qualified consultant to deploy in order to conduct a program review.

However, lessons learned during the short period of implementation in **Nigeria** did help to inform the development of guidance documents developed at the global level. In Year 4, MCHIP and other newborn sepsis TWG members drafted the *Management of Newborn Sepsis Implementation Guide* and complementary tools. However, they held back finalizing and publishing the guide through Year 6 in order to await—and align MCHIP's implementation guidance with—WHO's updated recommendations resulting from their multi-country study of simplified antibiotic regimens (for which MCHIP provided TA to the development of the study protocol). It is anticipated that USAID's Maternal and Child Survival Program, SNL, and other partners will be able to draw upon the draft guidance prepared by MCHIP to undertake OR on the management of possible severe bacterial infections in newborns at peripheral facility levels.

Handwashing with Soap for Newborn Survival

Through a GDA on *Handwashing with Soap for Newborn Survival* established in 2011, MCHIP worked with USAID and Unilever/Lifebuoy to meet the challenge of saving newborn lives through improved handwashing practices at birth and during the first month of life. The two key activities were to: 1) conduct formative research into handwashing practices in the neonatal period in order to understand motivators, barriers, and facilitators to handwashing; and b) develop materials for context-specific behavior change activities. MCHIP-supported formative research was undertaken in [Bangladesh](#) by the International Centre for Diarrheal Disease Research, Bangladesh (icddr,b), in [Indonesia](#) by the LSHTM, and in [Kenya](#) by the Urban Research and Development Centre for Africa (URADCA).

Findings from each country—plus one additional USAID-funded study in Bangladesh—were compared, synthesized, and published in a separate [program report](#) that “identified overlapping themes that transcend cultural and geographic diversity, and provide a basis for

development of interventions to promote handwashing in the perinatal period.”⁴⁵ Three priority insights from the MCHIP-supported synthesis report include:

- *Mothers wash hands because of motivators other than health.* Consistent with the findings from numerous formative research studies, data from Bangladesh, Indonesia, and Kenya found that mothers wash their hands due to a variety of motivators other than health, including disgust, comfort, aspiration, and nurture. The desire to keep their babies clean is equally as motivating as mothers’ desires to *appear* clean, suggesting the power of social norms in shaping mothers’ perceptions and handwashing behavior.
- *Conveniently located handwashing materials facilitate maternal handwashing.* Mothers who are cocooned with their newborns for religious or cultural reasons, or who do not have access to handwashing materials in close proximity to where they spend time with their babies, cannot wash hands because of inconvenience or the lack of visual cues.
- *New mothers are busy people and that lack of time (perceived or actual) prevents them from washing hands.* Mothers who do not have assistance from family members for household chores or care for older children have particular difficulty with washing hands. They do not have time to step away from the newborn or the home to find handwashing materials. A lengthy list of different critical times for handwashing may be too impractical to be followed by busy mothers.⁴⁶

USAID’s new Maternal and Child Survival Program, with support from Unilever and partners, will take forward learning from Kenya to further identify and document the most effective intervention or suite of interventions for increasing frequency of handwashing by caregivers before handling the newborn during the first 28 days of life.

Chlorhexidine for Umbilical Cord Care

MCHIP made a catalytic core investment to introduce CHX for umbilical cord care in **Liberia**, where MCHIP’s Year 4 core-funded newborn health situation analysis recommended, among other actions, that the MOHSW “adapt the use of chlorhexidine [CHX] 4% application to the umbilical stump to replace the current practice of alcohol application or leaving the cord clean and dry.” Less than one year later, through a national stakeholder process supported by MCHIP, the Liberia MOHSW did endorse CHX for cord care.⁴⁷



A midwife teaches a mother how to apply chlorhexidine to her baby’s umbilical cord stump in Monrovia, Liberia (2013).

Liberia’s national EML previously listed chlorhexidine digluconate in different concentrations and as a general antiseptic; the MOHSW endorsement of CHX for umbilical cord care should help expedite the inclusion of 7.1% chlorhexidine digluconate onto the EML. Given that local production was not feasible, MCHIP helped to secure funds through

⁴⁵ Ibid, page 8.

⁴⁶ Ram P and Kuman S. 2014. *Handwashing in the Perinatal Period: Literature Review and Synthesis of Qualitative Research Studies from Bangladesh, Indonesia, and Kenya*, page 13. MCHIP, published to www.mchip.net

⁴⁷ Ministry of Health and Social Welfare, Republic of Liberia. Policy on the Use of Chlorhexidine for Cord Care. Adopted April 2013.

Save the Children from the UNCoLSC's CHX working group budget to purchase three initial orders of CHX from a manufacturer in Nepal. MCHIP supported the distribution of the CHX to five hospitals and nine clinics in Montserrado County, where approximately one-third of Liberia's population resides. Subsequently, partners, including UNFPA, UNICEF, and the USAID bilateral – Rebuilding Health Services (RBHS), pledged financial support to allow for further expansion of the intervention in the counties and facilities that they support.

The rapid introduction of CHX in Liberia is a prime example of the powerful synergy between MCHIP's global leadership role—as a member of the UNCoLSC CHX working group and as co-organizer of the GNHC, to which it supported the Liberia delegations' attendance—and MCHIP's credibility and relationships at the country level. Looking forward, the MOHSW and implementing partners in-country must focus efforts and resources to address the sustainability of the intervention; cost of the product itself and related HSS inputs; procurement; integration of intervention into ANC clinics; and M&E of the intervention. More details will be found in an upcoming report from a qualitative assessment conducted by an external consultant.⁴⁸ These findings were shared with the global CHX working group of the UNCoLSC in May 2014, in order to inform introduction and implementation in other countries taking up this new intervention.

Challenges and Way Forward

At the country level, a recurrent challenge was health facilities' and their larger systems' inability to accurately capture relevant data to monitor, and then adjust, the delivery of quality newborn health services. Future programs and partners should continue to participate in the Newborn Indicators TWG, support testing and validating of key newborn health indicators, and share country experiences through the TWG and relevant COPs to inform the uptake of indicators in other countries. Programs should emphasize data use, in addition to data collection.

At the global level, the tension between MCHIP's readiness to take forward certain interventions—based on its own experience and evidence presented in the literature—and the desire to wait for WHO's formal recommendations to be released often presented a challenge. While this challenge will likely persist, USAID's Maternal and Child Survival Program and other partners would benefit from focusing on working with countries on *how* to apply relevant WHO guidance in their particular settings.

MCHIP did not succeed in gaining traction with USAID Missions or MOHs to prioritize programming for newborn sepsis management. Given the significant proportion of newborn deaths attributable to infection and sepsis, this warrants renewed attention and additional resources under the Maternal and Child Survival Program and partners in the future.

Finally, as reflected in the findings of the HBB process documentation exercises in **Bangladesh** and **Malawi**, and the two regional KMC assessments in Asia and Africa, the intense focus on training and site strengthening for both interventions, while warranted, is not sufficient to achieve implementation at scale. Future programs and efforts—notably the full suite of HBS learning materials—should take a broader, health systems strengthening approach.

⁴⁸ This report, written by Anne-Marie Bergh, will be published and available in 2015 on www.mchip.net.



Child Health

Introduction

MCHIP played an important role as a global leader for population-level improvements in child health (CH), focusing specifically on MDG 4, which calls for a two-thirds reduction in child mortality by 2015. MCHIP advocated for and supported the scale-up of high-impact interventions addressing the three main causes of child mortality—pneumonia, diarrhea and malaria. MCHIP worked with key CH partners at global and country levels on service delivery efforts and collaborated with WHO, UNICEF, the BMGF, and the Clinton Health Access Initiative (CHAI) on the project's CH activities. Collaboration encouraged harmonized decision-making and investments in and leveraging of resources at the country level. MCHIP was the Secretariat for the Global CCM Task Force (TF) and served as an active participant in other key global working groups and initiatives, including the Pneumonia/Diarrhea Working Group, GAPPD, the UNCoLSC, and the Call to Action for Child Survival/A Promise Renewed (APR). MCHIP's Child Health Team was led by John Snow, Inc. (JSI) and included technical experts from Save the Children, PSI, ICF International, CSHGP Support Team, and CORE Group.



MCHIP effected change in CH by advocating globally and at the country level for: 1) the introduction and scale-up of iCCM for pneumonia, diarrhea, and malaria in young children; 2) the revitalization of ORT and use of low-osmolality ORS and zinc in diarrhea treatment, including the re-classification of zinc as an over-the-counter drug in several countries; 3) policy change to allow CHWs to use zinc in diarrhea case management and antibiotics in the treatment of pneumonia; 4) the strengthening of facility-based CH services; and 5) the leveraging and coordination of support to achieve greater impact on infant and child mortality at scale.

Key Achievements: Global Level

Global Leadership and Program Learning for the Introduction and Scale-Up of iCCM

MCHIP contributed in different ways to global child survival initiatives and partnerships that aim to accelerate progress toward MDG 4 and the ambitious post-MDG goal of ending preventable child death in all countries by 2035.

Global CCM Task Force and CCMCentral.com: At the start of MCHIP, no formal mechanism existed to organize, coordinate, or provide guidance to countries interested in adopting or scaling up iCCM. USAID, with support from MCHIP, played a key role in the creation of the Global CCM TF, a collaborative body of organizations that raised the profile of iCCM and worked to more effectively leverage and coordinate resources toward its expansion. MCHIP's role as secretariat has been critical not only to the effectiveness of the broader TF, but also in supporting the CCM TF Steering Committee (WHO, UNICEF, USAID, Save the Children, and the Secretariat) to develop the vision and set the global TF agenda of

harmonizing tools, sharing learning, and identifying opportunities to leverage resources for iCCM implementation at the country level. MCHIP coordinated the work of thematic subgroups that compiled the body of evidence and existing tools to guide country uptake and implementation of iCCM, generated new learning, and developed new tools, including *CCM Essentials: a Guide to Planning and Implementing iCCM*, new CHW training and supervision materials and job aids, the *iCCM Benchmarks Framework*, the generic *iCCM Implementation Guide*, and the *iCCM Indicator Guide*. Tools compiled and generated by the TF were made available at www.ccmcentral.com, which was also developed and managed by the MCHIP CH Team. MCHIP used these tools for MCHIP-supported countries and used the TF to advocate for the use of these tools by other partners to guide implementation, scale-up, and monitoring in all country iCCM programs.

iCCM Joint Statement and GAPPD: In 2012, MCHIP made substantive contributions to the development and release of the joint iCCM advocacy statement spearheaded by WHO, UNICEF, and USAID and endorsed by a variety of other CH partners. The CH Team also played a significant role in developing The Global Action Plan for the Prevention and Control of Pneumonia (GAPP), which was launched in April 2013 in Geneva, London, and Washington, D.C., along with a related *Lancet* series on childhood prevention of pneumonia. Following the release of GAPP, four regional meetings were held in Nairobi, Rwanda, Senegal, and Bangladesh to update countries on iCCM evidence. At these meetings, MCHIP led the effort to include diarrheal disease as part of the GAPP. As a result of MCHIP's efforts, the GAPP became The Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea (GAPPD). The GAPPD was the first attempt to develop a coordinated plan of action to prevent and treat diarrhea and pneumonia. Follow-up in **Zambia** resulted in supporting an assessment to identify key bottlenecks to rolling out revised policy on low osmolality ORS and introduction to zinc. The results have informed the development of the new strategic plan to strengthen IMCI.

Learning from Country Scale-Up: At the start of MCHIP, both grey and peer-reviewed literature lacked systematic documentation of iCCM implementation findings and best practices. Through the OR subgroup of the CCM TF, MCHIP supported the development and publication of 15 papers on iCCM for the Journal Supplement of the *American Journal of Tropical Medicine and Hygiene* (AJTMH). Working with the TF, MCHIP and partners developed a set of benchmarks for monitoring the scale-up of iCCM using eight key program components. They then used this framework to guide the documentation of scale-up experiences in two countries—**Senegal** and **DRC**. Subsequently, findings were combined with those from Malawi in a three-country synthesis publication that summarized lessons learned. The synthesis was designed for and shared with program planners, implementing partners, and governments looking to implement and scale up iCCM. Recommendations from the lessons learned were used by MCHIP's own programming in **Mali, Guinea, Rwanda, Kenya, Zimbabwe, Namibia, and Ethiopia** and were instrumental in helping these countries to monitor progress during early implementation and scale-up.

Global iCCM Evidence Review and CHNRI Process: MCHIP worked with UNICEF and the CCM TF members to organize the iCCM Evidence Review Symposium in Ghana (March 3–5, 2014). The goal of the symposium was to systematically review the current state of iCCM implementation—tools, lessons, and gaps—and to map the way forward for iCCM expansion with the implementers. The symposium, which attracted delegations from upwards of 14 countries, 10 international agencies, and seven NGOs, was both a forum for dissemination of iCCM learning and for defining the agenda for the next phase of iCCM. MCHIP also supported the development of the iCCM research agenda through a Child Health and Nutrition Research Initiative (CHNRI) process on iCCM that was shared at the Symposium. The CHNRI process asked experts to generate and then rank potential research questions that, if answered, would significantly contribute to global learning. The CHNRI process on iCCM has paved the way for

global agreement on key priority areas of research and garnered donor support to improve iCCM implementation and scale-up.

Monitoring and Evaluating iCCM: The need for common indicators to guide and assess implementation emerged in the early stages of iCCM discussions. With MCHIP's leadership, and using the CCM Benchmarks Framework developed early during MCHIP, the TF's M&E subgroup defined, organized, and vetted a comprehensive list of iCCM indicators, and finalized and launched the iCCM Indicator Guide at the iCCM Evidence Review Symposium. MCHIP programs in **Kenya, Mali, Guinea, and Namibia** and CSHGP grantees have adapted elements of the framework for iCCM monitoring. MCHIP also led a review of the state of iCCM M&E in six countries (**DRC, Madagascar, Niger, Senegal, South Sudan, and Zambia**), while the USAID/ TRAction Project reviewed M&E systems in four other countries (Ethiopia, Mali, Malawi, and Mozambique). MCHIP and TRAction developed a synthesis of the learning from these 10 countries, which will: 1) guide further refinement of the iCCM indicators; 2) be used to recommend possible standardization of DHIS II community indicators and data collection methods; 3) support the use of data for decision-making; and 4) and inform future research on the strengthening of routine monitoring of iCCM services and community health programs.

Leveraging New Funding for iCCM: With the Global Fund's 2014 announcement that its New Funding Model would, for the first time, accept applications that included iCCM, the CCM TF became a channel for mobilizing and providing TA to 17 initial countries. MCHIP led efforts in **Kenya, Uganda, Ghana, and Zambia** to review existing iCCM policies and programs, carry out gap analysis to identify unmet financial and programmatic need, and work with MOHs to develop concept notes to the Global Fund to expand iCCM under the malaria and/or HSS funding windows. At the close of MCHIP, these concept notes were pending Global Fund approval.

Advocacy to Increase Coverage of ORT/Zinc

With ORS use either stagnating or on the decline and low zinc coverage in many developing countries, MCHIP supported secondary DHS analysis at the global level to better understand care-seeking and treatment patterns; advocated for policy change to allow the distribution of zinc and antibiotics by CHWs; and used global CH meetings and a webinar series to advocate for the revitalization of ORT, attention to zinc coverage, and policy change to enable CHWs to use zinc and antibiotics in diarrhea and pneumonia treatment.

Advocacy to Increase CCM for Pneumonia

At the start of MCHIP, malaria CCM was rapidly gaining acceptance with support from PMI and the Global Fund, but in many countries there continued to be a lack of supportive policy and resistance to the treatment of pneumonia by CHWs. USAID, through MCHIP, sought to introduce CCM of pneumonia into policy and supported its implementation in high-burden countries, often by building on an existing malaria platform. According to a survey conducted by UNICEF in 2013, 29 countries had national policies that included community management of pneumonia, including the administration of antibiotics by different types of community workers. MCHIP supported the initial introduction and/or scale-up of community case management of diarrhea, malaria, and pneumonia in nine of these 29 countries.

Facility-Based Quality of Care

MCHIP contributed to improving facility-based QoC through its review of existing WHO/UNICEF tools to improve supervision for the treatment of malaria. MCHIP carried out an assessment of training and supervision tools for malaria case management in 13 PMI countries to identify bottlenecks to scale-up of diagnostic testing and treatment guidelines within the context of IMNCI. Key findings included that, in 2013, few countries had step-by-step instructions on how to conduct a RDT or microscopy, and that they lacked instructions for the treatment of severe febrile

disease/severe malaria (beyond confirming the classification of the case). Also, some country materials did not instruct providers to use an RDT to test an anemic child, even though anemia is a key sign of malaria. This review, including recommendations, is documented in *MCHIP Child Health: Inventory of IMCI Training and Supervision Tools in PMI Countries*.

Key Achievements: Country Level

Introducing and Scaling Up iCCM/Advocacy for Pneumonia and Diarrhea Treatment

At the start of MCHIP in 2009, only 10 countries worldwide had adopted the assessment and treatment of diarrhea, malaria, and pneumonia by trained CHWs. According to UNICEF, by early 2014, 29 countries were implementing some or all elements of the iCCM approach. Ten of these countries—**DRC, Ethiopia, Guinea, Kenya, Mali, Namibia, Ethiopia, Rwanda, Zambia, and Zimbabwe**, plus two countries with Associate Awards, **Yemen and South Sudan**—received direct technical and financial support from MCHIP for iCCM. In all of the countries receiving MCHIP technical support, MCHIP consistently supported MOHs in their leadership by developing and participating in CH national steering committees (e.g., **Guinea, Namibia**), community health committees (e.g., the SEC in **Mali**) or CH TWGs with other country partners and MOH divisions and programs. Very few countries had the systems in place to adequately support their CCM programs and each was at a different stage of implementation. This demonstrates that MCHIP’s technical support was tailored, country by country, to meet the needs at different phases of implementation.

Advocacy and Planning: MCHIP worked with country stakeholders to advocate for policies that allow CHWs to assess, classify, and treat malaria, diarrhea, and pneumonia, including the use of antibiotics to treat pneumonia and zinc to treat diarrhea. In countries where the MOH and stakeholders were ready to make policy changes, for example in **Mali and Namibia**, MCHIP provided TA for policy change and facilitated discussions among partners to make strategic decisions and jointly plan program implementation. In countries such as **Guinea**, where the MOH demonstrated interest but lacked experience in implementing iCCM programming, MCHIP organized study tours and facilitated experience-sharing. For example, the MOH team and partners from Guinea visited the **Rwandan** MCHIP-supported program and the **Namibian** MOH and partners visited **Ethiopia**. In countries, such as **Kenya**, where controversies around iCCM remain, MCHIP helped build local evidence by working closely with the Government of Kenya on a feasibility study of iCCM in one district. As a first step, the Kenyan Government re-classified zinc as an over-the-counter commodity, which enabled CHWs and drug shops to dispense it with ORS in communities that otherwise would not have access. **Namibia and Mali** are examples of countries that developed policies supporting the provision of the fully integrated CCM (iCCM) package of CHW services during MCHIP’s tenure.

Early Implementation: MCHIP worked with ministries and partners to develop national guidelines, develop and revise training materials and approaches, test different models for CHW supervision and support, develop BCC materials and job aids, develop community health information systems, and monitor and evaluate iCCM coverage and effectiveness. This involvement helped standardize the approach to both iCCM and IMCI among countries and implementing global partners. Countries supported by MCHIP during the early implementation phase of iCCM include **Mali** (SEC program), **Namibia** (National Health Extension Program), and **Guinea** (PCIME Communautaire); all three national programs resulted in the rollout of new cadres of CHWs who provide iCCM services.

Expansion and Scale-Up: **DRC, Guinea, and Rwanda** have all either successfully scaled up their iCCM programs or are in the process of doing so with MCHIP’s technical support. During MCHIP’s two years in the DRC, the national iCCM program expanded from a baseline of 78 (with 1,358 trained CHWs) to 101 (with 2,286 trained CHWs) out of 515 health zones countrywide. Expansion of Guinea’s iCCM program also grew rapidly, from a baseline of no

CHWs to more than 500 CHWs trained in iCCM nationwide in its first two years of implementation. **Namibia** is also moving quickly to expand its Health Extension Program, with more than 500 HEWs trained in basic primary health care during MCHIP's final year of support, and plans to expand training for iCCM in 2015. **Zambia** and **Mali** are two more examples where MCHIP worked with MOHs to develop coordinated iCCM scale-up plans with targets to achieve coverage and saturation.

Refining CCM Strategies: In countries with national CHW programs and iCCM or CCM strategies that were already ongoing and scaled up, MCHIP helped test, introduce, and expand new approaches. These new approaches included: testing of FP provision by volunteer CHWs in the **DRC**; the introduction of RDTs at the community level to **Rwanda's** 30,000 *binomes*, who are now able to more accurately screen, classify, and treat malaria; and the implementation of iCCM in the challenging context of the **Ethiopian** pastoral region. In **Zimbabwe**, a country with a traditionally strong Village Health Worker (VHW) cadre, but one that had been severely affected by the country's economic downturn in the 1990s, MCHIP not only assisted in revitalizing the cadre, but also in developing the national training package for community-based malaria case management (introducing RDTs and ACT at the community level) and testing a new community HIS and system of peer supervision to improve the quality and the monitoring of VHW care.

Quality of Facility-Based Care

MCHIP worked with MOHs and other stakeholders in all of its country programs with CH objectives to improve the management of diarrheal disease at the facility level, health care worker training curricula, and the quality of IMNCI service delivery. MCHIP strengthened the management of diarrheal disease in facilities by reinforcing national policies that called for the use of zinc and low osmolality ORS but had not been fully implemented (**DRC, Kenya, Zimbabwe**); promoting water, sanitation, and hygiene (WASH) messaging and feeding counseling during and after illness (**Kenya, DRC**); and supporting the re-establishment of ORT corners in health facilities (**DRC, Kenya, and Zimbabwe**). As a result of reinforcing national policies, Zimbabwe began to use zinc in MCHIP-supported districts, areas where zinc typically expired on the shelf, causing stock-outs. DRC and Kenya increased the number of functional ORT corners and experienced an increase of overall use of ORS and zinc in districts where MCHIP worked. MCHIP CH advisors in **Zimbabwe, Kenya, Mozambique, Guinea, Mali, and Rwanda** played an important role by technically contributing to their countries' revisions to and rolling out of IMCI training courses. Revisions focused on updating training content to reflect recent evidence, adding care for the newborn, and/or shortening the duration, and reducing the cost of IMCI/IMNCI training. MCHIP supported **Zimbabwe, Rwanda, and Guinea** in developing a more cost-effective model of IMNCI training by reducing the IMNCI training course from 11 to six days, thereby reducing a significant barrier to scale-up. In **Rwanda**, MCHIP performed a comparison of health workers' skills through review of records in 2011–2012 to demonstrate that the shortened course did not sacrifice the QoC. All three countries adopted the new modules as the new national training curricula.

Finally, MCHIP used a modified SBM-R approach in **Zimbabwe** and **Guinea** to help facility-level staff monitor their own performance against IMNCI standards of care. MCHIP first developed specific SBM-R standards for CH services and then trained supervisors and care providers to use the SBM-R tools. In Zimbabwe, the pace of implementation was slow and results were mixed, while initial follow-up in Guinea showed encouraging signs of provider adherence and government ownership. This was the first time SBM-R, a methodology widely used in other technical areas, was applied to IMCI standards of care under MCHIP. Although there was an increase in adherence to the IMCI algorithm, the process wasn't linked to outcomes of sick child data. Experiences from the two countries showed that SBM-R was time-consuming. Moving forward, modification to SBM-R is necessary to reduce the number of standards to be implemented and tracked in order to increase the likelihood of health workers

using the tool. Outcome measures need to be linked to the IMCI standards to demonstrate improved QoC. The team will use the core principles of QI to adapt and test simpler approaches to QI in CH.

Challenges and Way Forward

MCHIP has continued USAID's tradition of global leadership in CH and become an important actor in multi-partner efforts to accelerate progress toward MDG 4. In its leadership role with the Global iCCM TF and the recipient of support from 12 USAID country Missions, MCHIP has been in the position to document and improve on strategies for scaling up iCCM. The CH Team has also played an active role in advocating for policies and practices that will lead to increase use of ORS and zinc for diarrheal disease, antibiotics for pneumonia, and RDTs and ACT for malaria treatment at the community level.

Reducing child morbidity and mortality from pneumonia, diarrhea, and malaria will depend not only on strategies like iCCM or IMNCI, but also on robust health systems that support linkages between community- and facility-based CH services and achieve a healthy balance between treatment and prevention (i.e., vaccination, WASH, IYCF, child spacing, timely and appropriate care-seeking). Too often, attention is paid to training facility- and community-based providers without sufficient attention to the systems that must be in place or the financial and technical support that will be required to ensure their success.

There is currently a groundswell of interest from countries in iCCM and new resources for implementation through the Global Fund's New Funding Model. Experience shows that implementation of iCCM should be guided by a long-term, multi-partner strategic plan for scaling up and achieving coverage and saturation. Special attention to high-burden areas, to ensuring that the necessary linkages are established between communities and health facilities, and to investing in the systems that will support the community cadre must all be part of country implementation plans.

The proliferation of global CH-related working groups and initiatives demonstrates renewed interest in CH, which is encouraging. At the same time, this renewed interest has resulted in significant fragmentation of the CH agenda and is not likely to translate into significant new funding for post-neonatal child survival without a well-coordinated effort to address the multiple causes and consequences of the 6.6 million preventable deaths that occur each year in children under five years of age.

Three recommendations can be made building on MCHIP's experience:

1. Based on MCHIP's experience, USAID and its global flagship Maternal and Child Survival Program should continue to strengthen case management at both the community and facility levels, while promoting improved disease prevention practices at the household level—all of these approaches need to be anchored in a broader health systems framework for sustainability.
2. Improved coverage, quality, and saturation (maximum coverage that meets disease-specific need) of services in targeted population are necessary to ensure that high-impact CH interventions lead to reduced child mortality.
3. Policies that support the delivery of lifesaving interventions by trained CHWs are in place in many countries, but policy challenges still remain. Action to support a country-led process to reduce policy barriers to iCCM is still needed. Respecting each country's right to determine its own path, USAID and its future CH flagship programs should continue to invest in demonstrations, such as those in **Kenya** and **Zimbabwe**, and in developing and working through country "champions" to push for policy change for iCCM.



Immunization

Introduction

MCHIP/Immunization TA focused on strengthening country capacity to manage routine immunization (RI) services and the smooth introduction of new vaccines. MCHIP provided long-term support in collaboration with partners⁴⁹ to increase vaccination coverage and equity using roughly **Redacted** in core funds and operating in 14 countries where MCHIP worked nationwide and covered all districts.⁵⁰ MCHIP also contributed to accelerated disease control efforts related to polio, measles, and maternal/neonatal tetanus.



MCHIP achieved its program objectives by focusing on four overarching strategies:

1. Increase capacity for achieving and sustaining high and equitable immunization coverage levels with all appropriate vaccines to reach the unreached and reduce child mortality.
2. Support effective and sustainable introduction of safe, high-quality, lifesaving new vaccines.
3. Engage in disease control priority programs with a focus on enhancing the positive effects on strengthening the RI platform.
4. Influence global and regional levels with program learning from the field.

Key Achievements and Results

Global Leadership

MCHIP's strategic participation in working groups and committees amplified the project's learning and expertise, while infusing the policies, strategies, and operational plans of key partners with pragmatic, operational considerations. Because MCHIP strengthens RI program management in many contexts, its input was valued and requested by partners who set the global agenda for immunization. Selected highlights follow.

Shaping strategies, policies, and approaches to sustainably increase the reach of vaccines, close the equity gap, and strengthen local management of routine immunization. MCHIP:

- Helped formulate the Global Vaccine Action Plan (GVAP), which serves as the blueprint to operationalize and achieve the immunization goals for 2020 set forth in the global Decade of Vaccines collaborative effort. Co-led the multi-agency "Strengthening Immunization Systems Performance and Monitoring" working group and successfully advocated for GVAP

⁴⁹ WHO, UNICEF, USAID, GAVI, Bill & Melinda Gates Foundation, CDC, and others.

⁵⁰ DR Congo, India, Kyrgyzstan, Kenya, Malawi, Senegal, South Sudan, Tajikistan, Tanzania, Timor-Leste, Uganda, Ukraine, Yemen, and Zimbabwe.

to retain the DTP1⁵¹ to DTP3 indicator and to include a new indicator measuring sustained immunization coverage over time.

- Was a founding member of the GAVI CSO Task Team, and supported the GAVI strategy to establish a civil society engagement strategy.
- Collaborated with partners to revise the recommended use of comprehensive multi-year plans (cMYPs) and, subsequently, the cMYP guidelines and costing tool for financial and program planning, required by GAVI in new vaccine applications.
- As a member of the Immunization Practices Advisory Committee, or IPAC, advised the Director of WHO's Immunization Program on: rotavirus vaccine introduction; training approaches; misguided efforts by environmental groups that would have removed the only available preservative from multi-dose vaccine vials, despite its proven safety; and revising the WHO pre-qualification process for programmatic suitability of new vaccines.
- Served on the GAVI Health System Strengthening (HSS) technical advisory group, which provided technical input on how GAVI's future HSS investments could be used to strengthen delivery of new vaccines and RI systems more broadly.
- Along with USAID and other partners, participated in the external evaluation of WHO/AFRO's five-year immunization strategy, which resulted in recommendations for WHO/AFRO's next strategy.
- Participated in a WHO-hosted meeting on the design of pre-service curricula for health professionals who either manage or deliver vaccination services, and provided further support in four MCHIP countries.⁵²
- Played a key role in comprehensive, multi-agency EPI reviews in 10 countries.⁵³ Results of reviews were used to advocate with decision-makers and program managers for strategic planning and investment in RI strengthening.

Helping to ensure that vaccines are used safely. MCHIP:

- Through IPAC, helped update the Multi-dose Vial Policy to help assure that newer vaccines, with their unique characteristics, are safely administered. The policy was finalized in 2014 and disseminated globally by WHO.
- Contributed to training and communication materials on rotavirus vaccine safety, particularly related to the potential consequences of stricter age restrictions that were imposed and then later lifted by WHO.⁵⁴

Promoting practices for effective and efficient handling of vaccines. MCHIP:

- As a member of the UNICEF Cold Chain Logistics Task Force, helped revise the Effective Vaccine Management tool that guides cold chain and logistics management and is required for countries to receive GAVI support. Also participated in drafting and reviewing 30-day temperature recording guidelines, which have been finalized and are being implemented in countries where continuous temperature monitoring devices are used.
- Contributed to the development of the WHO Vaccine Management Handbook (VMH-e7-02.1): How to use passive containers and coolant packs for vaccine transport and outreach

⁵¹ Diphtheria-tetanus-pertussis containing vaccine.

⁵² Kenya, Malawi, Senegal, and Tanzania.

⁵³ Benin, DRC, Liberia, Ghana, Senegal, South Sudan, Tajikistan, Uganda, Ukraine, and Zimbabwe.

⁵⁴ As member of the Rotavirus Communication Working Group.

operations. This module is a first in a series being developed and will be disseminated for use at the country level.

- Revised WHO’s module on “Maintaining Vaccines at the Correct Temperature at Country Level.”
- Through IPAC: advised on introduction of the “controlled temperature chain” and expansion of the birth dose of hepatitis B vaccine; and contributed to presentations advocating to the WHO Scientific Advisory Group of Experts (SAGE) for increased investment in immunization supply chain and logistics; these led to SAGE’s endorsement of the IPAC Call to Action on Immunization Supply Chain and Logistics.
- As a member of the WHO/PATH Optimize Program Advisory Group, advised on design of supply chain systems for the future and advocated for increased investment in this neglected aspect of immunization systems.

Helping Design Vaccine Products Appropriate for Use in Low-Resource Settings

Health workers in poor, remote settings are sometimes reluctant to open 10-dose measles vaccine vials for fear of wasting doses, which likely results in missed opportunities to vaccinate children against measles, late immunization, and increased risk of outbreaks. MCHIP advocated successfully for measles and measles-rubella (MR) vaccines in 5-dose vials, which will soon become available from UNICEF’s supply division for international tender. IPV, which is supposed to be introduced in 125 countries over the next three years, will be available in 5-dose vials for the first time in late 2014.

As a member of an Institute of Medicine Committee, MCHIP provided technical input into the *Ranking Vaccines: A Prioritization Software Tool*, which helps to identify and prioritize the introduction of new preventive vaccines.⁵⁵ MCHIP participated in the Vaccine Presentation and Packaging Advisory Group that brings industry and public health communities together virtually to design vaccines suitable for use in public sector programs in developing countries. MCHIP provided input on the development of specifications recommended for primary containers (e.g., vials) of vaccines⁵⁶ and, as part of IPAC, advised on programmatic suitability of vaccines for WHO pre-qualification.⁵⁷

Promoting Understanding, Acceptance, and Utilization of Vaccines

At WHO’s request, MCHIP worked with partners to revise and pre-test mid-level manager (MLM) training modules, which will be rolled out in the WHO/AFRO region, and wrote a new module for the Immunization in Practice (IIP) series on community partnership. These modules are used globally for training health workers and immunization program managers. MCHIP also drafted the M&E chapter and other sections of the WHO/EURO’s *Tailoring Immunization Programmes (TIPs) Toolkit*, which assists countries in developing appropriate communication approaches and community linkages for improving immunization coverage. As part of a suite of WHO tools for identifying why children remain unvaccinated, MCHIP prepared a diagnostic tool to review the knowledge, attitude, and practices of health workers with regard to their ability to assess the quality of the interface between health workers and parents.

⁵⁵ www.nap.edu/smartvaccines

⁵⁶ Co-chaired multi-agency meeting “Consideration for Primary Vaccine Container Selection in Developing Countries – Defining the Evidence and Framework for Decision Making.”

⁵⁷ As a member of IPAC.

Contributing to Accelerated Disease Control Initiatives

MCHIP has been an active member of the Measles Rubella Initiative, advocating for RI strengthening to become a key component of the measles and rubella elimination strategy. MCHIP provided technical input into a district-level measles outbreak risk assessment tool (which was used by WHO, CDC, and MOH in several African countries). In working toward the elimination of maternal and neonatal tetanus (MNT), MCHIP built on its longtime contributions in this area by serving as chair of UNICEF's MNT elimination Program Advisory Committee and developing a proposal for school-age tetanus toxoid vaccination which, in collaboration with UNICEF, will be tested and evaluated in one country.

MCHIP also provided detailed technical feedback to the GAVI Alliance guidelines for its support to supplementary immunization activities (SIAs) in priority countries and assisted with in-country support for SIAs and linkages with RI strengthening in **DRC, Kenya, Senegal, and Zimbabwe**.

New Vaccines

MCHIP provided technical support to 10 GAVI-eligible countries⁵⁸ in preparing for 24 new vaccine introductions,⁵⁹ six of which will occur following the close of MCHIP. MCHIP also provided STTA to other countries for the preparation and follow-up for new vaccine introduction (Table 5).⁶⁰ To maximize the effectiveness of pneumonia and diarrhea prevention, MCHIP's Immunization and Child Health Teams contributed to the Global Action Plan for Pneumonia and Diarrhea (GAPPD) and worked with UNICEF and other partners to draft a communications framework for pneumonia and diarrhea disease control and new and underused vaccine introduction. This framework was adapted for use in **Kenya** and several other East and Southern African countries for their PCV introductions.

Table 5. MCHIP/Immunization Technical Assistance for New Vaccine Introduction (2008–2014)

MCHIP NUVI COUNTRY-LEVEL TECHNICAL ASSISTANCE SINCE PY1						
Country	Vaccine antigen	GAVI Proposal	Preparation for introduction	Launch event for introduction	Post-introduction follow-up	Post-introduction evaluation (PIE)
Benin	PCV	–	✓	✓	–	–
DRC	PCV	✓	✓	✓	✓	✓
Ethiopia	PCV	–	–	–	–	✓
India	Penta	–	✓	✓	✓	✓
Kenya	PCV	–	✓	✓	✓	✓
	Rotavirus	✓	✓	July 2014	–	–
	Measles 2 nd dose	N/A	✓	✓	✓	N/A
Malawi	PCV	–	✓	✓	✓	✓
	Rotavirus	✓	✓	✓	✓	✓
	Measles 2 nd dose	✓	✓	–	–	–
Nigeria	Hib (penta)	–	–	–	–	✓
Rwanda	PCV	✓	✓	✓	✓	✓
	Rotavirus	✓	✓	✓	✓	–
	MR campaign	✓	–	–	–	–

⁵⁸ DRC, India, Kenya, Malawi, Rwanda, Senegal, Tanzania, Timor-Leste, Uganda, and Zimbabwe.

⁵⁹ Penta, PCV, Rotavirus, Mena, MR, Measles 2nd dose.

⁶⁰ Benin, Ethiopia, and Nigeria.

MCHIP NUVI COUNTRY-LEVEL TECHNICAL ASSISTANCE SINCE PY1						
Country	Vaccine antigen	GAVI Proposal	Preparation for introduction	Launch event for introduction	Post-introduction follow-up	Post-introduction evaluation (PIE)
Senegal	PCV	✓	✓	✓	✓	–
	Rotavirus	✓	–	–	–	–
	MR campaign	✓	✓	✓	✓	N/A
	MenA	–	✓	✓	✓	N/A
Tanzania	PCV	✓	✓	✓	✓	✓
	Rotavirus	✓	✓	✓	✓	✓
	Measles 2 nd dose	✓	✓	✓	✓	N/A
	MR	✓	✓	–	–	–
Timor-Leste	Penta	✓	✓	✓	–	N/A
Uganda	PCV	–	✓	✓	✓	–
	Rotavirus	✓	–	–	–	–
	IPV	✓	✓	–	–	–
Zimbabwe	PCV	✓	✓	✓	✓	✓
	Rotavirus	✓	✓	✓	✓	–
	Measles 2 nd dose	✓	–	–	–	–
Total		21 GAVI proposals submitted	24 vaccine introductions prepared for	19 vaccines launched	16 new vaccine-related follow-up activities	10 PIE's conducted

Routine Immunization

Introduction of new vaccines, control of vaccine-preventable diseases, and achievement of MDG mortality reduction targets depend on the functioning of the RI system. MCHIP strengthened RI systems, and supported and implemented RED and related strategies in nine countries.⁶¹ MCHIP's approach to strengthening RI recognizes that the priorities and challenges of immunization programs vary across countries; therefore, a common thread running through the project's TA was to work closely with in-country partners in developing customized approaches to meet the country's needs.

To foster shared understanding and ownership of the challenges related to strengthening RI systems in **Uganda**, MCHIP added elements of a QI approach, including implementation of user-defined, rapid learning Plan-Do-Study-Act cycles, to transition from RED to Reaching Every Community (REC). In one early success, this QI approach led to district health teams in four out of five implementation districts using their own funds to permanently solve a decades-old chronic shortage of gas cylinders that power the refrigerators in health facilities. In **India**, MCHIP tackled the perennial problem of poor supervision by designing and implementing RAPID (Regular Appraisal of Program Implementation in a District) methods; these have been adopted in their entirety by Jharkhand State, using local resources. MCHIP exported to **Tanzania** and **Kenya** the planning tools that MCHIP developed in **India** to target services and identify logistic requirements. In **India**, **Kenya**, and **Timor-Leste**, innovative techniques to improve newborn tracking by engaging existing community networks were implemented; notably, the "My Village is My Home" tool, which showed an improvement in vaccination

⁶¹ India, Kenya, Madagascar, Nigeria, Senegal, South Sudan, Uganda, Tanzania, Timor-Leste, and Zimbabwe.

timeliness. In **South Sudan**, MCHIP collaborated with partners to develop a new national immunization policy, in addition to drafting RED guidelines and EPI training modules for the national immunization program. In **Zimbabwe**, MCHIP supported implementation of all components of the RED approach to reach underserved populations and improve coverage across the intervention areas. In **Kenya**, MCHIP and the immunization program completed the development of pre-service curricula on immunization for medical and nursing schools, while in **Senegal, Uganda, and Malawi**, a similar process was initiated. In all countries, MCHIP improved the local collection, use, and interpretation of data to engage and motivate health workers and improve performance. In most countries, MCHIP engaged and mentored civil society players, including NGOs and faith-based organizations.

Polio

MCHIP supported efforts to strengthen global and regional polio eradication initiatives, particularly linkages with RI, through contributions to technical reviews and partnerships, including with the Independent Monitoring Board (IMB), a global advisory body for WHO, and the Global Polio Eradication Initiative (GPEI). To help shape the global agenda around polio, MCHIP also assisted the GAVI Alliance (GAVI) in defining its role and strategy on polio eradication, UNICEF's global polio grant, and USAID's Global Polio Emergency Plan. In addition, MCHIP participated in a closed polio roundtable with the Center for Strategic and International Studies.

At the regional level, MCHIP provided technical guidance to the Horn of Africa and SEARO Technical Advisory Groups, and for UNICEF/WCARO and ESARO multi-country polio workshops, which are forums to guide country implementation. MCHIP also co-authored two peer-reviewed journal articles in the May 2010 *Health Communication* that helped inform and guide organizations at country, regional, and global levels on the use of data on polio communication.

To sustain eradication efforts in polio priority countries, MCHIP supported national- and district-level planning and implementation of SIAs (**Kenya, India, DRC**) and RI training for UNICEF and CORE SM Net teams and District Immunization Officers (Uttar Pradesh, **India**). In addition, MCHIP led newborn tracking for OPV0 and BCG—including links with RI coverage in UP and Jharkhand, **India**—linking thousands of infants more directly with the immunization system. In **Kenya**, newborn tracking also included OR in high-volume, demonstration facilities, where mobile text reminders were used for new mothers to bring infants for their vaccination, including OPV. In DRC, MCHIP worked with health workers during polio SIAs to identify all children for the OPV birth dose, verify the immunization status of all children for all vaccines, and refer those who were un/under-immunized to fixed immunization sites to receive vaccination. These efforts contributed to an increase in routine coverage.

MCHIP provided technical and administration oversight of a four-year sub-agreement (extended for nine months until June 2014) that enabled the Communication Initiative (CI) to continue contributing its expertise in polio communication to global polio eradication efforts. Major accomplishments included:

- Participating actively in nine national technical reviews of polio communication
- Participating in numerous country technical advisory group meetings and regional meetings for polio and immunization, particularly in the polio-endemic countries
- Working with partners to develop and use polio-improved communication indicators within the global polio program

- Distilling, publishing, and disseminating polio communication strategic knowledge (polio website, online discussions, widely disseminated newsletters, blogs, journal articles, and reports)
- Providing networking and knowledge support; advising USAID Missions, the Independent Monitoring Board, and other partner staff and offices

Finally, in partnership with MCHIP and local organizations, CI planned and implemented a major study in **Nigeria** using qualitative comparative analysis (QCA) to understand the factors leading to repeated campaign coverage among certain households and communities. Field work has been completed and analysis has begun, with preliminary results expected by the end of June.

Challenges and Way Forward

Vaccines and immunization have gained global prominence in recent decades, but more support is needed to ensure that RI systems are capable of providing timely, safe, and effective vaccination to all children, particularly the most vulnerable, supporting the introduction of new vaccines, and sustaining the disease reduction gains achieved in large measure through mass campaigns. Without a sound platform, the full benefits of new vaccines cannot be realized.

Furthermore, as the GVAP suggests, the global community must ensure that “the benefits of immunization are equitably extended to all people,” in part by continuing to improve the RED strategy and moving from RED to REC. Poor data quality continues to be a bottleneck to successful identification of the unreached. With more children being born each year, the need for capable RI systems that protect all children against preventable deaths will be a cornerstone of health programs everywhere.



Malaria

Introduction

MCHIP has worked closely with the PMI and RBM Partnership, including key stakeholders in MNCH, to support a reduction in the global burden of malaria morbidity and mortality. MCHIP's key areas of intervention include: MIP, integrated community case management (iCCM), and malaria prevention and case management that are addressed at the community level through the Malaria Communities Program (MCP). This focus has engendered equitable support targeting pregnant women and children less than five, who are most vulnerable to malaria.



MCHIP's contributions to stem malaria span the global, regional, and country levels. At the **country** level, this includes high-quality TA, including program review and implementation support. At the **regional** level, this includes documentation and dissemination of best practices and lessons learned to advance program learning. MCHIP's **global** leadership in MIP and iCCM has contributed to developing evidence-based tools and fostering partnerships between experts in malaria and MNCH through participation in the RBM MIP working group and the Global CCM Task Force (TF), respectively. MCHIP has also strengthened the capacity of MCP grantees to design and implement community-based malaria programs that build local ownership.

Key Achievements and Results

Malaria in Pregnancy

Although many African countries have made important strides toward achieving their malaria program goals, none has reached the RBM targets of 80% and PMI targets of 85% for use of intermittent preventive treatment during pregnancy (IPTp) and use of insecticide-treated bed nets (ITNs) by pregnant women. Since Year 1, MCHIP has focused its MIP efforts on shedding light on why these challenges remain, disseminating information on what countries can do to increase the use of lifesaving MIP interventions, and supporting countries through global leadership and direct country support to accelerate MIP prevention and control.

Documenting and Disseminating Best Practices and Lessons Learned:

MCHIP produced country case studies of **Malawi, Senegal, and Zambia** documenting MIP best practices and lessons learned across eight

essential and interconnected health system elements: integration, policy, commodities, quality

In areas of moderate-to-high malaria transmission, IPTp-SP is recommended for all pregnant women at each scheduled ANC visit. WHO recommends a schedule of four ANC visits:

- The first IPTp-SP dose should be administered as early as possible during the 2nd trimester of gestation.
- Each SP dose should be given at least 1 month apart.
- The last dose of IPTp-SP can be administered up to the time of delivery, without safety concerns.

Source: WHO.

http://www.who.int/malaria/iptp_sp_up_dated_policy_recommendation_en_102_012.pdf October 2012.

assurance, capacity building, community awareness and involvement, M&E, and financing. A brief report synthesizing the key findings and recommendations from the three countries was developed and disseminated with the case studies to stakeholders in the three countries. It was also disseminated more widely through PMI and MCHIP country teams, and at regional-level meetings and conferences. A key recommendation of the documentation reinforces the important collaboration of national malaria control, RH, and HIV partners to implement integrated programs. During dissemination meetings in the three countries, partners decided upon actions, inspired by the documentation, to improve implementation of their MIP programs. For example, **Senegal** planned to accelerate its free distribution of long-lasting insecticide treated bed nets (LLINs) at ANC and create a joint coordination committee focusing on training and community-level interventions. Jhpiego developed a manuscript on the three-country documentation series accepted for publication in volume two of the *Global Health: Science and Practice* online journal (<http://www.ghspjournal.org/content/2/1/55.full>).

Malaria in Pregnancy Working Group: MCHIP has been an integral member of the RBM MIP working group, providing technical leadership through the MCHIP Director's role as Co-chair. MCHIP has also provided continuous support for the functionality of the working group through the development of meeting agendas and minutes, organization of annual meetings and telecons, and contribution to and formulation of the group's workplan, which centers on providing technical and programmatic guidance to countries challenged by MIP. Through MCHIP's involvement, namely, reaching out to new partners, the working group's membership expanded to include a number of new research, program, and technical partners to ensure wider coverage, support, and advocacy for MIP programming. MCHIP also contributed to the development of five key documents:

1. ***IPTp Policy Brief*** issued in April 2013, which reinforces and provides clarity to the WHO updated policy recommendation on IPTp-sulfadoxine-pyrimethamine (SP) that was issued in October 2012. All sub-Saharan African countries have begun the process to review, update, and/or disseminate the new policy guidance. (http://www.who.int/malaria/publications/atoz/policy_brief_iptp_sp_policy_recommendation/en/)
2. ***MIP Consensus Statement*** highlights the key elements needed to optimize the delivery of MIP interventions and champion integrated policymaking and harmonized program implementation between national RH and malaria programs, including: ensuring harmonized policies on MIP; increasing coverage and equity of access of comprehensive MIP services for pregnant women; implementing WHO's three-pronged approach to MIP prevention, diagnosis, and treatment; and using an MIP M&E framework to guide program implementation. (<http://www.rollbackmalaria.org/docs/2013/MIP-consensus-statement-en.pdf>)
3. ***Malaria Protection in Pregnancy: A lifesaving intervention for preventing neonatal mortality and low birth weight***, a brief synthesizing two published articles on the evidence of use of ITNs and IPTp contributing to reduced maternal and child mortality, as well as key MIP messages. (http://www.rollbackmalaria.org/partnership/wg/wg_pregnancy/docs/MIPBriefer.pdf)
4. ***Malaria in Pregnancy in Asia Pacific region***, a literature review from an area of mixed infections with *P. vivax* and *P. falciparum*. (<http://download.thelancet.com/pdfs/journals/laninf/PIIS1473309911703152.pdf?id=aaaEXZtEJc37L-Jb7ECqu>)
5. ***WHO Global Fund Policy Brief***, intended to support countries in the development of their Global Fund Proposals for Malaria. The guidance specifically outlines the need to link and strategically integrate malaria programming on the MNCH platform. MCHIP contributed to the 2011 brief and provided information to an updated 2014 version that is pending publication. (http://tip.populationaction.org/files/2012/08/WHO_RH_MNCHGuidance_July2011.pdf)

Recognizing that MIP is at a crossroads and strides must be made to sustain gains, MCHIP has worked closely with the MIP working group to raise visibility about the importance of addressing MIP. MCHIP participated in the **Global Fund technical consultation meeting** in Nairobi, Kenya, December 13–16, 2011, to support countries in developing transitional plans for MIP programming due to cancellation of Round 11 funding. MCHIP provided guidance to countries on reallocating scarce resources to scale up key program systems for supporting IPTp, LLINs, and case management. MCHIP also participated in the **Malaria in Pregnancy: Bringing the Maternal Health and Malaria communities together** meeting in Istanbul, Turkey, June 26–28, 2012, organized by the Maternal Health Task Force. Forty malaria and maternal health experts identified key steps for moving MIP programming forward, which were folded into the agenda of the MIP working group. MCHIP led a panel of presenters, including working group partners, on **Malaria in Pregnancy: What it takes to deliver quality services as a component of comprehensive maternal and newborn health care**, at the Global Maternal Health Conference (GMHC) in Arusha, Tanzania, January 15–17, 2013. The panel aimed to reach out to global MNH colleagues on the importance of integrating MIP services into ANC. In addition to visibility, MCHIP, in collaboration with the MIP working group, supported dissemination of the updated WHO policy for IPTp. This resulted in multiple countries, including **Burkina Faso, Guinea, Tanzania, Kenya, Uganda**, and **Mali**, reviewing existing policies and guidelines and updating these documents based on the latest evidence.

Malaria Tools and Resources Developed under MCHIP:

1. **National Document Review:** To better understand whether national MIP documents reflected WHO MIP guidelines and how consistent MIP content was across documents from the same country, MCHIP reviewed MIP national-level documents in 19 PMI focus countries. The report is an important reference document for countries as they continue to review and update national policies. MCHIP and PMI have disseminated the report to stakeholders in the countries and more widely through the RBM MIP working group and supported country-specific dissemination meetings of the findings and recommendations, including action planning, in **Uganda, Angola, Guinea and Kenya**.
<http://www.mchip.net/sites/default/files/mchipfiles/19%20Country%20Review%20of%20MIP.pdf>
2. **Review of MIP Indicators:** To better understand which MIP indicators countries are documenting, how these indicators are tracked in national health information systems, and how the indicators are used for decision making, MCHIP reviewed MIP monitoring in six PMI focus countries. The six individual county reports and overall synthesis report offer insight into how countries can improve MIP monitoring and support acceleration of programming efforts.
3. **Case Management Job Aid:** MCHIP supported development of a case management job aid, based on the latest WHO recommendations, which countries can adapt and incorporate into their national service delivery systems.

Country Technical Assistance: MCHIP has provided targeted TA to countries to address specific MIP program needs. For example, MCHIP helped Nigeria address bottlenecks hindering implementation of its Global Fund-supported MIP activities through meetings to orient state policymakers about MIP issues and distribution of guidelines to secondary and primary health care facilities. MCHIP worked with PMI in **Ghana** to develop a brief documenting the country's successful practices and lessons learned in implementing IPTp that lends to expanded program learning within **Ghana** and knowledge sharing with other countries. In **Uganda**, MCHIP and PMI supported the MOH to bring together key partners in RH and malaria control to define their roles and a process for reprioritizing MIP. MCHIP reviewed Uganda's MIP guidance documents and made specific recommendations for updating each document in accordance with the latest WHO MIP recommendations. MCHIP provided TA and facilitation of the MIP session of the MCP Regional workshop, in May 2011, in Lilongwe, Malawi. At the session, 18 grantees

across 12 countries learned to apply the eight essential MIP health system elements to their programs for improved performance and were informed by other country program challenges and successes.

Global Meetings: In addition to the meetings discussed above, through collaboration with the RBM MIP working group, MCHIP also participated in global meetings and panels to expand knowledge of MIP and future directions for MIP programming. MCHIP participated in the panel the “Changing Face of Malaria in Maternal Health” during the Global Health Council Conference in Washington, D.C., in June 2011. Panelists presented information on innovative MIP programs from two countries, as well as research priorities and the donor perspective on MIP program priorities in an era of changing epidemiology. At the CORE Group Spring Meeting in May 2012, MCHIP facilitated the panel “Malaria in Pregnancy: Strengthening Health Systems to Improve Outcomes for MIP,” which contributed to program learning and expanding the technical dialogue among CORE Group’s multiple member organizations and partners that work in community-focused public health around the world.

Integrated Community Case Management

iCCM of childhood illness—the delivery of timely and low-cost interventions against diarrhea, malaria, and pneumonia at community levels by CHWs—is an effective strategy for saving children’s lives. The iCCM TF is an association of multilateral and bilateral agencies and NGOs that is recognized globally for its contribution in pushing forward the global iCCM agenda and advancing state-of-the-art tools and resources. The TF membership grew to 50 organizations and 152 members in December 2013 from 26 organizations and 87 members in June 2012. This growth was thanks to the growing realization of the effectiveness of the TF in advancing iCCM. Through this forum, MCHIP is not only providing leadership, but also influencing the members on key child health issues. The TF has advocated policy change; as a result, 29 of 40 sub-Saharan African countries, and more in South Asia, today have favorable policies to implement a complete iCCM package. Such a package includes interventions against diarrhea, malaria, and pneumonia, the three primary causes of child mortality. Moreover, the majority of these countries are moving from introduction and NGO-led programs to expansion of national, government-led programs.

As the iCCM TF secretariat, MCHIP has played a key role in developing and maintaining an organized structure and convening technical subgroup members. The technical subgroups have spearheaded the development of evaluation criteria for collecting and assessing the various tools and guidance needed to support successful iCCM implementation, essentially an iCCM tool kit. The tools include the **CCM Essentials**, a **guide to planning and implementing iCCM** produced in collaboration with CORE Group and other partners, CHW training and supervision materials, job aids, etc. These tools formed the original core of the CCMCentral.com website, which provides a central location where organizations and countries can access state-of-the-art tools and decrease the need to “reinvent the wheel.” End of project evaluation of the Catalytic Initiative, for example, highlighted achievements in implementation strength of programs using some of the TF tools for training of CHWs.

The period of 2008 to 2014 has been a time of learning while doing for the iCCM community. MCHIP has been an active player, particularly in leading and collaborating on various initiatives and sharing tools and resources with the community. MCHIP documented iCCM implementation in DRC and Senegal to chronicle the history, process of policy change, key players, and successes and challenges to inform the future of iCCM in these countries and inform other countries. To build on this exercise, MCHIP developed a synthesis report of the cross-cutting findings and lessons learned from iCCM programs in the DRC, Senegal, and Malawi, and put forward key recommendations on how iCCM programs can integrate the lessons learned with current and future programming. The iCCM country reports have been

disseminated in **Guinea, DRC, Senegal, Uganda, and Mali**, and at the American Society of Tropical Medicine and Hygiene conference. Lessons learned from these documentation reports have particularly influenced policy changes related to iCCM in **Guinea and Mali**. In **Guinea**, MCHIP advocated for the introduction of an integrated CCM package by expanding the ongoing program of diarrhea case management to include the treatment of childhood malaria and pneumonia. In **Mali**, MCHIP was instrumental in facilitating scale-up of iCCM as part of a larger essential community package.

In addition, MCHIP carried out an assessment of training and supervision tools for: 1) malaria case management in PMI countries, and 2) iCCM in 10 sub-Saharan African countries to identify major bottlenecks to scaling up WHO diagnostic testing and treatment guidelines for malaria within the context of integrated management of childhood illness (IMCI) and adherence to WHO/UNICEF standards for iCCM. The review assessed how IMCI/malaria training and supervision tools currently used at the country level address updated WHO/UNICEF guidance encouraging diagnostic testing of all suspected malaria cases and treatment of those with a positive test only. It also examined guidance for pre-referral treatment for the severely ill and recommendations for definitive management of severe malaria. The findings were shared with all PMI and iCCM countries to address gaps in their respective country programs and will be published in the global malaria journal for wider dissemination.

The need for common indicators to guide and assess implementation emerged prominently in the early stages of iCCM discussions. Building on the work of BASICS and the benchmarks framework, from 2010 to 2013, MCHIP has been both an active technical participant and facilitator of the M&E subgroup's work to define, organize, and vet the list of indicators. The Indicator Guide has been completed and printed and will be distributed at the iCCM Symposium in Ghana to a broad range of participants to influence country M&E systems. Countries will also be supported to choose from the indicator list.

Finally, with the Global Fund's 2014 announcement that its New Funding Model would, for the first time, accept applications that included iCCM, the CCM TF became a channel for mobilizing and providing technical assistance to 17 initial countries. MCHIP led efforts in **Kenya, Uganda, Ghana and Zambia** to review existing iCCM policies and programs, carry out gap analysis to identify unmet financial and programmatic need, and work with MOHs to develop concept notes to the Global Fund to expand iCCM under the Malaria and/or Health Systems Strengthening funding windows. At the close of MCHIP, these concept notes were pending Global Fund approval.

Malaria Communities Program

Through the MCP, PMI engaged NGOs to support community-based malaria control efforts. MCHIP supported PMI by creating reporting guidance and then reviewing annual reports and workplans for 20 MCP projects; collating project results to contribute to PMI annual reports; and contributing learning from MCP projects to the interagency M&E of Malaria Behavior Change Working Group. These efforts assisted PMI with MCP administration, while also ensuring quality in grantees' work. In addition, to address the evidence gap regarding community-based malaria control efforts, MCHIP both led and contributed technical support to grantee efforts to convey project lessons to practitioners as well as to national and global policymakers. For example, two grantees, in partnership with MOH, conducted pilot tests of community case management, and MCHIP documented these experiences in a case study.

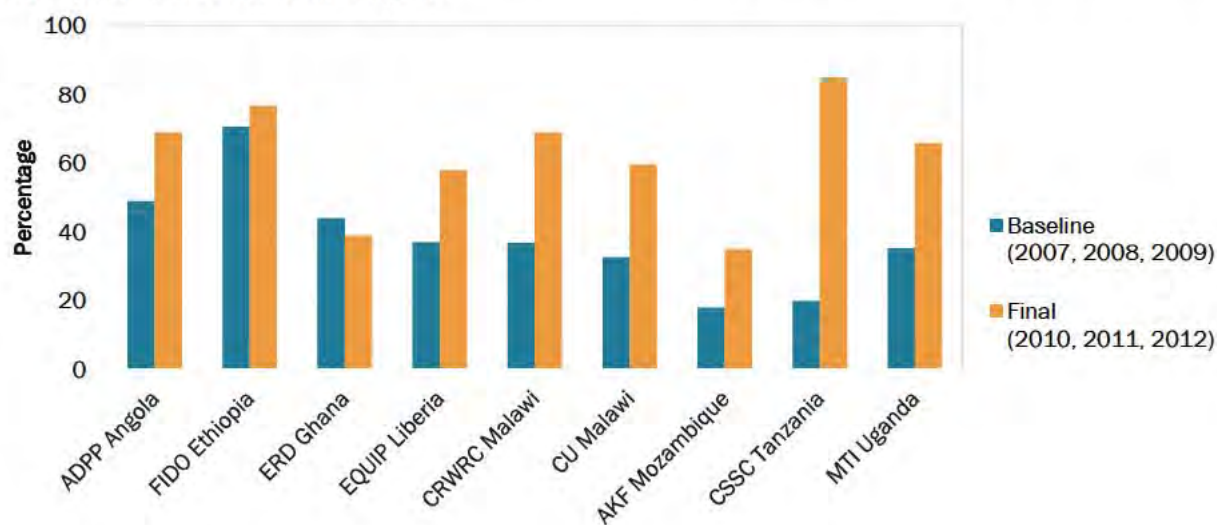
MCHIP supported grantees through technical advice during project site visits, in response to project deliverables and on an ad-hoc basis. This technical advice spanned topics including reporting to USAID and implementing community-based malaria control programming activities, M&E, and behavior change. MCHIP also designed curricula, and organized and

facilitated two workshops—one on M&E and behavior change and one on iCCM and MIP—to further guide and strengthen grantee projects. Finally, MCHIP disseminated relevant peer-reviewed articles and technical materials to the grantees. All of these grantee support efforts were designed to enhance grantee capacity, expand their knowledge, and strengthen their projects to contribute learning to global dialogue about community-based malaria control.

To contribute to the global dialogue, MCHIP organized a high-level event for PMI, during which grantees presented their results to showcase MCP project learning. MCHIP also collected data and, with PMI, wrote case studies to highlight learning in four areas: case management, ITN use, MIP, and community capacity for malaria control. See Figures 16 and 17 for some results from these projects. MCHIP’s work to build grantees’ skills in data collection made it possible to quantify coverage for several key indicators in project areas. Finally, MCHIP disseminated MCP learning through its many communication channels, reaching a wide audience so that other organizations can build on MCP lessons in planning, implementing, monitoring, and evaluating community-based malaria control projects. Specific points of learning that emerged from MCHIP’s work include:

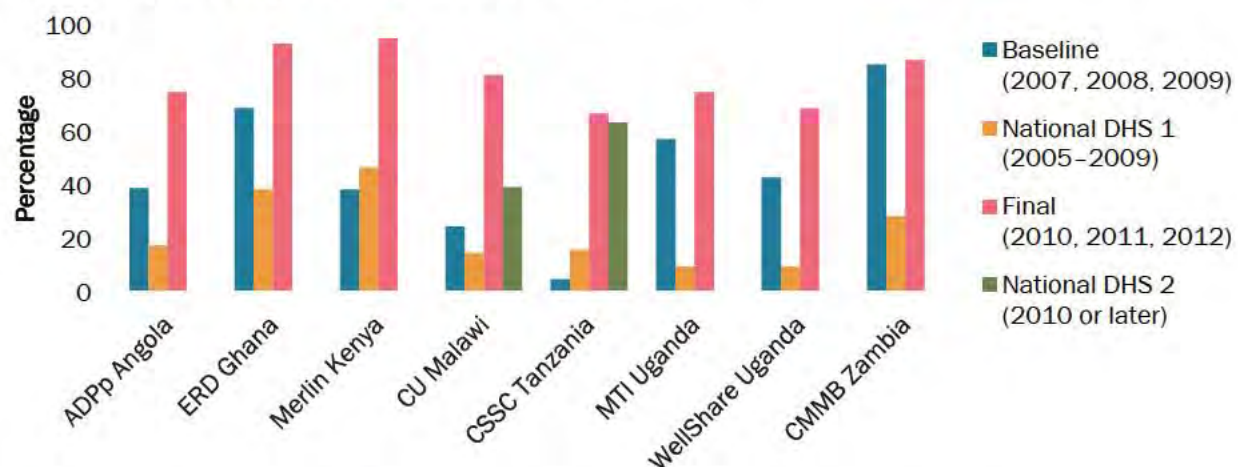
1. MCP partners are well-placed to continue implementing high-quality, community-based malaria control projects with other international and national partners. They have demonstrated how NGOs can contribute to national malaria control efforts. Documentation of their efforts adds to national and global discourse on both NGO roles and community-based efforts in malaria control.
2. Grantees preferred sharing learning in person; sharing through facilitated electronic discussion was not successful.
3. Visiting project sites afforded MCHIP opportunities to work together with grantees to assess/review processes and brainstorm changes, which could not be optimized through electronic and phone communication.
4. With MCHIP’s TA, grantees were able to conduct population-based surveys to acquire the data needed to measure change (results) in project areas.

Figure 16. Prompt Care-Seeking: Increased Demand for Prompt Malaria Treatment (general indicator: percentage of children under five treated promptly with an appropriate antimalarial*) in Three-, Four-, and Five-Year Projects



*Indicator definitions vary.

Figure 17. Percentage of Children under Five in MCP Project Areas Who Slept under an ITN the Previous Night* Compared to National Trends**



*Household surveys were carried out in MCP project areas and are not nationally representative.

**Limited availability of national coverage estimates through DHS/MIS.

Challenges and Way Forward

Maintaining visibility for MIP programming, as the world focuses on universal coverage for malaria prevention and control, will remain both important and a challenge. The RBM MIP working group corrals the collective guidance of experienced researchers, technical experts, and programmers who bring to the forefront the latest critical thinking on MIP. The MIP working group's efforts are not only relevant, but important moving forward. The working group raises visibility for MIP programming and also fosters key partnerships between RH and malaria control, as well as supporting dissemination of best practices and lessons learned. MCHIP has also contributed valuable resources to expand MIP program learning and guidance to countries. The MIP case studies, synthesis brief, journal publication, and documentation of country-level MIP guidance and monitoring are important tools to guide countries as they revise MIP policies, improve planning, adapt best practices, and address existing challenges in their MIP programs. Targeted technical support to countries will be needed going forward to assist countries with adoption of WHO's 2012 updated recommendation for IPTp and to aid countries with prioritizing actions based on recommendations from the documentation of country-level MIP guidance and monitoring. In recognition of the toll MIP has on MNH, there should be a focus going forward on engaging MNH stakeholders to support the prioritization of MIP as a comprehensive component of MNH programming.

MCHIP has contributed to moving the iCCM agenda forward, and is a successful channel for disseminating learning for stronger program implementation and, ultimately, increased access to treatment services for children previously underserved. Challenges remain, however, in advocating for scale-up and strengthening of linkages with facility services, providing CHWs with an uninterrupted drug supply, developing sustainable approaches to supervision and performance improvement, and gaining policy and funding support. Fortunately, the landscape for iCCM initiatives and players is improving and expanding, and MCHIP has played a critical role in both global technical leadership and coordination. MCHIP closely supports A Promise Renewed and the Global Fund's new funding model, which are examples of opportunities to support national governments in scale-up of iCCM that will be important investments going forward. MCHIP's legacy of advocacy, TA, and program learning to scale up iCCM, in collaboration with global and national leaders, will prove valuable in reducing preventable child deaths.

MCP grantees exemplified the various roles that NGOs can play in advancing malaria control efforts in communities and in facilitating learning about these activities at national and global levels through partnerships and the dissemination of data-driven reports. MCHIP assisted NGOs by providing QA through site visits, report reviews, and survey consultations, along with documenting and disseminating their work through reports and case studies. There is a gap in evidence and general documentation regarding what works for community-based malaria control and lessons learned from these projects can inform future efforts. Important points for future projects to consider include appropriate M&E to document results and establishing partnerships with MOHs and community groups to both inform projects and to disseminate findings.



Family Planning

Introduction

MCHIP’s Family Planning (FP) Team focuses on the health benefits of FP for mothers and children. FP integration within MNCH services is a key strategy for reducing maternal, infant, and child mortality and morbidity through the prevention of unintended pregnancies and the promotion of healthy pregnancy spacing. MCHIP-FP has successfully incorporated the following key components to more effectively meet the FP needs of women within MNCH services through the promotion of postpartum family planning (PPFP) to optimize the healthiest outcomes:⁶²



1. Providing proactive counseling to inform women about return to fecundity, risks of closely spaced pregnancies, benefits of pregnancy spacing and timing, and contraceptive use
2. Supporting women/couples to make voluntary and informed contraceptive choices
3. Integrating FP with other MNCH services, using a “no missed opportunities” approach
4. Addressing barriers to PPFPP use and cultivating social norms supporting PPFPP use
5. Advancing PPFPP at the global level through strong advocacy and technical leadership

MCHIP supported PPIUD programs in 12 countries in Africa and Asia. Through regional workshops, in-country interventions to advocate and overcome concerns with evidence and standardized training, the PPIUD has become a viable PPFPP option for many women.

Figure 18. Opportunities to Integrate FP through Contact Points along the Reproductive Cycle



MCHIP’s strategy and comparative advantage have been to capitalize on health contacts during the course of pregnancy, childbirth, and the care of a young child. Every interaction, whether in a facility or in a community setting, is an opportunity to introduce messages on the healthy timing and spacing of pregnancies, provide counseling on PPFPP, and encourage the adoption of a contraceptive method. Core- and field-funded programs explored and tested the feasibility of FP integration along the continuum of care.

⁶² Because ACCESS had a global Associate Award for FP that outlived the Leader Award (ACCESS-FP), MCHIP didn’t begin work in FP until 2009 or Year 3 of MCHIP.

Partners

The MCHIP-FP team works closely with MOHs, WHO's office of Reproductive Health Research, USAID, local organizations (e.g., Shimantik, the Center for Data Processing and Analysis [CDPA]) and CAs (e.g., PSI, JSI, FHI 360, and EngenderHealth, IntraHealth International [PAC], Futures Institute, CORE Group, and many additional stakeholders through global TWGs.)

Coverage: 21 USAID Missions have invested in MCHIP for FP, 17 of which included PPFPP.

Impact Indicators: Over 4 million women counseled on FP as part of integrated essential care services at MCHIP-supported facilities over the last six years, and 2.4 million couple years of protection (CYP) to avert pregnancy supported by MCHIP-FP services. A total of 15 FP policies in nine countries (DRC, Guinea, India, Kenya, Liberia, Malawi, Mozambique, Philippines, and Rwanda) were developed.

Engaging Global Actors in PPFPP

MCHIP-FP's long history of reviewing the evidence base for PPFPP, and growing that evidence through the development and documentation of program models for integrating FP with maternal health care, led to significant engagement from major global actors in FP. First, a "Statement for Collective Action for Postpartum Family Planning," calling for a renewed focus and commitment to meeting the FP needs of women in the postpartum period, was endorsed by 16 organizations and 147 individuals, around the time of the 2012 London Summit on Family Planning. Simultaneously, MCHIP's work to highlight the evidence of need among postpartum women caught the attention of WHO. Together with USAID, MCHIP and WHO developed the "Programming Strategies for Postpartum Family Planning," which provides strategies for policymakers and program managers on how to design a PPFPP program. The document was published in November 2013 and launched during a press conference at the International Family Planning Conference in Addis Ababa, Ethiopia. Later, a commentary introducing the document was published in *Global Health: Science and Practice* (February 11, 2014, vol. 2, no. 1, pp. 4–9). The French translation of the "Statement for Collective Action for Postpartum Family Planning" was disseminated at two international meetings in Burkina Faso in February 2014, and a Spanish translation is forthcoming.

The MCHIP-FP team consistently reached across organizations and projects to attract new stakeholders to PPFPP programming. Below are examples of results of this approach:

- Revitalized the postpartum IUD, the only LARC option for breastfeeding women during the immediate postpartum period. With partners, MCHIP held three regional meetings on PPIUDs (India 2010, Zambia 2013, Burkina Faso 2014) where MOH officials, program managers, technical advisors, and providers from 27 countries learned how to either introduce or scale up PPIUD program services.
- Provided TA to partner organizations, as, for example, in Liberia, to a CSHGP grantee to assist with replication of the MCHIP FP/immunization integration model at a larger scale.

Figure 19. Community of Practice as Channel for Linking of MCHIP and Partners, Global and Field Program Learning, and Coordinated Development of Products



Global Exchanges and Dissemination of Learning

MCHIP's advocacy for addressing the needs of postpartum women includes the facilitation of a **PPFP Community of Practice (CoP)** that hosts face-to-face annual technical consultations (the last one was held at the 2013 Women Deliver conference), as well as virtual discussions hosted on the Knowledge Gateway. This CoP has grown and generated TWGs. These platforms provide a forum to share field experiences and lessons learned and opportunities to collaborate with partners:

- The PPFP CoP has 1,306 members in 87 countries. MCHIP, with EngenderHealth and PSI, created an expansive PPIUD section, now the most visited tab within the PPFP toolkit. MCHIP hosts online discussion forums through the CoP.
- MCHIP created a Social and Behavior Change Communication (SBCC) for PPFP guide and e-learning course to build the capacity of technical advisors and program staff in this area, and to ensure that strategic, evidence-based, and sustainable approaches are used. The resources articulate seven key PPFP behaviors with strategies and steps for designing and implementing SBCC for PPFP.
- MCHIP co-leads the Maternal, Infant and Young Child Nutrition (MIYCN) and FP Integration Working Group with the SPRING project and a CoP with 199 members from 13 countries. An output of this work was to add LAM messages on the exclusive breastfeeding and complementary feeding cards in the UNICEF Community Counseling cards for MIYCN.⁶³ Collaboratively, the working group developed the MIYCN-FP toolkit.
- MCHIP also co-leads the FP/Immunization Integration working group with FHI 360. This CoP has 194 members in 19 countries and produced an FP/Immunization Integration toolkit, developed indicators for integrated service delivery, identified research gaps to inform future programming decisions, advocated for immunization community stakeholder buy-in, and wrote the High Impact Practices Brief on FP and Immunization integration. This brief has raised the profile of FP/immunization integration and outlines the rationale, program considerations, different types of service delivery models and evidence, and challenges and knowledge gaps.
- MCHIP published eight **country** PPFP profiles using DHS data, highlighting missed opportunities for integration of FP for women through two years postpartum; these profiles are used at country level to raise awareness of the unmet FP needs of postpartum women.
- MCHIP completed a manuscript of a multi-country DHS analysis on postpartum women from 21 countries, exploring trends in unmet FP need, short birth-to-pregnancy intervals, timing of key factors related to fertility return, linkages with FP use and other MNCH services, as well as method mix. This manuscript will provide new estimates of prospective unmet need among postpartum women, updating a seminal paper by Ross and Winfrey published in 2001.

⁶³ http://www.unicef.org/nutrition/files/Key_Message_Booklet_2012_small.pdf

Key Achievements and Results

Integration of Family Planning with Maternal, Newborn, and Child Health and Nutrition

Integration with Maternal Health

MCHIP has expanded FP method options in the immediate postpartum by initiating or expanding PPIUD services in 13 countries: **Bangladesh, Ethiopia, Guinea, India, Malawi, Mali, Mozambique, Pakistan, Paraguay, Philippines, Rwanda, Yemen, and Zambia**. Counseling begins during ANC, which allows a woman to choose and then obtain a postplacental PPIUD (within 10 minutes of placental expulsion) or intra-cesarean. Counseling can also take place in the immediate postpartum period up to 48 hours after birth, where, if adopted, insertion can be carried out pre-discharge or the morning after. The **India** program first initiated PPIUD programs in one state and has since brought the intervention to scale through partners, strong advocacy, and a supportive MOH.⁶⁴

PPIUDs in India:

India is currently rapidly scaling up PPIUD services. A recent follow-up survey enrolled 2,733 women who received a PPIUD prior to discharge and 1,730 women (63.3%) were interviewed at a 6-week follow-up visit. Results show:

- Expulsion rate of 3.8%
- Infection rate of 5.4%
- 90% of women satisfied with their choice of PPIUD

MCHIP facilitated dissemination of national guidelines on PPF/PPIUD in **Guinea**, and follow-up documentation indicates that 92% of women are still using PPIUDs at the one-year follow-up. In **Mali**, MCHIP introduced PPIUDs in two regions, Kayes and Sikasso, and strengthened PPIUD services at a major teaching hospital in Bamako. In **Paraguay**, MCHIP supported the documentation of a study demonstrating low expulsion rates of PPIUD that served as the catalyst for the standardization of the insertion technique. An abstract for this study, “Postpartum IUD in Paraguay: A Case Series of 3000 Cases,” appeared in the journal *Contraception* (Araujo et al., 2012). A full paper was also prepared and submitted.

Figure 20. Contraceptive Prevalence by Wealth Quintiles in Each Arm of the Healthy Fertility Study, Sylhet Bangladesh



Integration with Maternal and Newborn Health and Breastfeeding

MCHIP-FP, JHSPH, the Bangladesh MOH and Family Welfare, CDPA and Shimantik—local Bangladeshi NGOs—collaborated on “The Health Fertility Study” to address the unmet need for postpartum contraception in Sylhet District, **Bangladesh**. This study assessed the effect of integrating evidence-based PPF activities into an existing community-based maternal and newborn care program through antenatal and postpartum home visits as well as community mobilization.

Data collection occurred at 3, 6, 9, 12, 18, 24, 30, and 36 months postpartum. Study findings demonstrated that integration of FP services into a community-based MNH service delivery platform is feasible, effective, and did not negatively affect coverage of MNH interventions. Community mobilizers recruited LAM Ambassadors—mothers who practiced exclusive breastfeeding and LAM for a full six months—to deliver BCC messages and promote

⁶⁴ Kumar S et al. 2014. Women’s experience with postpartum intrauterine contraceptive device use in India. *Reproductive Health* 11: 32.

breastfeeding and FP behaviors through community meetings and one-on-one engagement with key stakeholders in the intervention area. By 12 months postpartum, 87% of study participants had attended at least one community mobilization meeting, and exposure to BCC messages on birth spacing, LAM, and postpartum care was nearly universal.

HFS interventions were associated with a 20% increase in the probability of contraceptive adoption during the 36 months postpartum and a 21% reduction in probability of pregnancy incidence in the intervention clusters compared to control clusters. Among intervention area participants, current modern contraceptive use was highest among individuals in the lowest wealth quintile. Overall, women in intervention areas were 21% less likely to have a birth-to-pregnancy interval shorter than 24 months. Among contraceptive methods, LAM was an important method of contraception at three and six months postpartum in the intervention area. However, at 12, 18, 24, 30, and 36 months postpartum, pills were the preferred method for users in both study arms, followed by injectables and condoms. The study initially did not include work on family planning service outlets, but over time CHWs were trained to dispense short-acting methods.

HFS CHWs were the primary source for condoms (88%) and pills (71%) in the intervention area. In the comparison area, pharmacies or shops were the main source for condoms (87%) and pills (57%), followed by government health facilities. In the intervention area, the March 2011 introduction of community-based injectables through HFS CHWs corresponded to increases in injectable use from 12 months (8%) to 36 months (10%) postpartum. User preferences on the source for injectables suggest that HFS CHWs provided injectables to 65% of women in the intervention arm, whereas 75% of control area participants obtained injectables from government health facilities, highlighting the willingness of individuals to utilize functioning public sector services. The lack of or low adoption of long-acting methods should be interpreted with caution as it may be linked to the lack of access to those methods in the study area rather than the preferences of postpartum women.

Integration of FP with Child Health

MIYCN and FP programs and services are perceived as distinct, yet integration of these interventions can be mutually beneficial for mothers and their children.

MCHIP worked collaboratively with the **Kenya** Ministry of Public Health and Sanitation, Department of Family Health, through the Divisions of Nutrition and Reproductive Health to initiate a demonstration program integrating MIYCN with FP services in six health facilities and adjacent community units. A “One Stop Shop” approach was used to ensure that clients visiting the MCH clinic received critical MIYCN and FP information and services during antenatal, delivery, postnatal, FP, and child welfare visits. Strengthening CHW knowledge and skills for counseling on MIYCN and FP during home visits and community activities was a key component. Strategically designed SBCC materials were developed (based on findings from formative assessment) to support the integrated approach. Despite challenges to optimal data collection, supportive supervision findings after one year of intervention revealed a 50% increase in demand for nutrition and FP services and 80% increase in MIYCN-FP knowledge by both mothers and health care workers. Health workers also reported increases in exclusive breastfeeding and the practice of LAM, and increased community dialogue about MIYCN and FP. An evaluation of this approach is currently under way.

In **Yemen**, a study on MIYCN and FP was conducted in March 2014. This qualitative study focused on determining the current practices for MIYCN and FP. The study aimed to identify mothers’ willingness and ability to try and to continue new practices, and barriers and motivators for using optimal MIYCN-FP practices. Members of the MCHIP-FP team contributed to the development and field-testing of the study tools and protocol, analysis of the

findings, and determination of implications. The study report is currently under development/review and will be shared in the coming months.

FP and immunization integration capitalizes on high coverage of child immunization. Ensuring that FP counseling and services are linked to infant vaccination contacts has the potential to reach mothers with FP information and services at a critical time—during the 12 months following birth.⁶⁵

“Some [clients] are saying their husbands say they should take FP and they come here more because they know they can get immunization at the same time. It helps us to meet the Ministry target [for immunization]. It helps you to be known in the community.” - *Vaccinator*

Beginning in 2011, MCHIP and the **Liberia** MOHSW provided short, targeted FP and immunization messages and same-day FP referrals to mothers bringing their infants to the health facility for routine immunization in a total of 10 facilities in Bong and Lofa counties. In 2011, a formative assessment was conducted to inform the development of strategically designed tools and materials to support the integration approach. Implementation of the demonstration project took place from March–November 2012. Findings from the final assessment in December 2012 included the following:

- The number of new contraceptive users at participating facilities increased by 90% in Lofa County and 73% in Bong County. FP users who were referred from EPI and accepted a method on the same day represented a large proportion of the total number of new contraceptive users in participating facilities—44% and 34% of all new contraceptive users in participating facilities in Bong and Lofa counties were same-day EPI-referral acceptors.
- Pilot facilities experienced an increase in the number of doses of Penta 1 and Penta 3 administered. In both counties, the increase in Penta 1 outpaced Penta 3, resulting in a net increase in the Penta 1–3 dropout rate. However, changes in immunization were more likely because of external factors (e.g., human resource constraints and drop-off in performance at one large health facility, higher background rate of dropout in the target facilities) rather than the integrated service delivery itself. Dropout from Penta 1 to Penta 3 is a challenge faced across health facilities. Vaccinators reported greater confidence and perceived that their value within the health system and community had increased as a result of the intervention. Interviews with service providers (vaccinators, in particular) suggested that the intervention may have also contributed to greater staff appreciation for good recordkeeping. Future integration efforts should continue to seek ways to minimize dropout rates—a problem that has been noted to challenge immunization services nationwide—such as through ensuring that FP providers remind mothers to return for their child’s next immunization visit and strengthening vaccinator communication about the importance of timely completion of the immunization schedule. Integrated service delivery continued at pilot sites even after the pilot phase was completed.

MCHIP-FP worked with the **Liberia** MCHIP team and the MOHSW to develop an FP/immunization integration implementation guide to highlight key components of the approach and recommendations for replication at additional sites. The MOHSW officially endorsed the approach for scale-up.

MCHIP has experimented with another approach to create service integration through **postpartum systematic screening (PPSS)**. In **India**, a PPSS study was undertaken in 18 sub-centers in one of the blocks (a geographical area with population of approximately 100,000) in Simdega district of the state of Jharkhand to assess whether the use of a systematic

⁶⁵ USAID High Impact Practices Brief: Family Planning and Immunization Integration: Reaching postpartum women with family planning services, August 2013.

screening tool could further increase the uptake of FP services during Village Health and Nutrition Days (VHNDs). MCHIP trained health workers in PPFPP counseling in both control and intervention arms of the study. The results suggest that the screening tool did result in increased acceptance of FP (34% to 54%) among women with a child less than one year old who came to the VHND for immunization services, as compared to no change in the control group that was not using the tool (35% to 36%), but there was no difference for women attending VHND for other child health services. The results also suggest that the number of doses of immunization administered was not adversely affected by introducing the tool during VHNDs, but population coverage of immunization was not assessed.

MCHIP introduced a similar PPSS model in **Mozambique**. The intervention consists of training on PPFPP and a one-page PPSS tool, onsite support to adjust client flow, monthly supportive supervision visits, and a newly established referral system in three health centers in Maputo City (Health Center Polana Caniço, Health Center Bagamoyo, and Health Center Xipanmanine). Evidence from supportive supervision visits and service statistics indicated that the intervention did identify women's needs and resulted in referrals and FP uptake on the same day. Preliminary results showed that as high as 74% and 94% of immunization and postnatal care clients were screened with the tool, resulting in 31% and 64% of same-day referral (of those who were screened) from these units, respectively. However, high volume of well-baby and immunization visits allows providers to screen only a portion of eligible clients, representing missed opportunities. Currently, MCHIP is expanding this work to an additional eight sites (four intervention and four control) in Nampula Province between April and September 2014.

Partnerships

MCHIP's work with partners in **Liberia** was instrumental in scaling up LARC services. MCHIP was a driving member in the TWG and developed national FP guidelines and a national training package that was adapted to pre-service training as a partner in the Rebuilding Health Systems (RBHS) project. MCHIP's work contributed to an increased national CPR from 10% in 2007 (DHS) to 20% in 2013 (preliminary report). In **Mali**, MCHIP increased the availability of contraceptive implants in rural areas. Results from a task-shifting study indicated that an auxiliary midwife can provide implant services according to international standards, and implants were widely accepted by the communities they serve. The MCHIP **Guinea** program consistently achieved 99% or 100% of PAC clients counseled in FP over 3.5 years of operation, and a postabortion contraceptive acceptance rate increased from 73% in 2011 to 90% for the first six months of 2014.

Challenges and Way Forward

Among challenges, rigorous data collection was not always budgeted in pilot projects and data collection was limited. A key lesson is to plan for and adequately fund studies during the activity design stage. More work is needed to develop reliable means of collecting meaningful indicators of integrated services.

The way forward for MCHIP-FP is exciting. The FP Team plans to continue to explore integration as an implementation area of interest. The team plans to focus on youth and young, first-time parents, in particular, to establish good postpartum and newborn care practices including PPFPP for healthy birth spacing. Gender norms and girls' and women's empowerment will be a cross-cutting issue that the FP team plans to address. Expanding the range of methods available in the postpartum period, MCHIP-FP will expand access to permanent methods, and, based on the outcomes of the WHO Medical Eligibility Criteria (MEC) consultation, incorporate progestin-only methods into immediate PPFPP services. Finally, MCHIP-FP will continue to explore women's perceptions of their return to fertility, the use of LAM, and timely transitions from LAM to another modern method, and address the special needs of postpartum women living with HIV.



Introduction

With a focus on “getting to zero:” zero new infections, zero AIDS deaths, and zero stigma and discrimination, MCHIP activities prioritized establishing and sharing evidence and best practices in HIV testing and counseling (HTC), with emphasis on linkages to care and HIV prevention efforts through voluntary medical male circumcision (VMMC), including early infant male circumcision (EIMC). Through core and field funding, MCHIP’s prevention of mother-to-child transmission of HIV (PMTCT) programs demonstrated that PMTCT efforts can be successfully leveraged to increase uptake of MNH services, as well as HIV services. For example, in **Kenya** and **Ethiopia**, PMTCT program implementation was associated with sharp increases in the number and percentage of pregnant women who completed four ANC visits and who gave birth with a SBA.



MCHIP’s PEPFAR-funded PSE nursing and midwifery programs helped build the knowledge and skills of the next generation of nurses and midwives in PMTCT, antiretroviral therapy (ART), FP, TB, and malaria. These PSE programs worked in **Lesotho** and **Ghana**, in partnership with MOHs, the Lesotho Nursing Council, Christian Health Association of Lesotho, the Nursing and Midwives Council of Ghana, and FHI 360’s Food and Nutrition Technical Assistance (FANTA) project. Finally, MCHIP provided TA and support to an Injection Safety and Post-Exposure Prophylaxis (PEP) program through a core-funded investment in **Malawi** and supported a comprehensive evaluation of USAID’s Centership model in **Namibia**.

MCHIP also undertook both qualitative and quantitative data analyses to characterize voluntary counseling and testing (VCT) clients and evaluate selected referral patterns for these clients and associated outcomes. Given the evolving landscape of HTC modalities, this analysis sought to help key stakeholders to better understand the role and contributions of VCT among the available testing modalities. These assessments, conducted in close collaboration with the Office of HIV/AIDS HTC team and staff from USAID/Zimbabwe, can be used to inform HTC strategic planning efforts. In addition, MCHIP recognized the potential global application of voluntary partner notification and linked HTC as a strategy to accelerate HIV case finding in PEPFAR countries. This approach has been instrumental in the conceptualization and protocol development for a pilot study to examine the relevance of this modality to HTC efforts in sub-Saharan Africa; **Tanzania** has been selected as the pilot country.

With the provision of VMMC services at scale, MCHIP made great strides in employing research findings, while ensuring implementation from the ground up. The program’s greatest areas of achievement were in providing TA to PEPFAR’s VMMC TWG, scaling up VMMC (reaching over 400,000 men with services), knowledge management, and OR. VMMC programs exceeded expectations, international guidance documents were developed and disseminated, and services became truly country-owned. Two of MCHIP’s three VMMC service delivery programs—

Tanzania and **Lesotho**—also succeeded in introducing EIMC, integrated with existing MNCH services. MCHIP focused on implementation at scale, while providing high-level guidance and TA to multiple countries, ensuring that new research was employed when applicable (such as with adult male circumcision devices), quality was maintained, and results were documented and disseminated through conferences, peer-reviewed papers, webinars, and other forums.

Key Achievements and Results

Injection Safety

MCHIP's core-funded injection safety and infection prevention (IP) program in **Malawi** trained providers and support staff on injection safety and PEP standards, including strengthening of reporting and management of PEP. Through the program, MCHIP advocated for interventions to fill the gap around resources for temporary medical waste and sharps collection and procured specific injection safety equipment for three hospitals.

Assessments conducted in August and November 2013 demonstrated positive movement toward institutionalizing IP practices in Mlare Hospital (one of three MCHIP-supported sites); the other two facilities demonstrated some inconsistency in uptake. Key results included the introduction of handwashing waste incineration areas, increased use of personal protective equipment, and procurement of pails and basins for management of linens and waste. Reporting of PEP cases has increased in all three facilities (no records were kept before infection prevention and control support was introduced through MCHIP). Mlare Hospital and St. Gabriel Hospital (a second MCHIP-supported site) were assessed in January and March 2014, respectively, under the MOH's National IP Assessors. Each facility achieved a score of 80% and above in all areas assessed, exceeding requirements for certification. Mlare Hospital was recognized as a "Center of Excellence" in IP practices. Continued challenges in all facilities include cost, staff turnover, and supply stock-outs.

Prevention of Mother-to-Child Transmission

MCHIP supported implementation of PMTCT interventions in **Kenya, Ethiopia, and Mozambique**. In Kenya, MCHIP adapted the Reaching Every District (RED) approach from immunization to also target low coverage areas of PMTCT; it was called Reaching Every Pregnant Woman. CHVs were mobilized in Bondo district, and between 2010 and 2012, they were part of critical efforts that increased the proportion of women who completed four focused ANC visits from 25% to 41%, the proportion of women who delivered with a SBA from 23% to 47%, and the proportion of HIV-exposed infants being tested at six weeks postpartum from 27% to 78%. By improving access to services along the continuum of care, more women and their children were able to receive the full range of PMTCT interventions.

In three regions of rural **Ethiopia**, PMTCT services were initiated in 39 health facilities, with focus on access and quality. The sites did not previously provide PMTCT or other HIV-related services. Through MCHIP's intervention, 109 providers were trained on basic PMTCT and MNCH services, the SBM-R approach was introduced, and testing was integrated into ANC, L&D, postnatal, FP, and under-five clinics.

In **Mozambique**, MCHIP and the Mozambican MOH introduced the Model Maternity Initiative (MMI), which promotes birthing practices that recognize a woman's preferences and needs. MMI focuses on humanistic care and the scaling-up of high-impact interventions, including PMTCT.

HIV Testing and Counseling

MCHIP, in collaboration with other partners, conducted both retrospective quantitative analyses and prospective qualitative analyses based on data collected from selected HIV VCT sites in **Zimbabwe** as part of an effort to better understand the characteristics of clients voluntarily seeking HIV testing and counseling at VCT sites and referral patterns associated

with this HTC modality, and inform approaches to HTC more broadly. The initial analyses included a desk review using existing **Zimbabwe** VCT program data. The desk review considered data from 16,971 male and female clients that looked specifically at referrals and linkages to care from HTC to VMMC and TB services. Initial findings showed that among 1,330 men who were referred for VMMC services, 530 (39.8%) completed VMMC referral. Among 203 men for whom these data were available, the mean number of days between provider referral and the initial visit to a VMMC site was 39.7. Of the total client population, 73 clients (0.4%) were referred for TB treatment (for confirmed cases) and further investigations (for TB suspect cases). Among these, 41 (56.2%) were tracked as having completed the TB referral. In addition, qualitative analysis of in-depth interviews with VCT clients who completed referrals revealed that quality of services provided was a primary motivator for referral uptake and referral of peers to HTC services.

The initial conceptualization and protocol development for the voluntary partner notification and linked HTC pilot, scheduled to take place in **Tanzania**, has been completed. This pilot evaluation will be an important part of efforts to understand whether voluntary partner notification and linked HTC is a proactive, case-finding approach that may provide a diagnosis to individuals at high risk of infection. The results from this study will provide key insights into the applicability of voluntary partner notification and linked HTC as part of country HTC strategic plans.

Voluntary Medical Male Circumcision

Over the life of the project, MCHIP provided global-, regional-, and country-level leadership in HIV prevention efforts through scale-up of VMMC. MCHIP accomplished four primary objectives for the VMMC program: technical assistance to PEPFAR's VMMC TWG, scale-up of VMMC, knowledge management and OR, and introduction of new technologies.

TA to PEPFAR's VMMC TWG. MCHIP provided significant TA through the development of global VMMC guidance documents, training packages, and QI approaches. In PY2, MCHIP began collaborating with WHO and UNAIDS in efforts to improve understanding about traditional male circumcision practices in a number of countries that have been prioritized for VMMC scale-up. In PY2, MCHIP created an e-learning package for VMMC program managers, clinicians, and researchers; it was finalized and disseminated in PY3. In PY3 and PY4, MCHIP supported the South African Centre for HIV/AIDS Prevention Studies in the creation of a VMMC Models for Optimizing Volume and Efficiency (MOVE) training video, which is a global resource for individual MC providers, implementers, and programs working in VMMC. In PY5, MCHIP contributed to, launched, and disseminated *PEPFAR's Best Practices for Voluntary Medical Male Circumcision Site Operations: A service guide for site operations*. The document has been posted with all related tools on WHO's male circumcision website. Finally, in PY5 and PY6, MCHIP collaborated with UNICEF to develop EIMC learning packages, drawing on experience from pilot programs in **Swaziland** and **Tanzania**. The training package is the first comprehensive resource on EIMC that is designed not only to transfer knowledge and skills, but also guide successful integration of EIMC within in the MNH platform.

Scale-up of VMMC. In PY2, MCHIP dedicated considerable effort to helping the MOH in the Kingdom of **Swaziland** prepare for a large, year-long VMMC campaign, called *Soka Uncobe* in Siswati. While *Soka Uncobe* was much less successful than hoped, due mainly to very low client turnout, it did yield important lessons learned for VMMC programs throughout the region, particularly in the areas of human resources for VMMC and matching supply and demand. Over the life of the project, MCHIP emerged as USAID's and PEPFAR's single largest VMMC implementing mechanism, as measured by the number of clients circumcised with MCHIP support. As of May 2014, more than 400,000 men received VMMC services through MCHIP (see Figure 21). In addition to circumcision, more than 90% of men in MCHIP's field programs were also tested for HIV.

Figure 21. Total MCHIP-Supported VMMCs by Country and Program Year



Knowledge management. In PY4, MCHIP began documenting and sharing program results and achievements, including a highly visible VMMC advocacy satellite meeting at AIDS 2012 in Washington, DC. A key outcome of this meeting was documentation of successes and challenges to VMMC implementation and scale-up in East and Southern Africa. In PY5 and PY6, MCHIP with PEPFAR and other implementing partners hosted four webinars on VMMC for Eastern and Southern Africa, reaching over 570 live participants from 14 countries. Webinar topics included monitoring, reporting, and quality; communications; devices for VMMC; and safety. Finally, MCHIP contributed to the development and publication of two PEPFAR and UNAIDS VMMC supplements for *PLOS* collections in 2011 and 2014.

In close collaboration with the Office of HIV AIDS at USAID, MCHIP supported implementation of continuous quality improvement (CQI) approaches to ensure safety and quality of VMMC programs. To that end, MCHIP compiled generic quality standards based on MCHIP’s field experience in **Tanzania**. The draft document was introduced and supported the initiation of CQI activities in **Uganda** and **Mozambique**. The document is currently adopted by PEPFAR as one of the key documents used to implement CQI approaches for VMMC. Its implementation in **Uganda** through USAID’s ASSIST project demonstrated a marked improvement in quality as ascertained by PEPFAR’s External Quality Assurance.

OR and introduction of new technologies. In its role in bringing VMMC programs to scale and ensuring the implementation of best practices, MCHIP also laid the foundation for the future of VMMC, particularly through OR surrounding the use and scale-up of devices for adult male circumcision. These devices are expected to play a key role in uptake and sustainability of VMMC services, and offer clients and providers an innovative option for non-surgical circumcision. In PY5 and PY6, MCHIP worked closely with partners to conduct studies to evaluate the use of the PrePex™ device for VMMC in **Tanzania** and **Lesotho**. Results from these studies will provide great program learning insight by determining the safety and acceptability of the device; evaluating the ability to task-shift using the device; and determining the acceptability of the device among providers, clients, and the community. MCHIP also developed a series of animated videos describing placement and removal of the device for clients and providers, and trained 10 providers from **Tanzania** and **Lesotho** on use of the PrePex™ device in early 2014.

Early Infant Male Circumcision

Sustainability of VMMC gains can be achieved only if next generation men access circumcision services in the first 60 days of life. A procedure done in early infancy (less than 60 days old) is

associated with fewer complications, fewer pragmatic challenges related to post-circumcision abstinence requirements, and lower costs. In addition, the easily performed procedure allows for broader task shifting. MCHIP took leadership in piloting EIMC programs in **Swaziland**, **Tanzania**, and **Lesotho**. MCHIP's early work in **Swaziland** helped provide key inputs for the development of the very first competency-based training package, reviewed and published by UNICEF in PY6.

Tuberculosis

TB has an enormous global burden, with more than 8.6 million incident TB cases and 1.3 million TB-related deaths globally in 2012. Out of the 8.6 million estimated incident TB cases, 2.9 million (35%) occurred in women and about 410,000 women died of TB in 2012. TB is complicated by and intertwined with the HIV epidemic. Globally, of the 35.3 million adults living with HIV, half of them are women. At least one-third of these people living with HIV (PLHIV) are estimated to be infected with TB and have 20–30 times the risk of developing active TB disease when compared with an HIV-negative person. In addition, PLHIV progress to active disease rapidly. TB is the leading cause of death among PLHIV, with about one in four deaths among them attributed to TB. Moreover, several studies showed that there are barriers to women in accessing TB diagnosis, prevention, and treatment services. This underlines the importance of mainstreaming TB prevention, diagnosis, treatment, and care services into existing MNCH and other RH services that provide care for women of reproductive age. Therefore, MCHIP has focused on integrating TB with MCH services to improve case detection and get clients with TB into treatment earlier—to ultimately save lives and prevent onward transmission.

MCHIP's work includes the use of an innovative measuring tape in PSE programs in **Ghana**, **Nigeria**, and **Liberia**, which includes clinical reminders about minimum focused ANC standards of care and specific information related to HIV and TB. The tape was also distributed to providers in **Rwanda**, **Angola**, **Malawi**, and **Tanzania**. MCHIP has also supported pilot implementation of TB screening in ANC in **Malawi**. Under the pilot program, health workers were trained in TB awareness and diagnosis for pregnant women; existing antenatal and cough registers were also modified to include case finding and a record of the time of TB diagnosis and initiation of treatment.

Centership Project

MCHIP also supported the evaluation of USAID's innovative Centership model. This community volunteer-based health information initiative was characterized by strengthening HIV and health information and referral links within the community and public and private facilities (as appropriate) in **Namibia**. The unique project combined health promotion with a small income-generating activity to test whether the model could create financially sustainable solutions for community volunteers. While MCHIP did not provide direct TA to the project, this evaluation shed light on several issues that in turn informed MCHIP's work in the field. Primary lessons learned included the importance of community leadership's commitment to projects during startup, the value of mentorship among CHWs, and the need for network and partner mapping to build on existing strengths and resources before expansion of a new or existing program.

Challenges and Way Forward

Development of global technical documents is often a lengthy process involving many partners and stakeholders, resulting in limited time to accommodate as many participants as possible. Despite challenges finalizing deliverables, MCHIP successfully contributed to a number of significant global technical documents. Some noteworthy products include the MOVE training video, *PEPFAR's Best Practices for Voluntary Medical Male Circumcision Site Operations* guide,

and EIMC learning packages. Future programming should build the consultative process into the timeline for development and then dissemination.

PMTCT remained underfunded as part of an integrated maternal health component for the life of the project, constraining MCHIP field programs. However, these programs managed to implement alternative strategies and strategically integrate PMTCT within the package of MNCH services in selected field locations such as **Kenya, Ethiopia, and Mozambique.**

Initial startup of the HTC study assessing partner notification had significant delays due to challenges identifying a country that has the capacity, relevant program, and Mission support to undertake the study. In the future, ensuring that countries and Missions were committed and had the capacity and personnel prior to developing and committing to the workplan activity would be advantageous.

In recent years, the global health community has become increasingly aware of the ways in which infectious diseases such as HIV, TB, and malaria contribute to maternal and newborn morbidity and mortality. MCHIP's experience and lessons learned strongly demonstrate the need for global health experts, specifically all maternal and newborn health care providers, to be able to identify and manage infectious diseases of importance. Therefore, infectious disease prevention, early diagnosis and timely management through PMTCT, case finding, screening, and treatment should be a primary area of focus, and the maternal health platform will remain the single most important way to address HIV prevention, care, and treatment for women during pregnancy, labor, and delivery.

The path to an AIDS-free generation requires a combination of evidence-based HIV prevention, care, and treatment interventions that can easily progress from implementation to scale. A key intervention and component of combination prevention (along with ART and PMTCT) that meets these criteria is VMMC. MCHIP has played a key role in preparing for the integration of the innovative and simple-to-use PrePex™ adult male circumcision device into programs. MCHIP's training, OR, and performance support tools on this device will prove invaluable for scale-up in the coming years. The PrePex™ studies in **Tanzania** and **Lesotho** will be continued under USAID's existing Accelovate project. Outcomes from these studies, along with similar studies happening in six other African countries, will inform the rollout and scale-up of devices for VMMC programs globally.

In addition, as all HIV-related interventions require an individual's knowledge of his or her HIV status, different models of HIV testing need to be considered in future programming. Disseminated results from MCHIP's HTC study assessing partner notification will therefore offer important contributions and will impact future and ongoing HTC implementation, as well as referral.

As the three high-impact HIV interventions (ART, PMTCT, and VMMC) are implemented at scale, "getting to zero" in the world's highest prevalence settings may become a reality sooner than previously thought.



Urban Health

Introduction

Over the past six decades, the world's urban population has grown nearly five-fold. Africa's urban population, alone, is expected to double from 294 million in 2007 to 742 million by 2030, with more people living in urban rather than rural areas. Already, over 1 billion people—or one in every three urban dwellers—now live in under-served, needy habitations. Given that there is little evidence regarding the urban health experience globally, USAID sought to capitalize on MCHIP's platform to invest in two countries that are facing these



urbanization trends to better understand and address urban health challenges.

Ethiopia presented an important opportunity given the Government of Ethiopia's leadership in establishing the Urban Health Extension Professional Program (UHEP) throughout the country to improve access to and demand for health services. With core MNCH funding, MCHIP linked **Ethiopia's** key UHEP stakeholders to the broader urban health professional communities of practice. This created opportunities for sharing implementation experiences, which informed the design of innovative program approaches to improve the quality and/or utilization of evidence-based MNH services in **Ethiopia's** urban and peri-urban areas.

MCHIP Urban Health collaborated with USAID/UHEP to promote the development of urban health leaders in **Ethiopia** and to design and test innovative program approaches that could improve the quality and/or utilization of evidence-based MNCH services in the country's urban and peri-urban areas. The intended goal of this support was to increase MNH services, particularly institutional delivery at public health facilities. Efforts focused on identifying innovative, cost-effective, and locally adaptable interventions that would help to improve the health outcomes of women and children in the urban community. A thorough formative phase (which included a desk review, exchanges, and site visits in **India** and **Brazil**, as well as qualitative and quantitative work) informed the development of pilot interventions to improve the quality and/or utilization of evidence-based MNH services in urban and peri-urban areas of **Ethiopia**. Hawassa City was then selected to test some of these approaches to provide evidence-based information for future scale-up.

In **Kenya**, PPH is the leading cause of maternal mortality, accounting for about 25% of maternal deaths. The majority of these deaths (88%) occur within four hours of delivery (MOH-Kenya annual Statistical Report, 2008). Early recognition at the community level and prompt management of PPH are crucial to maternal survival, especially given that most deliveries take place at home. The current WHO PPH guidelines do not include recommendations for non-skilled providers nor community-level education. MCHIP therefore invested some urban funds to design an interventional study that included both a clinical quality and a community BCC component to demonstrate a community approach to prevention of PPH, working with the DRH, DCAH City Council of Nairobi, and the Tupange Program, funded by the Bill & Melinda Gates

Foundation. Once tested, this MCHIP prevention of PPH model was intended to inform similar urban maternal and FP health activities in **Kenya** and other countries.

Key Achievements and Results

Ethiopia: Because there was a limited body of research and program evidence on urban health work, the urban health work in **Ethiopia** started with a research and data collection phase (Phase 1) to inform the selected activities pilot testing implemented later in the project (Phase 2).

Phase 1: Preliminary research and situation analysis to inform programming: International exchanges. To gain exposure to different approaches to improve demand and access to health services in urban settings and foster cross-learning, MCHIP supported the participation of urban health champions from **Ethiopia** at the annual International Conference on Urban Health in **Brazil**, where they learned about tested urban health approaches and conducted site visits to see Brazil's Family Health Program—upon which Ethiopia's UHEP was originally modeled—in action.



Subsequently, MCHIP collaborated with USAID/**India** and its Health for the Urban Poor project to organize a 12-day exchange visit to Mumbai, New Delhi, Pune, Bhubaneswar, and Agra for 15 urban health leaders from Ethiopia's Federal Ministry of Health (FMOH) and its Regional Health Bureaus (RHBs), during which they learned how health issues are being addressed in India's highly diverse urban and peri-urban areas. They also shared experiences, tools, achievements, and challenges of working with low-income urban populations. Participants returned equipped with ideas for adaptation to the Ethiopian context, including fostering inter-sectoral collaboration, developing public/private partnerships using the Corporate Social Responsibility model, using e-infrastructure to streamline systems—web-based data management, telemedicine, and mHealth. The foundation was laid for a continuing bilateral partnership between the two country teams and their USAID Missions.

Secondary analysis of urban data from the 2011 Ethiopia DHS (EDHS). Following the international exchanges, MCHIP conducted a secondary analysis of urban MNCH data from the 2011 EDHS to specifically tease out information pertaining to MNCH problems and health-seeking behaviors of **Ethiopia's** urban poor. Findings revealed that there was considerable variation in health-seeking behavior between geographical regions, across household wealth, maternal education, and maternal age groups. Wealth was the strongest predictor for all health services, showing a large gap in health care coverage between the poorest and wealthiest urban women and children. It is commonly assumed that urban populations enjoy better health than their rural counterparts since they have greater access to health facilities; however, the disaggregation of wealth highlighted alarmingly low health service utilization among the urban poor (often lower than women living in rural areas). Maternal age and education were also significant determinants for predicting ANC utilization.



Qualitative formative assessment. MCHIP also conducted a qualitative formative assessment in Hawassa to assess health facility MNCH readiness and determine the principal barriers (social, cultural, economic, geographic, etc.) to the utilization of facility-based MNCH services by

socio-economically disadvantaged urban populations. Findings showed that although there was general recognition that ANC and institutional deliveries help improve the health of mothers and newborns, the level of awareness and understanding of the benefits of MNH services varied and many questioned whether such visits were necessary. Further, many women viewed institutional deliveries as necessary only when complications were present. PNC was primarily associated with newborn immunization and FP for the mother. Additional barriers to service utilization included: limited ability to pay for services; transportation (access or cost); perceptions of pregnancy and childbirth as a natural state not requiring medical intervention; availability of friends, family, and traditional birth attendants (TBAs) to assist with home deliveries; and mistreatment and lack of quality care at the facility (particularly in public facilities). Cultural practices that strongly promote home deliveries prevail, irrelevant of socio-economic and education levels. Findings revealed that multiple factors, often operating in tandem, influenced MNH service utilization.

The work conducted under Phase 1 provided a far better understanding of the target audience, the underlying attitudes, knowledge gaps, and cultural practices that affect MNCH service utilization. This led to the design of targeted approaches to increase MNCH utilization and coverage, some of which were then tested at a small scale in Phase 2.

Phase 2: Testing of innovative program approaches to improve the quality and/or utilization of evidence-based MNH services in Ethiopia’s urban and peri-urban areas:

Based on findings from learning and research activities in Phase 1, MCHIP developed a joint activity plan with the City Health Department of Hawassa to work with urban health extension workers to increase institutional deliveries in Hawassa City. Given time and funding limitations, MCHIP chose to support the following three activities:

1. Increasing the awareness and knowledge of the community regarding MNH services.

To broadly capture the attention of Hawassa’s urban population, radio messages promoting the services provided in neighboring health facilities were developed and aired for five months. The post-airing evaluation, which included community survey data and focus group discussions, indicated that radio was one of the top three sources of information that reportedly influenced birth preparations, ANC, and institutional deliveries in Hawassa city. The spots created demand for health services and influenced misperceptions and misinformation.



2. Improving client-provider interactions by enhancing interpersonal communications (IPC) between health care providers and clients.

Using IPC materials, job aids, and data collection tools, MCHIP trained 59 health care professionals from Hawassa’s hospitals and health centers and 87 Urban Health Extension (UHE)-Professionals to enhance institutional delivery and improve health outcomes by improving health care providers’ communication, refining their interpersonal skills, and strengthening workplace relationships. A post-training action plan was also developed to ensure that trained midwives and health care providers in turn trained other staff in their facilities (including clerks, heads, and security guards) to treat clients, particularly pregnant mothers, with kindness and respect. A standard exit interview checklist is also now being used by health facilities to measure the level of satisfaction of mothers who come to health facilities for ANC, delivery, and child immunizations.

3. **Improving referral systems for maternal health services (ANC, institutional delivery, and PNC).** A mapping exercise was conducted and a client-friendly referral directory was assembled and widely disseminated to help UHE-Professionals refer pregnant mothers to nearby health facilities.
4. **Project staff conducted extensive follow-up to assess the impact and benefit of these three targeted interventions.** As expected, the various pilot interventions and products were reported as helpful to clients and practitioners, but they alone did not ensure service utilization of MNH clients. Programs addressing urban health issues should also apply a “family-centered” approach to address the stated barriers related to family members’ expectations, needing permission, customs, and so forth. Positioning health as a family issue, and understanding the role each family member has to play (both as an enabler or a barrier), as opposed to only focusing on mothers, is critical to encourage the uptake of MNCH services in urban settings, as was evidenced by the qualitative assessment and radio spot evaluation.

Kenya: MCHIP worked in collaboration with RMHU, NCAHU, City Council of Nairobi, the Bill & Melinda Gates Foundation-funded Tupange Program, and other MNH partners to demonstrate a new approach to prevent PPH in low-income urban areas. This work targeted service providers, CHWs, and community members in three urban slums—Viwandani, Korogocho, and Mathare—and covered a community of approximately 400,000 people. The intervention included both a clinical quality and a community BCC component to improve knowledge of the dangers of PPH, encourage delivery with a skilled provider, and help prevent unwanted pregnancies. Leveraging the Tupange Program, MCHIP was able to tap into established community units with active community health extension workers (CHEWs) and CHWs.



Young mothers club session

MCHIP mapped health facilities in the sub-counties to provide information about which facilities community members can go to for maternity and FP services, and conducted a baseline assessment on FP intention after delivery and intention to deliver with a SBA. From the baseline findings, training materials were adapted and areas of weakness identified during the baseline were strengthened. Using a modular approach, eight key topics revolving around PPH were covered. Capacity-building activities were then carried out for service providers, CHEWs, and CHWs. A new approach targeting the CHWs and keeping in line with the MOH Community Strategy was used.



CHWs being shown uterine massage

The CHEWs then oriented the CHWs on providing information on PPH and FP to mothers. They were also updated on their role as a link between the community and the health facility to address a weakness identified during the baseline. After orientation, the CHEWs and CHWs established young mothers’ clubs within their communities. The clubs met weekly under the CHW facilitation to provide information on PPH and FP.

Initial analysis of the endline data revealed that prior to the training, most of the providers were not aware of the real causes of PPH and how to manage or treat it at either the facility or community levels. The mothers also saw PPH as either a curse or a normal occurrence and therefore did not think it required facility attention. After the training, it was clear that the young mothers were more aware and knew the benefits of birth spacing and facility deliveries.

Challenges and Way Forward

Urban health is a fairly new focus of public health, but one with distinct and urgent needs. The health system therefore must adapt to the changes caused by demographic shifts, and sustained investments are needed to improve maternal health and child mortality in urban areas to maintain current progress toward achieving MDGs 4 and 5.

MCHIP's accomplishments in urban health were a result of strong technical leadership, well-grounded research, close collaboration with local government at various levels, and small but targeted pilot interventions. MCHIP's urban health efforts in **Ethiopia** and **Kenya** contributed to the knowledge base for this important new health area through formative research as well as lessons learned from pilot activities. Research findings have informed a variety of stakeholders in urban health programming, including the **Ethiopian** and **Kenyan** governments, other urbanizing countries, policymakers, governments, donors, and program implementers, both local and international.

Although urban populations have proximity to health services within the city, evidence suggests that lower quintiles are not utilizing services as expected. Given the inequity in service usage by wealth quintile in the urban context, future programmatic efforts need to target the urban lowest wealth quintile that has lower patterns of maternal health service utilization (ANC and institutional delivery). The need to gain a better understanding of the factors affecting utilization of MNCH services in urban settings became increasingly evident as implementation of urban-focused activities progressed. There are many assumptions regarding the barriers to utilization in urban settings, but little data to validate these. Utilization patterns and barriers may also vary from one region to another. Therefore, program interventions need to be carefully designed to best reach the intended populations and health communication materials need to be culturally and contextually appropriate. Interventions should be based on the socio-economic and demographic characteristics that affect maternal health service utilization, such as age, level of education, and household socio-economic status/wealth.



Nutrition

Introduction

MCHIP used its global platform and influence with international partners and leveraged field funding to improve advocacy and program implementation to prevent anemia and stunting. As the two most prevalent nutrition problems affecting developing countries, anemia and stunting affect the ability of pregnant women and children (under five years of age) to learn, work, thrive, and survive. MCHIP strategically operationalized USAID's mandate to promote an integrated package of interventions to prevent and control the multiple causes of anemia, including iron deficiency, malaria, and helminth and microbial infections at the global and country levels. MCHIP focused on the first 1,000 days window-of-opportunity (from pregnancy to two years of age) to identify barriers and leveraged unconventional channels to improve MIYCN. Examples include the integration of MIYCN and FP counseling at each contact with women and extending beyond the health sector to form collaborations with agriculture to disseminate MIYCN messages.



Through these targeted efforts at the global and country levels, MCHIP introduced the concept of integrated maternal anemia control to participants at MCHIP global meetings from 61 countries and conducted anemia-control program activities in four countries—**Egypt, Kenya, Rwanda, and Yemen**. In addition, MCHIP supported the development of national policies, guidelines, training curricula for health workers, and nutrition strategies in three countries, as well as two major OR studies to identify barriers and facilitating factors for adequate MIYCN practices.

Key Achievements and Results

MCHIP's integrated platform provided opportunities for expanding program implementation to address the major causes of maternal anemia and stunting. MCHIP's Nutrition, Malaria, Maternal, and Reproductive Health Teams and USAID at the global and country levels (in **Egypt, Kenya, Rwanda, Yemen, and Zimbabwe**) worked collectively to increase attention to and program implementation related to anemia. This was achieved through Pathway 1, Global Leadership and Country Activities for Anemia Prevention and Control, and childhood malnutrition, including stunting, through Pathway 2, Global Leadership and Country Activities to Reduce Stunting.

Global Leadership and Country Activities for Anemia Prevention and Control

MCHIP utilized its maternal health platform to support advocacy efforts to improve programming for maternal anemia at the facility and community levels and increase awareness of other public and private sector organizations.

MCHIP developed the [*K4Health Anemia Prevention and Control Toolkit*](#), a comprehensive and current source of information and resources for policymakers and program managers on the prevalence, causes, and consequences of anemia. The toolkit provides a step-by-step guide on how to build and implement programs to address anemia using an integrated package that includes iron-folic acid (IFA) supplementation, malaria control interventions, and deworming. Reviewed by 15 health and nutrition experts, the toolkit was launched to an audience of more than 225 researchers and program implementers at the International Congress of Nutrition (ICN) and the CORE Group Partners' Meeting on Anemia (September and October 2013). To date, there have been 407 visits to the toolkit site, with a total of 785 page views.

To develop the toolkit, the MCHIP Nutrition Team compiled information on anemia trends and coverage of programs to address anemia, and conducted an analysis to determine if program coverage is related to anemia prevalence. To reach an even larger audience, this analysis was submitted to a peer-reviewed journal to promote further awareness about the importance of using and increasing the coverage of an integrated package for the prevention and control of anemia. MCHIP played a significant technical leadership role as a member of the Anemia Task Force (ATF) Secretariat, led by USAID and its partners, including MCHIP, CORE Group, FANTA-3, and SPRING. MCHIP guided the development of ATF's goals. MCHIP was also a key presenter on several panels at the CORE Group Partners' Meeting on Anemia (October 2013), displaying technical leadership by leading discussions of the first-ever electronic Integrated Anemia Prevention and Control Toolkit and secondary analyses of anemia trends and program coverage in Rwanda. These contributions led to MCHIP Nutrition and Malaria teams collaborating with USAID Malaria teams on the development of a brief to provide background information on the WHO recommendation to limit the daily dose of folic acid to less than 5 mg to mitigate folic acid's interference with malaria treatment.

MCHIP demonstrated global leadership in nutrition through symposiums on maternal anemia and calcium supplementation called "Guidance on Implementing Effective Programs to Prevent Pre-Eclampsia and Eclampsia and Anemia to Improve Maternal and Newborn Outcomes," held the day before the global meetings on maternal and newborn health in Dhaka, Bangladesh (May 2012) and Johannesburg, South Africa (April 2013). MCHIP sought participation and TA from other global programs, including the CIDA-funded Micronutrient Initiative, the Gates-funded Alive and Thrive Project, and the USAID SPRING project. Attended by 200 people from 61 countries, MCHIP and its partners advocated for increasing coverage of the integrated package to reduce anemia, presented evidence for improving supplies for IFA supplementation, and discussed demand issues related to IFA supplementation. MCHIP also featured **Kenya** and **Nepal** country experiences for improving IFA supplementation programs and introducing calcium supplements as part of ANC. Prior to May 2012, WHO released recommendations to prevent pre-eclampsia by giving calcium to women living in countries where intake of calcium is low. At the request of USAID's Maternal Health Team, the MCHIP nutrition symposiums purposefully showcased evidence on how to improve maternal IFA supplementation programs that can be used to inform the introduction of calcium supplementation.

MCHIP's Nutrition Team presented on maternal anemia prevalence and interventions at the Annual Meeting of the RBM MIP Working Group Meeting, "*Commitment to Strengthening, Accelerating and Supporting MIP Programming*," July 2014 in Accra, Ghana. As a result of the presentation, the MIP Working Group prepared a consensus statement on eliminating the availability of the 5 mg dose of folic acid by suppliers of micronutrients at both international and country levels.

To address other nutritional causes of maternal complications, besides anemia and calcium deficiency, MCHIP conducted a "deep dive" literature review and analysis of the impact of nutritional deficiencies on the major causes of maternal mortality, namely PPH, sepsis, and

PE/E. The review and analysis were presented as a poster at the ICN and were submitted to a peer-reviewed journal. Attention to improving maternal nutrition in country programs has been limited in most developing countries. This review will be used to advocate in countries for greater attention to incorporating maternal nutrition counseling into antenatal care and addressing the physical and cultural barriers to improved food intake during pregnancy. In addition, advocacy is needed to improve monitoring of maternal food intake through proxy indicators for quantity and quality to track the effectiveness of interventions.

MCHIP's global role was to address maternal anemia; however, anemia in pregnant women and their newborns is inextricably linked. Addressing iron deficiency in children during their first two years, when iron demands are the highest, is an important component of the integrated package to address anemia. With TA from the Nutrition Team, MCHIP developed a brief on DCC, which increases iron stores at birth. However, giving iron to children in their first two years remains controversial. MCHIP responded to this controversy by organizing the panel "Giving Iron to Children," at the ICN, which was made up of international experts to discuss related benefits and concerns. The panel was co-chaired by MCHIP and Dr. Francesco Branca, Head of Nutrition, WHO, and included participants from JHSPH, Aga Khan University, University of Barcelona, University of West Indies, and University of Minnesota. The panel provided a balanced view of current evidence about the harm of giving iron to and withholding iron from young children. The panel did not resolve the controversy, which can be resolved only through the World Health Organization's leadership, but it raised awareness about the issue, which was discussed in other sessions at the ICN.

Through advocacy at the country level, MCHIP positioned anemia on the agenda with **Rwanda's** MOH and **Kenya's** MOH's Division of Nutrition, now called the Human Nutrition and Dietetics Unit (HNDU), by organizing and sponsoring National Anemia Consultation and Stakeholders' meetings. As a result of the meetings in **Kenya**, stakeholders developed a workplan to improve the existing maternal anemia control program. Subsequently, IFA supplements were added back into **Kenya's** EML and separate IFA supplements were replaced with a combined IFA supplement with less folic acid (400 µg or 0.4 mg), in accordance with updated WHO recommendations to limit the amount of folic acid in malaria-endemic countries. In addition, MCHIP provided technical guidance on BCC materials developed by the HNDU in **Kenya** to assist health workers in counseling women about taking IFA. Further, as a result of the stakeholders' meeting, funding for IFA supplements was included in the World Bank-financed Health Sector Support Project. Given the lack of information about facilitators and barriers to taking IFA supplements, MCHIP/**Kenya** identified needed support during the stakeholders' meeting for qualitative research on IFA supplementation and the use of mobile technology as one tool to provide reminders about taking IFA supplements. Through this activity, PATH will investigate how calcium and IFA can be taken together, with TA on mHealth from MCHIP. By the end of MCHIP, there will be a report on the results of the research including women's perceptions and beliefs about taking IFA supplements with and without calcium supplements, whether they were able to comply with the recommended number of each supplement, and what tools helped them in taking the full course.

In **Rwanda**, a National Anemia Consultation was held (September 2013). Twenty-six participants attended the meeting with representatives and donors from diverse sectors, including health, malaria, agriculture, maternal, child, and reproductive health, and education, in addition to private sector representatives and donors from the food industry. Meeting recommendations to improve supply of and demand for anemia control commodities and programs were used to inform revisions to the *National Nutrition Strategy*. A *Secondary Analysis of the Rwanda Demographic and Health Survey* of anemia and anemia control programs was conducted and presented at the Consultation and at the ICN in Granada, Spain (September 2013). This analysis was submitted to a peer-reviewed journal article for publication.

Global Leadership and Country Activities to Reduce Stunting

MCHIP Nutrition and FP Teams have collaborated on a global scale to promote the integration of nutrition and FP messages at each counseling visit for pregnant women and women with young children. Because of the strong association between stunting and short birth intervals, along with other nutrition problems for women and children, promoting PFP has become a focus. The MCHIP Nutrition Team contributed to the development of the *Global MIYCN-FP Toolkit* and the MIYCN-FP Integration Technical Meeting (May 2010), and assisted in writing the technical report of the meeting. The team actively participated in and presented at subsequent MIYCN-FP technical meetings and developed MIYCN-FP-related counseling cards and posters to deliver key messages at each health contact with women as a key component of a pilot for the MCHIP/**Kenya** country program.

In each country program, MCHIP worked to improve MIYCN practices in an effort to prevent malnutrition, including stunting. In **Kenya**, MCHIP provided TA to the HNDU to develop *MIYCN National Operational Guidelines for Health Workers*. MCHIP helped the HNDU standardize mother support group efforts by developing a *Baby Friendly Community Initiative Tool*, and developed and tested a nutrition indicators monitoring tool for use at sentinel sites called the *Child Health and Nutrition Information System*. MCHIP assisted with training on these tools in Bondo and Igembe North sub-counties.

MCHIP Nutrition and Child Health Teams worked together to introduce nutrition counseling messages about feeding children during and after illness at oral rehydration therapy (ORT) corners in health facilities in **Kenya**. To provide annual support to World Breastfeeding Week (WBW), MCHIP assisted the HNDU with national-level advocacy activities, media events, and technical support to disseminate breastfeeding messages through their WBW Facebook page, *Let's Talk Breastfeeding, Kenya*. Created in 2011, the page has accrued 1,094 “likes” from **Kenya** and worldwide, over the course of three annually held WBW events, and 904 people have shared stories about breastfeeding during the same period. Additional cross-sectoral activities include work with the Ministry of Agriculture (MOA) to develop complementary feeding recipes using local foods, which were disseminated through MOH and MOA channels.

In **Rwanda**, MCHIP supported training for CHWs in MCHIP-supported districts using the national *MIYCN Community Behavior Change Counseling Package*. MCHIP worked outside the health sector to bring nutrition training and messages to the **Rwanda** Agricultural Board's Kitchen Garden training initiative, targeting the country's poorest families.

In support of evidence-based programs, MCHIP designed and implemented innovative OR studies to identify barriers to optimal MIYCN in the Middle East. In **Egypt**, MCHIP conceived of, designed, and implemented a four-part, mixed methods study examining factors associated with stunting. This study includes longitudinal follow-up of children to understand the progression of undernutrition and stunting in the first year of life (Part 1). This study used Trials for Improved Practices (TIPs) methodology to understand mothers' current practices, knowledge, and cultural beliefs related to infant and young child nutrition (IYCN) and explored motivations and drivers of junk food consumption in children less than two years of age (Part 3). The study also examined the role of other caretakers (i.e., grandmothers and fathers) and health care providers in influencing IYCN practices (Part 4). Finally, the study also provided information on cultural beliefs and perceptions of maternal diet during pregnancy and postpartum (Part 2), as well as weight gain during pregnancy and birth spacing among Egyptian women. The results of the study, which were presented at a national workshop in Egypt in May 2014 and in D.C. in July and August 2014 (at Wilson Center for International Scholars and the MCHIP office), have learning implications for Egypt and the region, and will inform global knowledge regarding factors associated with stunting. Two final reports, two technical briefs (English and Arabic), one counseling guide, and three journal manuscripts were submitted based on findings from TIPs and

in-depth interview data, secondary analysis of the 2005 and 2008 Egypt Demographic and Health Surveys, and the longitudinal part of the study.

The Nutrition and FP Teams worked together to design and conduct an MIYCN-FP TIPs study in **Yemen**. It is one of the few studies in **Yemen** with in-depth information on current MIYCN and FP practices and barriers and facilitators of optimal practices. The study will not only be critical to MCHIP's work in developing evidence-based counseling messages on MIYCN-FP for MCHIP's Associate Award in **Yemen**, but will also assist the Ministry of Planning and International Cooperation and its support to the global Scaling-Up Nutrition (SUN) initiative. The TIPs study was shared in a dissemination meeting with national-level stakeholders including the Ministry of Health in June 2014.

In **Zimbabwe**, MCHIP supported other analyses to prevent stunting, including a qualitative study on infant and young child feeding (IYCF) and an IYCF Nutrition Program Review in **Zimbabwe**, both of which were used to develop a National Nutrition Strategy. This strategy became a roadmap for implementing the National Food and Nutrition Security Policy that was approved by Parliament.

MCHIP contributions to MIYCN and MIYCN-FP in **Egypt** and **Kenya** were showcased in presentations at the Nutrition and Nurture Meeting in the United Kingdom (June 2013) and at the International Congress of Nutrition in Spain (September 2013).

Challenges and Way Forward

The MCHIP platform provided a critical and effective mechanism to integrate nutrition interventions to address malnutrition in developing countries. The MCHIP Nutrition Team worked with other MCHIP teams and partners to apply proven strategies, using integrated approaches to successfully advocate for introduction or expansion of maternal anemia control and stunting prevention programs in five countries. Increasing the use of the MNCH platform for nutrition at the national level would facilitate country implementation efforts to reduce malnutrition as an important cause of maternal, newborn, and child mortality.

Given recent increased global attention to malnutrition and the SUN initiative, future programming by all partners and programs should include integration of nutrition across health areas and influence SUN to redouble its efforts to prevent and control anemia and stunting using integrated approaches. Such approaches include incorporating FP, as an important intervention to prevent stunting in children, in nutrition programs. In the future, integrated programming, advocacy for, and programs related to anemia control and stunting should continue to be disseminated at the national level. Program implementation should be tailored to the needs and causes of malnutrition in each country, using multi-sector approaches (e.g., agriculture and civil society) to reach the most vulnerable and address the barriers to optimal nutrition. Nutrition programming should be expanded across sectors (i.e., agriculture, civil society) to increase efforts to address an array of barriers to optimal nutrition. Efforts should also be made to intensify these experiences at the country level, which would engage a greater number of partners and would facilitate "a call to action" to scale up effective interventions to eliminate malnutrition globally.

Recommendations and the Way Forward

As analytical evidence to support program directions becomes increasingly more important, MCHIP's lessons learned and thoughts for future directions can contribute to exciting ongoing discussions on post-MDG programming. Groundbreaking evidence on what strategies contributed to positive impact has accrued over the six years of implementation, allowing the Program to vet approaches that worked and identify remaining gaps. This section offers reflection on MCHIP's experience and the way forward across four areas: 1) global leadership, global alliances, and NGO partnerships; 2) cross-cutting themes; 3) technical areas; and 4) monitoring, evaluation, and research.

Global Leadership, Global Alliances, and NGO Partnerships

GLOBAL LEADERSHIP

- **Engage international experts to assure expansive opportunities for dialogue and advocacy:** Future programming should draw on a wide pool of expertise so as to assure expansive opportunities for dialogue and advocacy. MCHIP's fielding of a highly networked, senior-level team leveraged USAID's investments and positioned it to shape global policy and influence practice outcomes through participation in the global debate. With a history of engaging at the highest levels, many of the senior technical staff hired under the USAID project mechanisms have been credible speakers and expert witnesses when it comes to debate on policy and technical advances. The practice of engaging international experts, drawn from the countries benefiting from assistance, as well as from the United States, makes it inclusive and well-positioned to influence impact.
- **Promote horizontal coordination and common agendas through USAID's leadership:** USAID's efforts to promote coalescence around a common agenda and better coordination among its various projects and programs and those of other donors helped foster more united efforts to achieve impact. This is evident in how MCHIP built on the gains of earlier programming such as BASICS III and ACCESS⁶⁶ and intersects with Saving Newborn Lives, funded by Gates. Future programming will benefit from continued promotion of the horizontal coordination between projects to capture opportunities for maximizing impact. A good example of such an approach is the work done in 2011, led by the Global Health Bureau, which produced a collaborative document entitled *Finding Common Ground: Harmonizing the Application of Different Quality Improvement Models in Maternal, Newborn, and Child Health Programs* and which engaged many USAID projects and partners working toward one goal.

GLOBAL ALLIANCES

- **Ensure adequate collaboration and coordination with regional UN offices where appropriate:** Relationships between USAID-funded projects and WHO and UNICEF will remain critical, but while current policy efforts have been directed at WHO headquarters, future efforts should take into account the devolution of authority to the regional offices. There is some variation according to technical area; maternal health policy work remains centralized in Geneva, but immunization work is increasingly devolved to the regional office. Plans should be put forward to ensure adequate collaboration and coordination with

⁶⁶ Refer to Figure 2 of the report for more details on predecessor projects.

regional offices. Understanding the organizational structure and funding policies of UN agencies has informed the MCHIP Immunization Team's approach to coordination and collaboration. For example, the regional and sub-regional structures of WHO are influential in guiding country-level immunization decisions, so MCHIP consistently engaged those levels, especially when beginning to work in a country for the first time or advocating for new country strategies. To achieve broader impact, MCHIP's immunization staff participated in a multi-agency, region-wide review of the WHO Regional Office for Africa (AFRO) multi-year immunization workplan and on several policy advising groups, presented at many WHO/AFRO sub-regional immunization meetings that engaged all countries, and provided technical support to WHO/AFRO region-wide initiatives such as drafting of training modules and advancing pre-service immunization curricula.

- **Evaluate the effectiveness of GDAs:** The use of GDAs as a partnership/coordinating entity has expanded significantly; however, there has been little independent or objective evaluation of GDAs to determine whether the results are consistent with objectives. An independent evaluation would be useful to determine what changes, if any, would make this mechanism more effective.
- **Consider the nature and members of GDAs:** GDAs function best when all members are active participants and are available to contribute resources. mPowering is an example of a GDA that went from 10 to 18 members and was readily functioning, thanks to active participation by all members. On the assumption that the many GDAs will continue, there should be some consideration given to the nature and number of the members, and arguably should be more inclusive with members who are available to contribute resources.
- **Encourage collaboration with unconventional partners and institutions to enhance impact:** In an increasingly inter-connected world, developing networks across agencies and with different kinds of institutions will continue to be needed to stretch resources. MCHIP worked successfully with the United States Peace Corps, private sector groups, NGOs, both local and international, as well as faith-based organizations, and traditional multi-lateral donors such as WHO and UNICEF. Future programming should continue to seek out unconventional partners and create alliances that enhance impact.
- **Further assess the effectiveness of mHealth applications:** While the use of new mHealth technologies has been embraced by the public health community, there is a need for a more rigorous evaluation of mHealth applications in the future. MCHIP has begun this evaluation process and has found positive impact, for example, use of mobile applications increased utilization of maternal health services in **Afghanistan** and **Timor-Leste**. MCHIP also used mobile technology to good effect in 20 countries for capturing data on QoC, as well as the experience in **Madagascar** of using mobile phones for data collection on community distribution of misoprostol for PPH prevention.

LOCAL NGOS

- **Build capacity of local NGO partners with regard to management and administration to better respond to USAID requirements:** Dedicated resources for mentoring and coaching local NGO partners are critical to obtain optimal performance. In many countries, local NGOs are just beginning to play a major role in development, in part because of the public sector's acceptance to work with them. At the same time, local NGOs can find partnership with USAID projects challenging because of the stringent administrative demands. As USAID continues to leverage the local presence of partners, there needs to be managerial and administrative mentoring to local NGOs, given that many lack structures in compliance with USAID regulations, while at the same time, offering excellent insights and networks with local cultures. For example, USAID, through MCHIP and other health bilaterals, is working to mentor the organization Action Socio Sanitaire et Organisation Secours, which is a consortium of local

NGOs in **Madagascar**. The association brings with it a wealth of knowledge about the health profile in Madagascar that should be used in program planning for effective project implementation.

Technical Areas

MCHIP experience demonstrates that technical intervention areas are best able to flourish with multi-year investments and longer-term vision as planning frameworks. This approach gives rise to more robust programming and allows for multiple interventions to be implemented at the same time, as MCHIP has demonstrated through its longer-standing programs in **Bangladesh, Mali, Zimbabwe, and Yemen**. For example, in **Zimbabwe**, MCHIP has had five years of funding and is working across all of MCHIP's technical areas. MCHIP in Zimbabwe has been able to build relationships with the extended donor community and drive the agenda, particularly in the introduction of salient new vaccines. While this need is true for all technical domains, child health and immunization are two areas that would benefit enormously from long-term sustained programming to have a positive impact on coverage.

In all technical areas, an emphasis on improved indicators and practical data collection, as well as refined processes for measuring, analyzing, and visualizing RMNCH intervention coverage, is essential. District- and national-level planning and decision-making, including the use of dashboards, will be key to empowering communities to actively engage in decision-making and filling current gaps in RMNCH measurement—particularly with respect to obtaining information on quality and equity. Lessons and future directions of specific technical areas are outlined below. Additional information is further detailed in the preceding technical narratives.

MATERNAL HEALTH

- **Enhance PE/E management efforts:** Among the key maternal health interventions, efforts on PE/E management can still be enhanced. As the diagnosis and treatment of PE/E require frequent contact with the health system, uptake has been slow on changing policies and practices and has emphasized the use of MgSO₄ to treat eclampsia once detected. Based on the influential work implemented under MCHIP, future programming efforts should expand across the continuum of care and include two important added components: 1) calcium supplementation during pregnancy in areas where calcium intake is low to reduce the risk of developing PE/E; and 2) screening and early detection of PE through blood pressure measurement and simple urine protein detection at every ANC visit to improve prognosis by increasing opportunities for effective interventions to prevent progression of PE/E. This shift toward earlier detection, with treatment options available from a greater pool of providers, would result in greater reductions in mortality.
- **Support advocacy and education on community-based distribution of misoprostol:** The evidence in support of community-based distribution of misoprostol is compelling in its contribution to reducing mortality. However, the political commitment is fragmented, which has contributed to the slow and incremental progress in this arena. With the recent WHO endorsement of community-based distribution of misoprostol for AMTSL, global efforts should now be able to gain increasing traction, but future efforts must not underestimate ingrained resistance to using misoprostol in the community. While MCHIP studies have demonstrated that self-administration of misoprostol is effective in reducing PPH without loss into the community for further use, additional evidence is needed to rebut concerns on its use as an abortifacient, concerns that women will not be able to take the drug safely without medical supervision, and suspicions about task shifting. In addition, further advocacy is necessary for endorsement by WHO for self-administration of misoprostol.

- **Continue to address QoC and RMC:** RMC is another crucial area of focus that continues to need improvement. Building upon the undeniable momentum from the MCHIP QoC studies, future assessments should include comprehensive RMC components. Future projects should contribute to efforts under way to refine research and measurement methods to determine prevalence of RMC, the results of which should be used to improve the QoC that women receive.
- **Expand programmatic attention for ANC and PNC:** In addition to the major direct causes of maternal mortality discussed above, future programs should prioritize addressing the increasing proportion of maternal, perinatal, and newborn morbidity and mortality due to indirect causes, such as infectious diseases. There is a need for expanded programmatic attention to ANC and PNC services as key loci for improved and integrated service delivery.

CHILD HEALTH

- **Eliminate policy barriers and promote national coordination for child health services:** High-impact results for diminishing child morbidity are achievable only with supportive policies and government ownership. At the start of MCHIP, malaria CCM was rapidly gaining acceptance with support from PMI and the Global Fund (GF), but global awareness of diarrheal disease was very limited and, in many countries, there continued to be a lack of encouraging policies and resistance to the treatment of pneumonia by CHWs. USAID, through MCHIP, advocated for expanded resources for and enhanced visibility of diarrheal disease; sought to introduce CCM for the treatment of pneumonia into policy; and fostered the initial introduction and/or scale-up of iCCM in nine countries, often by building on an existing malaria platform. Eliminating policy barriers for task shifting and allowing CHWs to manage childhood illness, as well as promoting national coordination, will continue to be essential to implementing child survival services.
- **Promote the linkage between community- and facility-based child health services:** Reducing child morbidity relies heavily on a health system that backs the linkage between community- and facility-based child health services. Health systems need to foster this linkage in the areas of promotion of appropriate household practices to prevent disease and promote early care-seeking practices for childhood illness. For example, in the **Democratic Republic of Congo**, MCHIP emphasized the expansion of iCCM by working extensively with religious leaders to promote care-seeking behavior and partnered with UNICEF to develop a national advocacy strategy to fortify both WASH messaging and diarrhea treatment with zinc and ORS. The compelling child health agenda should continue to strengthen case management at both the community and facility levels to expand the scope of child health interventions, while bolstering the improvement of disease prevention practices at the household level.
- **Explore innovative interventions to eliminate barriers to implementation, which maintain high-quality services:** Global child health technical partnerships must continue to be innovative to surmount barriers for implementing high-impact interventions. For example, MCHIP assisted **Rwanda** and **Guinea** in piloting a more cost-effective model for training related to integrated management of neonatal and childhood illness (IMNCI) by reducing the IMNCI training course from 11 to six days, thereby reducing the financial barrier to scaling up. A comparison of health workers' competencies through review of records from 2011–2012 demonstrated that the shortened course did not sacrifice the QoC. Both countries adopted the enhanced modules as the new national training curricula. Increased cost-effectiveness allows for countries to implement IMNCI in a sustainable manner. In the future, child health efforts need to take advantage of these innovative interventions to eliminate barriers to implementation, while maintaining high-quality child health services.

NEWBORN HEALTH

- **Support the sharing and standardizing of key information:** Sharing and standardizing key information and best practices across programs and countries is central to improving newborn health programming. Future programs and partners should continue to engage in the Newborn Indicators TWG. MCHIP used the TWG as a platform to help inform the development of guidance documents for the global level, which can be used by many country programs and guide newborn programming using best practices. MCHIP's support to the testing and validating of key newborn health indicators, and subsequent sharing through the working group and relevant communities of practice, has helped to instruct the uptake of indicators in other countries and strengthen newborn programs.
- **Utilize evidence to guide future program activities:** Using the compelling results of evaluations and assessments can significantly bolster and guide future program activities. The findings of the MCHIP HBB process documentation exercises in **Bangladesh** and **Malawi**, and the two regional KMC assessments in Asia and Africa, highlighted that while the intense focus on training and site strengthening for both interventions is warranted, it is not sufficient to achieve implementation at scale. Future programs and efforts—notably the full suite of HBB learning materials—should take a more comprehensive HSS approach.
- **Promote and prioritize the use of high-impact interventions, including ACS:** The use of high-impact interventions should be prioritized in future programming. Based on MCHIP's multi-country study looking at provider use of antenatal ACS, future programming should include the continued promotion of ACS, which has been identified as a highly effective intervention to improve newborn outcomes of preterm births. In fact, according to the *American Congress of Obstetricians and Gynecologists Practice Bulletin 127*, antenatal administration of ACS is the single most beneficial intervention for advancement of newborn outcomes among babies born prematurely, and near universal coverage of ACS across 75 priority countries may result in a 40% reduction in newborn deaths arising from complications associated with prematurity.

IMMUNIZATION

- **Support technical capacity for immunization:** In low-resource environments with complex, decentralized health systems, the capacity building of health personnel is particularly needed to increase timely protection through the use of both new and traditional vaccines as part of broader strategies to prevent and control diseases and improve health. MCHIP's TA for immunization focused on fostering country capacity to manage routine immunization (RI) services and the smooth introduction of new vaccines. More work is needed to ensure that the improvements in technical capability are supported with reliable and sufficient resources, particularly for recurrent operational costs, so that RI actually functions in accordance with immunization budgets and plans.
- **Improve access to immunization for the vulnerable and hard to reach:** Although significant advancements have been made regarding immunization coverage in the last 14 years thanks to the paramount work of MCHIP and other global partners, this coverage is not high enough to reliably prevent disease transmission at the population level. As stated in the Global Vaccine Action Plan, which MCHIP helped to formulate, more work is needed to move from Reaching Every District—the paradigm of the past decade—to Reaching Every Community and even every child. This goal requires championing the commitment to serve the needs of these groups, improving the quality of immunization data, and promoting its active use by health managers, community members, and development partners to identify and reach the underserved.
- **Promote strong RI systems to deliver all vaccines safely, effectively, and efficiently:** Both new vaccine introductions and mass campaigns against measles and polio

attract resources and visibility that have the potential to benefit RI and other health interventions. However, given their uncertain timing and short-term nature, they do not take the place of RI, which requires its own direct investment as a cornerstone of primary health care services. To foster shared understanding and ownership of the challenges related to strengthening RI systems, MCHIP added elements of a QI approach, including the use of user-defined, rapid learning Plan-Do-Study-Act cycles, to reach more people. With the likely development of improved vaccines against TB, malaria, and possibly HIV/AIDS, there will be a growing need to ensure that RI systems are strong enough to deliver all vaccines safely, effectively, and efficiently to all intended beneficiaries.

FAMILY PLANNING

- **Continue support for PPF and expand method choice:** Current global evidence suggests that as many as 65% of women in their first postpartum year have an unmet need for FP.⁶⁷ MCHIP's crucial efforts in PPF, which have emphasized counseling on all methods, but removed barriers to access for the longer-term methods by promoting and offering PPIUDs, are one critical solution to this significant need. This was evidenced in the exciting rapid expansion of PPF programming in **India**, where more than 100,000 women received the method of their choice. Support should be given for PPF as a way of expanding method choice for women and ensuring that women have access to services that are most appropriate for their expressed needs.
- **Explore new messaging and SBCC approaches for PPF:** Unfortunately, barriers within the health system can lead to dramatic decreases in product uptake. These obstacles, as well as facilitators around implementation and scale-up of FP integration with other MNCH services, including PMTCT, should be examined and well-documented. A new pivotal area of learning will be the efficacy of hormonal contraceptive methods when combined with antiretroviral therapy (ART). Critical program learning under MCHIP demonstrated that despite social and behavior change communication (SBCC) efforts to inform women about the return to fertility in the postpartum period, many misconceptions remain. Going forward it will be crucial to explore new messaging and SBCC approaches to cue timely uptake of FP among postpartum women. Future programming should also emphasize adolescents and first time mothers, who have unique needs that require specific and targeted interventions.
- **Extend FP focus on youth and young, first-time parents:** All females of reproductive age should have access to FP options. To build on the momentum of MCHIP through their integration of FP and maternal health, future projects should focus on youth and, in particular, young, first-time parents to establish good postpartum and newborn care practices, including PPF for healthy birth spacing. Gender norms and girls' empowerment should be cross-cutting issues that are central to future project implementation.

NUTRITION

- **Expand the use of the MNCH platform for nutrition at the national level:** Integration of technical areas can be a vital strategy to increase uptake of high-impact interventions. The MCHIP Nutrition Team worked with other technical leads and partners to apply proven strategies to successfully advocate for the establishment or expansion of programs on maternal anemia control and stunting prevention in five countries. Going forward, boosting the use of the MNCH platform for nutrition at the national level will be crucial to facilitate country implementation efforts to reduce malnutrition as an important cause of maternal, newborn, and child mortality.

⁶⁷ Statement of Collective Action for Postpartum Family Planning, based on DHS analysis of data from 27 countries.

- **Support integration of nutrition across health areas:** Given recent expanded global attention to malnutrition and the Scaling Up Nutrition (SUN) initiative, future programming by all partners and programs should include integration of nutrition across health areas and harness the momentum generated by the SUN Movement to transforming that momentum into country plans and efforts to prevent and control anemia and stunting. These combined approaches in nutrition programs include incorporating FP as an essential intervention to avert stunting in children. In **Kenya**, MCHIP has bolstered the Ministry of Public Health and Sanitation to conduct advocacy around integration of MIYCN-FP and develop a model for implementation. The SUN movements efforts to integrate programming, advocacy for, and programs related to anemia control and stunting should be supported and continue to be disseminated at the national level.
- **Use multi-sectoral approach to reach the most vulnerable and address current barriers to optimal nutrition:** Programs should be tailored to the causes of malnutrition in each country, using multi-sector approaches (e.g., agriculture and civil society) to reach the most vulnerable and address the barriers to optimal nutrition. Building on the innovative OR studies completed by MCHIP to identify barriers to optimal nutrition, programming should be expanded across sectors (i.e., agriculture, civil society) to increase efforts to address an array of barriers to optimal nutrition.

MALARIA

- **Maintain visibility for MIP programming:** Maintaining visibility for MIP programming, as the world focuses on universal coverage for malaria prevention and control, will remain an important challenge moving forward. The work of the RBM MIP working group, for which MCHIP's Director served as Co-chair, raises awareness for MIP programming and also plays a role in fostering key partnerships between reproductive health and malaria control, as well as encouraging dissemination of best practices and lessons learned. Participation by partners and continued emphasis on MIP will be needed to ensure that programs continue to spearhead MIP project components.
- **Utilize key resources to support country revision of MIP policies and programs:** Standardization and sharing of resources inspires program quality within and across technical areas. The MCHIP MIP case studies, synthesis briefs, journal publications, and documentations of country-level MIP guidance and monitoring are meaningful tools to counsel countries as they revise MIP policies and programs. Targeted technical backing to countries will be needed going forward to assist countries with adoption of WHO's 2012 crucial updated recommendation for IPTp and to aid countries with prioritizing actions based on recommendations from the documentation of country-level MIP guidance and monitoring.
- **Ensure that both local and international partners can help identify needs and opportunities in malaria programming through well-established presence:** With MCHIP encouragement, MCP grantees exemplified the various roles that NGOs play in advancing malaria control efforts in communities and in facilitating learning at national and global levels. There is a gap in evidence and general documentation regarding what works for community-based malaria control, and lessons learned from these projects can inform and help surge future efforts. Crucial points for future projects to consider include appropriate M&E to document results and establishment of partnerships with MOH and community groups to advise projects and disseminate findings.

URBAN HEALTH

- **Expand efforts to address the urgent and nuanced needs of urban health:** Despite its fairly new presence in the public health realm, urban health has nuanced and urgent

needs. It is critical that the health system continue to adapt to changes caused by demographic shifts; sustained investments are needed to improve maternal health and child mortality in urban areas to maintain current progress toward achieving MDGs 4 and 5. While important learning from MCHIP's urban health efforts in **Ethiopia** and **Kenya** has occurred, there remain areas to focus on going forward, including barriers to use of health services and inequities. The need to gain a better understanding of the factors affecting utilization of MCHIP MNCH services in urban settings became increasingly evident as implementation of urban-focused activities progressed. Given the inequity in service usage by wealth quintile in the urban context, future programmatic efforts need to target the urban population's lowest wealth quintile that has significantly lower patterns of maternal health service utilization (ANC and institutional delivery).

HIV

- **Enhance and emphasize infectious disease prevention, early diagnosis, and timely management through PMTCT:** In recent years, the global health community has become increasingly aware of the ways in which infectious diseases such as HIV, TB, and malaria contribute to maternal and newborn morbidity and mortality. MCHIP's experience and lessons learned strongly demonstrate the need for global health experts, specifically all maternal and newborn health care providers, to be able to identify and manage infectious diseases of importance. Therefore, infectious disease prevention, early diagnosis and timely management through PMTCT, case finding, screening, and treatment should be emphasized. The maternal health platform will remain the single most important way to address HIV prevention, care, and treatment for women during pregnancy, labor, and delivery.
- **Continue to support VMMC scale-up:** The path to an AIDS-free generation requires a combination of evidence-based HIV prevention, care, and treatment interventions that can easily progress from implementation to scale. A critical intervention and component of combination prevention (along with ART and PMTCT) that meets these criteria is VMMC. MCHIP has played a complex and important role in preparing for the integration of the innovative and simple-to-use PrePex™ adult male circumcision device into programs. MCHIP's training, OR, and performance support tools for use of this device will prove invaluable for scale-up in the coming years. The PrePex™ studies in **Tanzania** and **Lesotho** will be continued under USAID's existing Accelovate Program. Outcomes from these studies, along with similar studies happening in six other African countries, will inform the rollout and scale-up of devices for VMMC programs globally.
- **Explore innovative models for HIV testing and counseling:** In addition, given that all HIV-related interventions require an individual's knowledge of his or her HIV status, different models of HIV testing need to be considered in future programming. Disseminated results from MCHIP's HIV Testing and Counseling study, assessing partner notification, will therefore offer focused contributions and will impact future and ongoing HIV testing and counseling implementation, as well as referral.

Monitoring, Evaluation, and Research

- **Enhance and further standardize approaches for measurement:** As a global program, MCHIP was well-positioned to track and synthesize lessons learned across countries. MCHIP made important contributions to measuring multi-country progress on scaling up high-impact MNCH/FP interventions, improving the quality of MNCH/FP care, and delivering services with equity. Looking ahead, future global projects can continue to build on this work and take an even more standardized approach to measuring and

synthesizing lessons learned in these areas across countries. To achieve impact at scale in the future, it will be important to identify and track progress for vulnerable segments of the population.

- **Build consensus on a common set of indicators and definitions:** Applying an implementation science approach in the future to conduct program evaluations, OR studies, and routine monitoring will yield a more comprehensive understanding of how program interventions were implemented, the results achieved, and the lessons learned that will be most relevant to other implementers. USAID renewed its focus on measurement during MCHIP's implementation. This was in part a response to concerns that development assistance be used for maximum impact and to gain a better understanding of progress toward MDGs 4 and 5. Moving forward, continued work is needed to improve MNCH/FP metrics, especially for routine tracking. There is a lack of consensus at the global level regarding a standardized core set of maternal and newborn indicators to incorporate into national HMIS, especially indicators that measure content and QoC. While progress was made in this topic through MCHIP and other partner support, for example with regard to the WHO recommendation to track uterotonic immediately after birth routinely for prevention of PPH, consensus is needed on other indicators. Future global projects should help facilitate this consensus-building process. Building a common body of work based on indicators and definitions shared by multiple countries and partners improves efficiency and allows for better comparisons of which strategies are achieving the best results.
- **Encourage collaborative QI efforts:** QI monitoring promotes evidence-driven service delivery. MCHIP has learned that successful QI approaches are stronger and more likely to be adopted nationally when implemented in collaboration with other local and international partners. For example, in **Bangladesh**, QI activities are implemented in partnership with WHO and the Japan International Cooperation Agency. In **Bolivia**, MCHIP is one partner in the ENLACE en Salud consortium of partners, which includes Care, Georgetown University's Institute for Reproductive Health, JSI, Socios para el Desarrollo, and PROCOSI. Through the ENLACE umbrella, SBM-R has been integrated into the Bolivian MOH's Family Community and Intercultural Health Strategy. Going forward, QI efforts should be undertaken in collaboration with key stakeholders and partners and in this way will lead to sustainable QI approaches and high-quality health services.
- **Utilize key QoC resources and tools:** MCHIP made an important contribution to measuring the quality of maternal and newborn care services, especially L&D services, through the QoC survey toolkit. The L&D observation checklist has now been adopted as an optional module of ICF/MACRO's Service Provision Assessment so that many countries in the future will have the opportunity to use this tool. A complementary *Clinical Observer Learning Resource Package* developed by MCHIP provides a set of resources for training clinicians to observe client-provider interactions in a standardized way. This resource package has now been disseminated and should be a valuable tool for other organizations conducting direct observation.
- **Support and encourage the production and utilization of high-quality data:** In the future, emphasis should increasingly be placed on the quality of data, in addition to production and utilization of data. Routine data quality audits are needed to help improve the quality of HMIS data that governments and implementing partners like MCHIP rely on to inform programmatic decisions. This includes supporting regular data review meetings at the district level and identifying mechanisms to use the data. As many countries move to using and expanding the DHIS2 as their online, open-source system for housing, analyzing, and charting HMIS data, there may be more opportunities to access and use information at multiple levels of the health system.

Cross-Cutting Themes

MCHIP's experience has shown that the need to focus on cross-cutting areas is paramount to success. The areas of equity, quality, and scale-up are relevant to nearly all project activities. With a focus on improving equity and quality of projects, and assuring scale-up in a sustainable way, projects will achieve greater and more sustainable contributions to the health impact.

IMPROVING AND MEASURING EQUITY

- **Incorporate a health equity focus from the onset of a project:** To reach the most disadvantaged populations, programs must incorporate a health equity focus from the beginning by involving national and local governments and institutions, as well as communities. Equity will not be achieved as a byproduct of other developmental efforts—i.e., health interventions will not automatically reach or benefit the poorest and other disadvantaged groups. In fact, unless strategies are adopted specifically with clear goals established, interventions can have the unintended effect of exacerbating inequities. Programs need to clearly define equity goals and communicate them to program stakeholders, along with what specific actions are aimed at improving equity; how these improvements will be demonstrated and measured; and how these actions, if successful, might be sustained, institutionalized, and scaled up. MCHIP used their guide, *Considerations for Incorporating Health Equity into Project Designs: A Guide for Community-Oriented Maternal, Neonatal, and Child Health Projects*, to begin health equity dialogues in **Mozambique, Zimbabwe, Yemen, and Indonesia**.
- **Seek and consider data on equity during the design phase:** Discussions about specific patterns of inequities began under MCHIP and should continue in subsequent programs. Programs need to seek and consider data on equity during the design phase. For example, during the design phase of the MCHIP **Yemen AA**, there was recognition that the overall skilled birth attendance is very low. MCHIP's baseline survey in **Yemen** will let program managers know how health behavior is linked to socioeconomic status. Currently, asset questions on wealth, income, and food security are being added to the baseline survey to gain further understanding of the pattern of inequity and to adjust activities appropriately. These discussions should be part of the design of all programs.
- **Consider equity during scale-up to reach hard-to-reach populations:** Because marginalized populations are often the hardest and most expensive to reach, it may seem more efficient to concentrate scaling up of interventions to those who can be reached with fewer resources. However, recent modeling analyses⁶⁸ show that although such strategies may cost more per beneficiary, they may in fact be more cost-effective though they may never reach

MCHIP's Six-Step Checklist for Health Equity Programming

1. Understand the equity issues in the intervention area:
 - a. Identify inequities in health outcomes and the magnitudes of the differences
 - b. Understand underlying issues and barriers
2. Identify the disadvantaged group on which to focus
3. Decide what is in the program's manageable interest to change
4. Define equity goals, objectives, and a specific definition of equity
5. Determine equity strategies and activities
6. Develop and implement an equity-focused M&E plan

⁶⁸ Carrera C, Azrack A, Begkoyan G et al. 2012. The comparative cost-effectiveness of an equity-focused approach to child survival, health, and nutrition: a modeling approach. *Lancet* 380(9850): 1341–1351, 13.

universal coverage.⁶⁹ Moving forward, it will be important to understand the potential effects on inequities when programs are scaled up and develop strategies to avoid increasing inequities.

- **Utilize a community-based approach to decrease barriers to access and improve equity:** In many developing countries, portions of the population lack access to quality health services for a variety of reasons (e.g., geographic access, sociocultural, linguistic barriers). Providing health services through community-based approaches is a promising strategy to help increase health equity by overcoming the access barrier. This idea is supported by a recently published analysis⁷⁰ that looked at data for 12 key MNCH/FP interventions in 54 Countdown countries. The analysis showed that community-based interventions tend to be more equitably distributed compared to facility-based ones. MCHIP experience suggests that the best way to achieve high-quality, community-based services is through linkages with the formal health system. In **Bangladesh**, MCHIP linked CHWs to both the nearest health facility for supportive supervision to ensure the quality of services and with the local governance system to improve social acceptance. MCHIP also trained a private cadre of community skilled birth attendants so that communities without reasonable access to health services have a private provider available in their communities. These private providers were linked to the locally elected representatives to jointly determine how much they could charge and ensure free services to poor women, as identified by local government representatives. The results were promising—with an 11% increase in use of ANC and 20% increase in use of long-acting FP methods in hard-to-reach districts.⁷¹

EFFECTIVE AND SCALABLE COMMUNITY-BASED APPROACHES

- **Support national policies to promote and improve community-based primary health care:** Countries need to develop stronger policies and financing for community-based primary health care programming, robust CHW initiatives, and permissive policies that authorize the community-based delivery of specific, high-impact interventions (e.g., FP, misoprostol, chlorhexidine for prevention of newborn sepsis, etc.). National plans ought to be costed with consideration to possible NGO and private for-profit sector partnerships. Furthermore, there is a need to support the process of authorization for task shifting/task sharing to community-level workers. It is important to recognize that there can be resistance among other cadres to this sort of task shifting. To support community programming at scale, a full analysis of the system is necessary with consideration of the needs for investment across all the WHO “building blocks” of a strong health system: leadership and governance, financing, supply chain, HMIS, and workforce orientation and training (in addition to task shifting). Civil society and NGOs play a role in supporting and strengthening community-level structures and programming. This approach requires a policy-friendly environment for NGOs. There is a clear policy window now in many countries with the development, refinement, or tracking of national plans based on “A Call to Action, Eliminating Preventable Child and Maternal Deaths” and other frameworks for ambitious action. **India’s** plan,⁷² for example, has chapters on the importance of behavior change and community participation. One of the

⁶⁹ Gwatkin DR. 2002. Who Would Gain Most from Efforts to Reach the Millennium Development Goals for Health? An Inquiry into the Possibility of Progress That Fails to Reach the Poor, World Bank Health, Nutrition and Population (HPN) discussion paper, December.

⁷⁰ Barros A, Ronsmans C, Axelson H et al. 2012. Equity in maternal, newborn, and child health interventions in Countdown to 2015: A retrospective review of survey data from 54 countries. *Lancet* 379(9822): 1225–1233; doi: 10.1016/S0140-6736(12)60113-5)

⁷¹ (<http://www.mchip.net/files/mchip-event-presentations/10%20Unleashing%20the%20Potential%20of%20Community%20MaMoni%20Experience%20in%20Bangladesh.pdf>)

⁷² India Ministry of Health and Social Welfare (2013), A Strategic Approach to RMNCH+A in India, http://www.unicef.org/india/1._RMNCHAStrategy.pdf (accessed June 2014).

prioritized interventions is home-based PNC visits by Accredited Social Health Activists. This sort of community action could be deepened and broadened.

- **Expand the evidence base to understand the effectiveness of newer technical interventions delivered at the community level:** There is an ongoing need to expand the evidence base to test the effectiveness of newer technical interventions delivered in the community under realistic settings. However, the bulk of efforts for learning should be directed toward implementation research to elucidate how high-impact technical interventions can be delivered in context-specific situations, in sustainable ways, and packaged in combination. Suggested areas for emphasis for implementation research are:
 1. Investigation of community approaches at scale over longer periods of time. Most of the evidence reviewed was for programming taking place for two to three years within a tightly controlled project environment. Sustainable programming that can last beyond such a relatively short period might require additional supports. These should be better described.
 2. Investigating how best to address the bottlenecks to effective CHW and iCCM programs. iCCM programs delivered by CHWs are often targeted for difficult-to-reach areas where the health system is weak. Logistical and supervisory support continues to be difficult in many programs. Novel ways to ensure proper support for these programs is, therefore, particularly needed. mHealth supports might play a role in non-traditional approaches to supervision. The private sector may be able to play a role for logistics support for needed commodities. MCHIP's work in the **DRC** in assisting the iCCM program found that the supply chain for iCCM was completely separate from the national health system that experiences severe shortages of essential medicines.
 3. In many countries rolling out iCCM, CHWs are combining this new or strengthened treatment role with previous responsibilities for health promotion (e.g., the essential community health system in **Mali**, the Elementary Polyvalent Community Health Agent system in **Mozambique**, and the female community health volunteer [FCHV] system in **Nepal** are all examples of this). It will be important to determine which models are most effective for such integration, by either one or several cadres of health volunteers. MCHIP provided technical support to the SEC system in **Mali** in which CHWs provide iCCM, in addition to nutrition, ENC, and FP.
- **Utilize existing resources and tools:** Some of the necessary evidence does not need to come from new research projects, but could be obtained by analysis of the current and emerging peer-reviewed literature and program reports and evaluations from the grey literature. The CSHGP has the world's most extensive archive of community-based program evaluations and could be exploited further.
- **Include implementation support as well as practical problem-solving for CHW program strengthening:** Support for large-scale CHW program strengthening should involve combining implementation support with investigations into the critical bottlenecks and how to address them in practical ways. Other community-based delivery strategies should also be supported. Critical areas in building a health system's capacity are to: empower and mobilize communities; communicate health messages more effectively to the community; design programs, identify target groups, or carry out surveillance more effectively; or strengthen the health system in ways that would be of benefit for community-based programs (e.g., supervision of CHWs and provision of drugs and supplies to them). Supporting a health system to register vital events, for instance, or working effectively with village health committees could have benefits for improving MNCH/FP services. The review of the evidence identified four basic intervention delivery strategies: home visitation, community case management, participatory women's groups, and delivery of services at

outreach sites by mobile teams. Through the PVO grants, MCHIP supported all of these approaches. Through MCHIP country programs there was the most emphasis on iCCM and on outreach in immunization programming. Strengthening all of these approaches should be a priority, not just iCCM or outreach.

- **Utilize behavior change communications to bolster effectiveness of interventions:** Some of the influential high-impact interventions with the largest potential effect are not only those that can be delivered in the community, but specifically those that are behavior change interventions.⁷³ Bhutta and Black describe different high-impact packages of interventions for MNCH care. One of these is a package of nutrition interventions that includes breastfeeding. One of the most effective mechanisms for breastfeeding promotion is interpersonal behavior change. Care Groups have the power to do this effectively by combining the power of participatory women’s groups with systematic home visitation. These groups have shown the potential to dramatically raise coverage of behavioral interventions, such as breastfeeding and handwashing, and others that have a strong behavioral component, such as use of ITNs and care-seeking for serious illness. There have been some early experiences with scaling up Care Groups and integrating them into national systems, most notably in **Burundi**. Systematically implementing and studying such approaches could go a long way toward helping countries reach their goal of eliminating preventable child and maternal deaths.

QUALITY OF CARE

- **Invest in implementation science to better refine and understand QI approaches:** Investment in implementation science to refine and understand the effects of the various QI approaches that have already been prioritized is crucial to improving quality (i.e., SBM-R and other facility-based approaches, including supervisory checklists, partnership defined quality [PDQ], and other community-inclusive approaches, and RAPID and other immunization QI approaches). It is a common issue with QI approaches that even published literature does not document well the types of activities that led to improvements in outcomes. To best facilitate learning, certain key implementation process elements need to be documented and analyzed regularly for any QI approach: description of the MOH and/or other personnel engaged to lead the QI process; the types and numbers of health workers trained in the QI approach and who received training; the types of QI activities in facility and district workplans; to what extent plans are followed; how often the Plan, Do, Study, and Act (PDSA) QI cycle was repeated; what specific improvements occurred at the facility and district levels; and what resources were provided or mobilized to make the improvements. These could include improvements in infrastructure, supervisory processes, institutionalization and standardization of registers, and use of job aids and reminders. There were promising outcomes using the SMB-R approach from MCHIP programs in **Mozambique, Guinea, Zimbabwe**, and other programs. Explaining better what was done in such instances would help in replicating this success. Other promising QI approaches should be brought in. Particularly promising are experiences with brief point-of-service checklists simple enough to be applied in real time, such as WHO’s “Safe Birth Checklist.”
- **Encourage community and civil society engagement in defining and implementing QI approaches:** Community and civil society engagement in defining and implementing QI approaches is important to ensure sustainable and culturally sensitive interventions. QI processes and tools should allow for the full participation of civil society. The use of PDQ or other community-inclusive approaches will be a priority. The project should also look for opportunities to evaluate such approaches.

⁷³ Bhutta Z and Black R. 2013. Global maternal, neonatal, and child health: So near yet so far. *N Engl. J Med.* 369(23): 2226-2235.

- **Emphasize the importance of respectful care as it related to quality:** The importance of respectful care as an essential element of QoC cannot be over emphasized. Building true symmetric partnerships between clients and providers increases the likelihood of better health care seeking and better outcomes. MCHIP’s learning about and experience with respectful care, in conjunction with several other partners, has added critical knowledge to the field and should be incorporated in all QI approaches used. Work needs to continue on feasible and valid measurements, and, even more important, on effective methods for improving this aspect of care.
- **Explore innovative approaches to incentivize the institution and maintenance of a QI system:** Frontline health workers and their managers at the district level need strong incentives for instituting and maintaining a QI system. Strategies that incorporate a behavior change approach for providers should be explored further. Three performance-based incentive approaches appear to hold promise for use in low- and middle-income countries. These include rewards for attaining accreditation standards and rewards for achieving performance on quality components incorporated in correct treatment protocols. Some countries are also exploring the use of quality checklists or scorecards producing a quality index or score, which is then used to either inflate or deflate the performance payment that a health facility should receive based on the quantity of services delivered.
- **Streamline and simplify QI tools to improve institutionalization and sustainability:** QI tools should be streamlined to maximize the chance of institutionalization and sustainability within national systems. SBM-R is systematic and focused on the whole system, but the checklists can be quite lengthy when explanations and tables are included. RAPID is an example of a streamlined approach with promising results in one setting that other QI approaches might emulate. Simple and systematic data presentation and visualization are also important to ensure that data are used by those who need them most—health care providers and their managers. Application of only part of a QI tool at any one time, use of mHealth for data collection, and use of tablets to link specific improvement plans to identified weaknesses are all approaches currently being developed and piloted. The QoC assessment L&D observation checklist is currently being refined so that it has only 20 indicators (reduced from more than 100 in its current form), which would transform the QoC tool from its current quality measurement focus to a true QI focus.
- **Consider the entire health system when addressing QoC:** Many of the challenges in delivering QoC relate to underlying health system issues. An exclusive focus on improvement of quality of service provision will not achieve optimal results if other system issues such as commodity management and shortages of health workers are not addressed. A broader HSS approach is required. In addition, QI interventions cannot be time-limited and donor-driven, but must be institutionalized and sustained within national programs to strongly signal to providers that quality care is not optional. This can be done in multiple ways, some of which have already been piloted, but rarely scaled to the national level:
 1. More frequent and rigorous external verification of results (in SBM-R and other similar approaches)
 2. Linking facility scores on QI tools to provider pay and/or results-based financing programs
 3. Incorporating QI approaches into routine supportive supervision systems
 4. Blending QI tools with national accreditation systems or incorporating QI into the regulatory role of the MOH and rest of the government
 5. Encouraging the formation of QI committees in facilities

SCALE-UP OF HIGH-IMPACT INTERVENTIONS

- **Address scale-up with a comprehensive approach to systems strengthening:** Thinking in terms of systems is critical for sustainable scale-up. Public health interventions have multiple components and need supports across the health system. Almost all of MCHIP’s scale-up cases took a comprehensive systems approach, seeking to address how the new practices would be supported through new governance, resourcing, and service delivery processes. Some of the most highly successful cases were those that were most driven by system thinking, such as the NUVI scale-up examples. In **Kenya, Malawi, and Tanzania**, there was near universal coverage of PCV in the first full year following introduction. The new vaccine was integrated into the national immunization programs’ governance, resourcing, and delivery processes. All the interventions drew on robust international evidence of effectiveness, but were implemented in ways that were congruent with national health systems and structures. The ability to reach “impact at scale” is only as good as the weakest part of the process—so, for instance, even if training and supervision are good, but commodities are absent, impact will not be achieved. Similarly, if the commodity is present but training follow-up and supervision systems are weak, the commodity may not be used well, again lessening impact at scale.
- **Addressing and ensuring quality at scale is essential:** Obtaining high coverage with poor quality and then hoping to “fix” quality issues later is risky. Donor and MOH priorities may well shift later, robbing the ability to fix the problems, and, in addition, high ineffective coverage will not achieve impact at scale, taking away effort from other more effective programming as well as being demoralizing. MCHIP experiences have highlighted the need to have quality at scale be a primary goal in any scale-up plan. This means applying a systematic approach from the beginning that tries to address all six of the Health System Building Blocks in order to achieve sustainable results: governance (i.e., policy, coordination, leadership, planning), financing, personnel including training, service delivery (supervision, quality improvement, and demand), health information systems, and logistic systems. Improvement and maintenance in all of these areas, while challenging, are essential to assure quality and sustainability, and achievement of the ultimate goal of “sustainable impact at scale.”
- **Consider and plan for timing challenges in scale-up:** The pace of scale-up is likely to be a long-term process (i.e., 10 or even 20 years) and does not happen at a constant rate. Shorter-term projects run the risk of making the scale-up process seem like a “project” (e.g., separate vertical trainings, parallel registers and reporting), when, in fact, it must be a long-term, country-owned process. Shorter-term projects need to make choices about how to support scale-up without distorting the MOH’s overall process of reaching impact at scale. There will be key moments outside the control of a project to help the MOH make great progress (e.g., iCCM **Mali** and PFPF **India**—which now fit into national plans and priorities and can progress quickly), but there will be other times where progress will be slow and difficult (e.g., iCCM in **Kenya** in the past before the MOH made a commitment in its national plans).
- **Appropriately address conflicting principles:** There are times when important development principles will be in conflict with each other. For example, in scaling up HBB there was a conflict between “data use for action” and “country ownership.” **Bangladesh** made the decision that for HBB to be country-owned, the Resource Team recommended

Phased Scale-Up of PFPF in India

The scale-up was phased from a handful of sites to demonstrate that PFIUD was acceptable and feasible to larger and larger targets. There were a number of process innovations (counselors, training nurses, supportive visits, on-site training) developed at an early stage and then built into the expansion phase. If **India** had tried to scale up throughout the whole country all at once or in every facility in the high-focus states, the learning about these innovative implementation strategies may not have been so easily incorporated.

waiting to put HBB indicators into the registers until the MOH printed new registers. They did not want to give the impression that HBB was project-driven, but it also meant that the team managing the scale-up process was “driving blind.” They did not have information on where things were working well or not.

- **Support and enhance task shifting to promote scale-up:** While continuing to support task shifting as a viable strategy to increase scale-up, MCHIP’s assessment of this practice has signaled some aspects that need to be addressed globally. These include:
 - The role of incentives, whether monetary or intangible, as an important way to facilitate the adoption of new practices by providers;
 - The importance of determining the saturation point for adding multiple tasks to providers to ensure quality of services;
 - The need for advocacy aimed at experienced health care providers who are resistant to task shifting; and
 - The imperative to provide follow-up for at least 18 months to ensure that the new skills are being used.

Integration of Service Delivery

The integration experiences highlighted in this Global EOP Report and in Annex 8 are not exhaustive in terms of representing the full portfolio of MCHIP and CSHGP integrated programming, but they provide insights into integration as an approach to service delivery. Each of the projects highlighted demonstrated that integrated services can improve intervention-specific health outcomes. In the case of delivering integrated health services at the community level via CHWs, project work in **Bangladesh, Honduras, Rwanda, and South Sudan** established that CHWs can effectively integrate new services into their routine duties at the community and household levels with positive health outcomes for target populations. However, the **Rwanda** example in which misoprostol coverage rates did not rise significantly shows that the results are sensitive to design of the design of the integrated intervention. Each of these projects also linked community-based interventions and facility-based services to ensure an integrated continuum of care for improved MNCH.

The MCHIP and CSHGP experiences with integration confirm that this is a complex and multi-faceted process that relies on a range of inputs. Projects demonstrated the successes of *partial integration* with shared service delivery responsibilities across providers and through service linkages, and in some cases *full integration* such the **Bangladesh** Healthy Fertility Study. These experiences simply scratch the surface, leaving many key questions to be answered. The following are some recommendations for future implementation research on the topic of integration.

- **Test scalability of integrated programs:** In going to scale, system bottlenecks will more forcefully come into play and need to be addressed. One common bottleneck is commodity availability. While a project might support supply chains in a pilot phase, this cannot be done as the experience is scaled. This is just one example of the sort of system bottlenecks that can threaten the ability to replicate the results of small-scale pilots when going to scale.
- **Consider how funding channels can significantly affect integration:** For example, Atun states that when “financing is provided directly to an intervention and addressed only a particular disease or problem, the function was considered to non-integrated.” Partial integration occurred when donor funds were channeled into the health system to cover the costs of implementing integrated programs. Thus when USAID has earmarked funding, or specific funding such as PEPFAR, which must be used on HIV/AIDS programs, to what extent do these fiscal mandates skew integrative approaches? The elements that promote successful integration such as planning, financing, and governance must be weighed as to how they will impact service delivery and client programs.

- **Further explore costing integrated models:** The MCHIP HFS project in **Bangladesh** found that activities were delivered through existing community-based platforms at minimal incremental cost and that positive health outcomes represented un-quantified cost savings to the household. ChildFund in **Honduras** demonstrated cost savings to families if they were able to manage health services locally as opposed to going to a rural health post or a hospital.
- **Document and disseminate integrated community platform models supported by NGOs:** For example, several papers have been published about the Care Groups (community-based mothers' groups) but there are other promising practices that deserve wider attention. There is a wealth of context-specific information in project reports that should be documented in usable formats and disseminated widely to expand learning and push the boundaries of traditional thinking about scaling up integrated services through a facility-centric model to include community-based approaches. To do this, practitioners and those providing technical assistance should be supported to document results and learning from individual projects as well as from groups of projects.
- **Continue research on health system effects of integration and not only client outcomes:** The Integra Initiative, supported by the Bill & Melinda Gates Foundation, developed a multidimensional index of integration based on five years of research integrating HIV services into reproductive health and family planning services. It is a tool used to quantify the degree of integration at each facility over time to try to get an objective view of how well integration serves clients and improves efficiency.⁷⁴ The Integra Index was able to show that structural integration (i.e., the preparedness of a facility to provide integrated services such as having sufficient infrastructure, equipment, supplies, and human resource in place) does not necessarily lead to integrated delivery of care (whether the provider actually offers more than one service during the consultation). Thus, one recommendation is that future assessments include measures of whether clients actually receive integrated care or if care was integrated in name only and the client did not get any additional benefit.
- **Pay attention to possible overburdening of health workers and to client experiences:** At what point can programs no longer integrate interventions without sacrificing the ability to meet client needs? It is incumbent upon donors and implementers alike to develop the context-specific evidence base to guide policies and practice in relation to program design, rather than rely on dogma. The USAID team conducting the consultation on the Integration of FP, MNCH, and Nutrition stated that among some of the next steps were: "The community perspective and satisfaction with FP-nutrition integrated services is an area that has not received any attention and should also be explored. Advocacy tools, training curricula, job aids, and behavioral change materials are absent, but could be developed based on existing and new research. By taking action on developing a research agenda and conducting advocacy with donors, partners and researchers at all levels, FP-nutrition integration proponents could build a strong case and build momentum for the field."

MCHIP remains convinced of the merits of thoughtful integration as one of the public health strategies that can deliver better care, reduce missed opportunities to meet client needs, and continue to offer high-quality, efficient, and cost-effective services. However, MCHIP recognizes that a thoughtful research agenda is needed to provide the data supporting the best practices for integration.

⁷⁴Vassal A et al. 2013. Cost analysis of Integrated HIV and Sexual Reproductive Health Services in Kenya and Swaziland, London Dissemination Meeting, July; http://www.integrainitiative.org/blog/wp-content/uploads/2013/09/Cost_presentation_

