Legacy of the MacArthur Foundation's Maternal Health Quality of Care Strategy in India: **Reflections and Findings from the Endline Evaluation**

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FOREWORD

The John D. and Catherine T. MacArthur Foundation started its Population and Reproductive Health (PRH) program in India in the late 1980s and opened an office in the country in 1994. For more than two decades, the Foundation funded pilot projects, research, advocacy and social accountability, and other work to advance the sexual and reproductive health and rights of women and girls in India. Through an early fellowship initiative, the Fund for Leadership Development, PRH supported early- and mid-career individuals who went on to become global and national champions and leaders. The program also funded a variety of civil society organizations whose strategic efforts led to important policy changes, better access to quality services, and more scholarly knowledge and community awareness about the issues that affect women and girls and how to resolve those issues. Over the years, the PRH program funded efforts to end child marriage, bring attention to the extraordinarily high numbers of women dying as a result of pregnancy or childbirth, guarantee that abortion services were safe and accessible, and ensure that the sexual and reproductive health needs of young people were met.

In 2014, the Foundation announced that the Population and Reproductive Health program would wind down over a five-year period. After consulting with grantees and partners, we narrowed our final program strategy in India to focus on advancing the quality of maternal health services and increasing women's and families' knowledge about and demand for those services. We made 28 grants to 20 organizations, building on their early efforts and successes with an eye to ensuring that the new programs, policies, practices, and initiatives would live on beyond MacArthur's engagement. We also wanted partner organizations to be stronger and better placed to continue their work after our exit.

At the beginning of our final "legacy" grantmaking strategy, we hired Mathematica to serve as our evaluation and learning partner. The Mathematica team helped us refine our indicators and collected data over the next four years, producing a landscape, baseline, midline, and this, the final evaluation report. The team also created a series of issue briefs on the maternal health quality of care ecosystem, community accountability, and coalition building, reflecting on lessons learned and certain aspects of the evaluation results.

The purpose of the evaluation was to help us understand the overall progress of the strategy to improve the quality of and demand for high-quality maternal health services. Knowing that we would be leaving the field at the end of 2019, we also intended the evaluation to be instructive to practitioners, government officials, and donors that continue to do maternal health work and to anyone new to the field. Additionally, the issue briefs on accountability, coalition building, and the maternal health quality of care ecosystem have applications beyond our field.

We are deeply grateful to all of the partners, policymakers, donors, and others who gave their time to the evaluation—and more importantly, for ensuring that women and girls in India are aware of and have access to high-quality maternal healthcare services. We also thank the Mathematica team for conducting this comprehensive evaluation and for producing a series of excellent reports and briefs summarizing the findings. While the MacArthur Foundation is winding down its investment in sexual and reproductive health and rights in India, we hope that our partners who remain in the field will find this evaluation informative and useful.

John Palfrey
President
John D. and Catherine T. MacArthur Foundation

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LEGACY OF THE MACARTHUR FOUNDATION'S MATERNAL HEALTH QUALITY OF CARE STRATEGY IN INDIA: REFLECTIONS AND FINDINGS FROM THE ENDLINE EVALUATION

For more than two decades, the John D. and Catherine T. MacArthur Foundation has supported population and reproductive health in India to improve the trajectory of health for women, children, and their families. As the Foundation transitions its work and exits the field of population and reproductive health, its legacy grant-making in maternal health quality of care in India provides insights into the field's successes to date, the challenges that remain, and the way forward.

ACKNOWLEDGEMENTS

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From the bottom of our hearts, we express the deepest gratitude to the grant organizations and staff that welcomed us with open arms at site visits and meetings, reported on tedious indicators annually, shared their experiences, and provided candid perspectives. Without their many contributions and hard work on the ground, there would be no story to tell or learning to be had. In particular, we thank Sangeeta Rege and Sanjida Arora (Anusandhan Trust); Sharad Iyengar and Peeyush Umrao (Action Research & Training for Health); Aparajita Gogoi and Tina Ravi (Centre for Catalyzing Change); Premdas Pinto and Abhijit Das (Centre for Health and Social Justice); Raghavendra Rao, Michelle Thomas, Shailja Mehta, and Priyanka Anand Chadha (Dasra); Hema Divakar and Samita Bhardwaj (Federation of Obstetric and Gynecological Societies of India); Susheela Singh and Jonathan Wittenberg (Guttmacher Institute); Vinoj Manning, Medha Gandhi, and Anisha Aggarwal (Ipas Development Foundation); Dr. Raman Kataria and Pradipta Kundu (Jan Swasthya Sahyog); Somesh Kumar and Bulbul Sood (Jhpiego); H. Sudarshan and Roshni Babu (Karuna Trust); Sunil Mehra, Murari Chandra, and Sumitra Dhal Samanta (MAMTA Health Institute for Mother and Child); Dr. Anupama Rao and Mahesh Srinivas (Pathfinder); K.G. Santhya and Sohini Paul (Population Council); Bijit Roy and Sona Sharma (Population Foundation of India [PFI]); Renu Khanna and Vaishali Zararia (SAHAJ-Society for Health Alternatives); Y.K. Sandhya and Paula Das (Sahayog); Shrey Desai (Society for Education Welfare and Action-Rural); Colin Gonsalves and Sarita Barpanda (Socio Legal Information Centre); Kasonde Mwinga and Paul Francis (World Health Organization); and the many other staff members and volunteers who helped to coordinate meetings and site visits. We are also grateful for the insights of the many staff at Indian national and state agencies, foundations, and local organizations who were interviewed as part of our landscape study; their input strongly grounded the entire evaluation and learning effort.

At Mathematica, we thank Anu Rangarajan, who provided helpful comments on our report. To Sheena Flowers, who created the report graphics and produced the report (and every single other one for this study) and Effie Metropoulos and Maura Butler, who edited the final report, we are grateful for their assistance.

EXECUTIVE SUMMARY

Throughout its engagements in India, the John D. and Catherine T. MacArthur Foundation has focused on building in-country capacity that supports long-lasting change and betters the health and well-being of those in the country. As the Foundation's Population and Reproductive Health (PRH) engagements came to a close in 2019, it considered how to leave the field and stakeholders in India poised to take on the ongoing task of improving maternal health—a key to achieving social, financial, and physical well-being. Recognizing quality as the linchpin for making more progress on maternal health, the MacArthur Foundation focused its final PRH grants on improving maternal health quality of care (MHQoC) in India. This final round of funding in India supported long-standing work designed to transition the country to the next phase and launch promising innovations. Using information collected from the final phase of the MHQoC strategy (April 2018 through July 2019), this report represents the culminating review of the strategy, assesses its contributions to the quality of maternal health care, and considers the implications for the future of the field. Results are presented by each of MHQoC strategy's three core substrategies: supply, demand, and advocacy.

Supply: strengthening human resources, strengthening facility-based quality assurance, and improving adherence to existing quality protocols and guidelines

The supply substrategy has supported improvements in knowledge and skills among tens of thousands of providers, the institutionalization of quality practices at hundreds of facilities, and commitments to adhere to nationally and internationally recognized standards and protocols in all 16 states targeted by the MHQoC strategy. Specifically, strategy grantees achieved the following:

- **Extended the reach of skilled providers.** Grants under the strategy developed 20 curricula to train providers on delivering quality maternal health care. The number of providers who were trained steadily increased over time, with a total of over 40,000 trained across the country over the four years of the MHQoC strategy.
- **Introduced mechanisms to maintain quality in facilities.** The strategy established 8 training centers, supported 422 facilities through the process of becoming accredited, and established quality assurance (QA) procedures at 538 facilities over three and a half years.
- **Improved facilities' ability to adhere to standards and best practices, including offering emergency obstetric care (EmOC) services.** Offering quality EmOC services and adhering to evidence-based best practices for maternal health needs, such as intrapartum care, have been shown to significantly reduce maternal mortality and morbidity. The strategy has given more than 700 facilities technical assistance to support adherence to nationally and internationally recognized protocols and guidelines, and over 300 facilities in four states have received trainings specifically for EmOC.

As the maternal health field looks beyond the MHQoC strategy and its achievements to date, these findings reveal several cross-cutting next steps that could promote continued strengthening of the supply of quality maternal health care:

- **Scaling up and sustaining clinical and quality management standards to promote consistent quality of care across the country.** The strategy's activities have demonstrated localized success for particular facilities and providers, but more information is needed on what works *at scale* to put guidelines into practice and institutionalize quality improvement.
- **Measuring and documenting the impact of quality improvement on quality of care and health outcomes.** More evidence about outcomes can illustrate the relative importance of various facility-level quality improvement efforts and lay the groundwork for state- and national-level policies to improve quality.
- **Looking beyond the focal areas of the MHQoC strategy and addressing other critical gaps in the MHQoC health ecosystem.** Stakeholders noted gaps in three specific areas: (1) health system financing to ensure equitable access to quality care, (2) information systems to support the coordination of care across settings, and (3) functional referral systems.

Demand: Informing women and families about quality and their rights, developing and testing community accountability mechanisms, and scaling up legal strategies.

Over the life of the strategy, thousands of women and community leaders across six states have participated in strategy-supported community accountability activities. Five core strategy-supported mechanisms include maternal death reviews, social autopsies, strengthening of Rogi Kalyan Samitis (RKSs, or Hospital Management Societies), help lines, and community-based monitoring. Legal strategies, including launching high-profile public interest cases, have helped hold the government accountable for key maternal health services. Work under the demand substrategy has yielded important results to date:

- Conceptualized accountability frameworks, tested accountability approaches, and advanced the use of accountability as a strategy to generate demand. MHQoC strategy funding has engaged over 20,000 women and community members in building community accountability for quality maternal health services. The five novel approaches tested by the strategy have led to increased community engagement in holding the government accountable to its word, heightened institutional responsiveness to accountability data, and, to a more limited extent, improved availability of key equipment and infrastructure to support services.

- Applied legal strategies to safeguard maternal health rights and entitlements when other accountability mechanisms failed. Work under the MHQoC strategy has helped advance legal approaches to holding the Indian government accountable for delivering on its ambitious maternal health policies—a novel strategy that will likely generate important lessons for other countries seeking to operationalize and enforce their stated commitments to maternal health. This approach has yielded some notable wins for MHQoC, including the banning of sterilization camps throughout the country, which has wide-ranging implications for all women seeking contraceptive services in the public sector.

Lessons learned from the demand substrategy have highlighted the following necessary next steps:

- **Sustaining and deepening engagement in community accountability mechanisms to hold governments to their word**. Although community accountability programs have demonstrated success at eliciting quality improvements with relatively light-touch models, deeper community

involvement and engagement could make them even more successful at attracting the attention of health officials and ensuring their responsiveness to community needs (Prost et al. 2013).

- **Delivering on the National Health Mission's stated commitment to encouraging communities to lead health planning and monitoring.** To spread the adoption of community accountability mechanisms, it is important for community leaders to work closely with state and national health officials.
- **Documenting the impact of community accountability on health care utilization and health outcomes.** Deeper and longer-term investigations of whether increased community engagement can promote service utilization, enhance quality of care, and improve health outcomes will help argue for continued support of these programs.
- **Supporting legal strategies to promote accountability when other methods fail to deliver.** Legal strategies can play a key role in ensuring the availability of quality care when other methods fail, and this can translate to higher visbility and demand for quality services.

Advocacy: Generating and disseminating evidence, promoting civil society advocacy, and sustaining MHQoC efforts

Over the life of the MHQoC strategy, the Foundation has supported the publication of dozens of research articles and technical reports, the development and dissemination of issue briefs and other non-technical reports, and the establishment of 10 national- and state-level advocacy networks to advance MHQoC. Specifically, work under this substrategy has achieved the following:

- **Produced rigorous evidence and targeted publications to advance the supply and demand substrategies.** Strategy grantees published more than 50 research studies and reports, including peer-reviewed journal articles, technical reports, issue briefs, and other nontechnical publications. Although it is often difficult to trace the impact of such publications, strategy grantees documented clear instances in which the evidence they generated was used to make state- and national-level decisions to expand or scale up promising supply- or demand-side MHQoC interventions, such as government adoption of an effective mHealth intervention in Gujarat, and the development of a statewide plan to improve QA practices in public facilities in Uttar Pradesh.

- **Built effective state and national advocacy networks to promote MHQoC.** The strategy has supported 10 state- and national-level advocacy networks to promote issues such as respectful maternity care, person-centered care, and community accountability. Both individually and through these coalitions, MHQoC grantees have advocated for MHQoC at all levels and have successfully influenced policymakers to advance MHQoC priorities, such as enhanced functioning of hospital management societies to better support quality improvement in public facilities.

- **Worked to sustain MHQoC efforts after the end of the strategy.** Almost half of all grantees—9 out of 20—have secured additional funding for their MHQoC work, and most others are actively seeking alternative sources of support. All have committed to continuing their MHQoC programming by sustaining, modifying, or expanding programs supported under the strategy.

As the Foundation prepares to exit, continued advocacy as an approach that supports both supply- and demand-side interventions will help maintain MHQoC as a state- and national-level priority, especially

as other priorities—such as universal health coverage—gain momentum. Key areas for continued advocacy include:

- **Fulfilling policymakers' appetite for evidence by documenting the results.** Strategy grantees stated that a more rigorous documentation of MHQoC advocacy efforts could help make the case for the importance of ongoing advocacy and help position grantee organizations as influential actors in the MHQoC landscape.

- **Strategically positioning MHQoC within the broader health landscape, including paying attention to the growing pressure to achieve universal health coverage.** Stakeholders have voiced concern that the push to achieve universal health coverage will overshadow MHQoC efforts, but have suggested that framing MHQoC in an equity context and acknowledging that maternal health is a fundamental component of universal health coverage will help keep MHQoC on the agenda.

Moving forward for MHQoC in India

Sustaining the MHQoC strategy's work will take various forms depending on the stage of the intervention for a specific grant. For grants providing **proof of concept**, sustainability will involve further **adoption and maintenance** to show consistent value when an intervention is attempted again. Interventions already showing this value will need to demonstrate their transferability to various settings—ultimately, that stakeholders can **replicate and scale up** core components of the intervention. Finally, widely applicable and relevant interventions could be at the stage that warrants **institutionalization** through policy.

Although the MHQoC strategy's grants span these stages, the majority are in one of two stages: replicate and scale-up, or institutionalization. Given this, sustaining the strategy's momentum will require all sectors (nongovernmental organizations, donors, and the government of India) to collaborate and coordinate resources to fully realize the outcomes possible from approaches forwarded by the strategy.

Future of the field

Addressing MHQoC requires a concerted effort across multiple dimensions of quality—clinical, experiential, and contextual (O'Neil et al. 2017). The MHQoC strategy has provided information on a wide-ranging menu of supply, demand, and advocacy interventions—some evidence-based and others emergent—that, if scaled up, could have far-reaching impacts on maternal health.

Stakeholders should also not lose sight of the multifaceted approach put forward by the strategy, and its recognition that supply-side interventions focused on clinical care—accompanied by complementary efforts to increase demand and advocate for change—are more likely to move the needle on maternal mortality than any one substrategy alone. To move the field forward, the effect of combined approaches within and across the strategy's substrategies needs more exploration to understand how multipronged approaches might amplify outcomes. This information can convince stakeholders of the value of adoption and collaboration.

I. BUILDING IN-COUNTRY CAPACITY TO SUPPORT POPULATION HEALTH AND REPRODUCTIVE HEALTH IN INDIA

Throughout its engagements in India, the John D. and Catherine T. MacArthur Foundation has focused on building in-country capacity that supports long-lasting change and betters the health and well-being of people in the country. Beginning with the Fund for Leadership Development (FLD) Initiative in the Population and Reproductive Health (PRH) program (1994–2013), the Foundation tasked itself with equipping the next generation of Indian leaders and bellwethers in the field to improve PRH. In 2003, the Foundation began its grant-making for a PRH program focused on reducing rates of maternal mortality and morbidity; the grants funded organizations with strong local ties to help them innovate and sustain their work. As the Foundation's PRH engagements ended in 2019, the Foundation's motivation remained focused on how to leave the field poised to make greater strides in maternal health.

1. Context for population and reproductive health in India

Attention to maternal health in India emerged from efforts to slow population growth from the 1950s through the late 1980s (O'Neil et al. 2017). The narrative shifted in the 1990s to using maternal mortality as a rallying cry for work that broadened women's access to health services during pregnancy, labor and delivery, and the postpartum stage. Maternal mortality declined significantly in this period, with India's maternal mortality ratio decreasing from 556 to 174 maternal deaths per 100,000 live births between 1990 and 2015.

Access to services was the central mechanism for improving maternal health during this period, but the quality of services still lagged and hindered India's ability to achieve deeper reductions in maternal mortality. Recognizing quality as the linchpin for an even greater impact on maternal health that could propel India to meeting Sustainable Development Goals, the MacArthur Foundation focused its final PRH grants on improving maternal health quality of care (MHQoC) in India.[1]

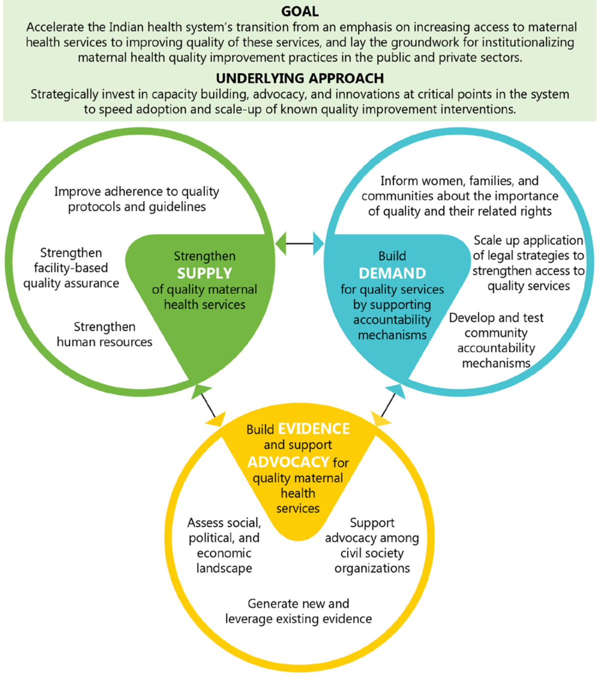
2. Foundation's legacy of population and reproductive health through the Maternal Health Quality of Care strategy

Improving MHQoC requires a systems approach that tackles issues from multiple angles: the quality of care, people's knowledge of their rights in demanding such care, and policies that promote adherence to standards for quality care. Consequently, the Foundation structured its MHQoC strategy (2015–2019) to back three mutually reinforced substrategies, or areas of work: (1) strengthening the supply of quality maternal health services, (2) building the demand for quality services through accountability mechanisms, and (3) building an evidence base and support for MHQoC as shown in the strategy's conceptual framework (Exhibit 1).

[1] Sustainable Development Goal 3.1: By 2039, reduce the global maternal mortality ratio to fewer than 70 maternal deaths per 100,000 per live births.

This final round of funding—equaling about $10 million to 20 organizations through 28 grants—was made to support longstanding work in India to transition to the next phase and to launch promising innovations. The grant-making continued the Foundation's deep involvement in the states of Rajasthan, Gujarat, and Maharashtra, where grantees had made significant gains in improving the quality of maternal health care, and also supported work at the national level and in 13 additional states where quality improvement was necessary. To further ensure that momentum gained through the strategy's efforts would endure, the Foundation also made a unique grant to increase grantees' capacity for sustaining and scaling their work. As a final measure, the Foundation contracted with an external evaluation and learning partner to document evidence and stories from the strategy for wider learning and contribution to the field.

Exhibit 1. MHQoC strategy: conceptual framework



II. JOURNEY OF THE MATERNAL HEALTH QUALITY OF CARE STRATEGY

MHQoC strategy endline evaluation and learning questions

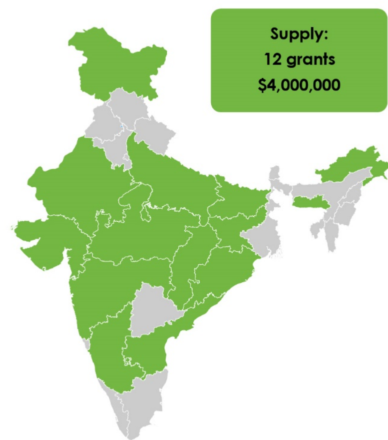
- What (intended and unintended) outcomes has the strategy achieved?
- Have these outcomes contributed to improvements in MHQoC?
- What interventions indicate strong likelihood of success if they were scaled up?

At its outset, the MHQoC strategy sought to answer several pivotal questions to forward the field. The questions related to the landscape, implementation, outcomes, and lessons learned from the strategy. (For a complete list of evaluation and learning questions, see Appendix A, Exhibit A.1.) This report represents the culminating review of the MHQoC strategy and focuses on questions related to the contributions within each substrategy that will lead to better maternal health quality of care. The report draws on data collected through interviews, site visits, and document reviews from all MHQoC strategy grantees, as well as a review of routine data provided by grantees on their performance against a core set of indicators selected to measure the strategy's progress toward its goal (further detailed in Exhibit 1). The report uses information collected and analyzed over the full life of the MHQoC strategy (2015–2019), across early, midline, and endline evaluation and learning periods, but emphasizes information from the endline period, April 2018 through July 2019. (See Appendix A, Exhibit A.2 for a list of grants that contributed information to each evaluation and learning period.) For each evaluation and learning period, strategy progress and contribution were assessed using key indicators of

outputs and outcomes. (Appendix A, Exhibit A.3 presents a list of these key indicators.[2]) The remainder of this chapter summarizes the strategy's progress, lessons learned, and remaining gaps in each of these three substrategies, as measured by the strategy's key indicators.

1. Supply

From the start, the Foundation and other stakeholders recognized that the supply of high quality care depends on infrastructure and human factors at multiple levels: provider, facility, and health system. However, at each level, gaps in the MHQoC landscape persist, interfering with progress toward achieving high quality maternal care. Key deficiencies include insufficient workforce with insufficient skills required to deliver high quality maternal care, a lack of infrastructure in facilities to support delivery and maintenance of quality care, and poor standardization of practices for ensuring quality. Health officials at the national level have confirmed that overcoming these deficiencies is vital to improving the supply of quality maternal health care.[3] Considering this evidence, the strategy focused on three approaches to improving supply:



- **Improved knowledge and skills** for tens of thousands of providers
- **Institutionalization of quality practices** at hundreds of facilities
- Commitments to **adhere to standards and protocols** in all 16 strategy-targeted states

1. *Strengthening human resources:* Increasing the number of staff with the requisite skills to perform their duties.
2. *Strengthening facility-based quality assurance (QA):* Putting internal QA systems in place to safeguard the provision of high standards of care.
3. *Improving adherence to existing quality protocols and guidelines:* Establishing external mechanisms to further ensure that commonly accepted standards for care are met.

[2] Grants may report on different measures from year to year. Grants not categorized under a particular substrategy or approach may contribute to measures in that approach.

[3] From interviews conducted by evaluation and learning partner in 2016.

1.1. *Strengthening human resources*

	Early stage progress	Midline period progress	Endline period progress	Overall strategy contributions
	9 active grants under approach	10 active grants under approach	5 active grants under approach	20 grants reported on this approach
	6 curricula and training guidelines developed	10 curricula and training guidelines developed	4 curricula developed (no training guidelines developed)	20 curricula and training guidelines developed
	~18,000 health care professionals trained	~16,000 health care professionals trained	~14,000 health care professionals trained	~48,000 health care professionals trained
	7 grants found that most trained providers reported improved skills	7 grants found that most trained providers reported improved skills	5 grants found evidence of improved skills by trained providers/ professionals	In most grants, trained providers/ professionals reported improvement in skills

Note: Data in this table provide information on the indicators associated with Outputs 1.1.1 and 1.1.2, and Outcomes 1.1.1 and 1.1.2 in Appendix A, Exhibit A.3.

In India, most women receive much of their maternal health care from nurses, midwives, and frontline workers (FLWs) (O'Neil et al. 2017).[4] However, this cadre of providers, who deliver care in the community as well as at subcenters and primary health centers, has not necessarily had adequate training in the skills and competencies they need to provide quality maternal health care. Overall, many providers at all levels, including physicians, lack some of the core competencies required to provide the full range of maternal health services, including emergency obstetric care (EmOC) (Vora et al. 2009).

To build these providers' capacity, the strategy funded the development and dissemination of 20 curricula and trainings for *all* levels of providers on maternal health care and on processes for referral and care coordination. The target audience for these curricula was groups of providers well positioned to reach large numbers of women, especially women who might have difficulty accessing essential maternal health services at community health centers (CHCs). Training covered topics that would enhance skills in the core maternal health functions most likely to improve health outcomes, such as antenatal care (ANC), referrals, and intrapartum care (Exhibit 2). These curricula built on many government guidelines for quality maternal health services (National Health Mission 2013), with an emphasis on ensuring compliance with guidelines and establishing mechanisms for regular trainings, mentorship, and supportive supervision. Most curricula developed under the strategy were finalized in the early stages of the strategy; the endline period focused on using the developed curricula to expand reach of the trainings.

The strategy steadily increased the number of trained providers over time. By the endline period, more than 40,000 providers across the country, including doctors, nurses, midwives, auxiliary nurse midwives (ANMs), FLWs, and non-clinical facility staff, were trained using strategy-developed curricula (Exhibit 2).

[4] Obstetricians are not typically staffed at public facilities below the CHC level.

Most trained providers reported an improvement in their skills in the key topics covered by the trainings, and reported they were better prepared to provide clients with quality care.

Exhibit 2. Curricula developed and providers trained under supply substrategy

Curriculum topic	Provider
Preconception care Delivery of patient-centered care	ANMs, Nurses, Doctors, FLWs
Antenatal and postnatal care Adherence to quality of care standards	Midwives, ANMs, Doctors, FLWs
Referrals Care coordination for delivery and intrapartum care	Nurses
Dakshata (intrapartum and postpartum care) Adherence to quality of care standards	ANMs, Nurses, Doctors, Facility staff
Technology and mobile job aids Data capacity and data-driven decision-making	Nurses, Facility staff, Doctors, FLWs
Skilled birth attendance Critical birth functions, such as EmOC	Midwives
Standards for maternity care **(e.g., LaQshya, Manyata, emergency management)** Adherence to quality of care standards	ANMs, Nurses, Doctors
Management of health facilities Data capacity and data-driven decision-making	RKS members, Facility managers
Respectful maternity care Delivery of patient-centered care	ANMs, Nurses, Doctors
Midwifery training Performance of essential delivery services	Midwives

ANMs
Doctors
Facility staff
FLWs
Midwives
Nurses
RKS members
Facility managers

Expanding the skills and capability of providers at the subcenter, primary health center, and CHC levels helped satisfy unmet needs for medical care in the strategy's targeted geographies. Scaling up such efforts could have wide implications for addressing unmet needs across the nation. Regulated public sector facilities, especially at the CHC level, cannot meet the needs of about one-fifth of the rural population (O'Neil et al. 2017). Midwives, however, can provide quality maternal health care in a range of settings, including in facilities below the CHC level, and therefore hold great promise for expanding access to quality services (Sandall et al. 2016).

1.2. *Strengthening facility-based quality assurance*

	Early stage progress	Midline period progress	Endline period progress	Overall strategy contributions
	13 active grants under approach	2 active grants under approach	5 active grants under approach	13 grants reported on this approach
	4 grants offering training centers/ programs	3 grants offering training centers/ programs	1 grant offering training centers/ programs	8 grants offering training centers/ programs
	164 facilities accredited	135 facilities accredited	123 facilities accredited	422 facilities accredited
	~330 facilities with QA procedures	89 facilities with QA procedures	356 facilities with QA procedures	~538 facilities with new or ongoing QA procedures[a]

Note: Data in this table provide information on the indicators associated with Outputs 1.2.1 and 1.2.2 , and Outcomes 1.2.1, 1.2.2, and 1.2.3 in Appendix A, Exhibit A.3.

[a] Some facilities received ongoing support for QA procedures across phases and are thus represented in multiple columns; the "overall strategy contributions" column provides a unique count of facilities across all periods.

The environment in which providers work influences their ability to deliver quality care. Recognizing this factor, the substrategy funded processes and infrastructure to facilitate providers' achievement of nationally and internationally recognized quality standards. Substrategy activities included developing and institutionalizing policies and procedures to help facilities implement continuous quality improvement and QA practices, as well as supporting facilities in obtaining accreditation or certification to demonstrate consistent compliance with widely accepted quality standards. Providers conducted these activities to improve their facilities' capacity to monitor and improve the quality of their maternal health services. Attaining accreditation or certification also incentivizes facilities to maintain processes that would deliver consistent quality of care.

Through the substrategy, several organizations developed training centers to provide the infrastructure to continually develop skills for providers in Rajasthan, Uttar Pradesh, Gujarat, Maharashtra, and Madhya Pradesh. Key skills included how to develop facility QA processes and procedures as well as specific clinical skills such as EmOC and skilled birth attendance. By offering opportunities for ongoing training and skills building, these grants are helping providers develop their individual capacities, learn how to train others, and bring good practices back to their facilities.

The strategy facilitated the development of most training centers early in its implementation. As these centers were established, grantee efforts supported through the strategy shifted to obtaining accreditation and implementing QA procedures. Over the course of the strategy, approximately 538 facilities have begun to institutionalize QA procedures and quality reporting, including adopting the National Quality Assurance Standards (NQAS) checklists and establishing dedicated QA teams, processes, and information systems. In addition, 422 facilities have demonstrated an ability to maintain quality standards and engage in meaningful quality improvement practices and have sought accreditation from core bodies such as the National Accreditation Board for Hospitals and Healthcare Providers (NABH), Manyata, or Labor Room Quality Improvement Initiative (LaQshya) (Exhibit 3).

Exhibit 3. Accreditation and certification obtained by health facilities

Source: Data provided by MHQoC strategy grants working on accreditation and certification, as of July 2019.

ISO = International Organization for Standardization, NABH = National Accreditation Board for Hospitals and Healthcare Providers, PHC = Public Health Center.

To put these strategy contributions in context, many of the QA practices being instituted by grantees, as well as the standards used for LaQshya and Manyata certification, are based on commonly used, evidence-based protocols, such as the World Health Organization (WHO) Safe Childbirth Checklist (WHO 2015). The Safe Childbirth Checklist has been extensively field-tested and demonstrated to improve adherence to essential, evidence-based best practices that, when consistently used, can help prevent the most common causes of maternal mortality (WHO 2015; Spector et al. 2012). However, it is not yet known whether introducing these practices or meeting these standards leads to sustained improvement in providers' or facilities' ability to deliver high quality care. A recent randomized controlled trial revealed that an intervention designed to support adherence to the Safe Childbirth Checklist in Uttar Pradesh increased facility staff's adherence to some practices on the checklist, but that adherence declined after the intervention ended (Semrau et al. 2017). The QA practices and standards grantees implemented during the strategy period are still in relatively early stages and thus have not yet generated answers to questions about long-term adherence or health outcomes.

1.3. Improving adherence to existing quality protocols and guidelines

	Early stage progress	Midline period progress	Endline period progress	Overall strategy contributions
	10 active grants under approach	5 active grants under approach	5 active grants under approach	12 grants reported on this approach
	▸ More than 300 facilities received TA	▸ 281 facilities received TA	▸ More than 300 facilities received TA	▸ More than 700 facilities received new or ongoing TA[a]
	▸ More than 130 facilities received emergency obstetric care (EmOC) training	▸ ~150 facilities received EmOC training	▸ More than 300 facilities received EmOC training	▸ More than 300 facilities received new or ongoing emergency obstetric care training[a]

Note: Data in this table provide information on the indicators associated with Outputs 1.3.1 and 1.3.2, and Outcomes 1.3.1 and 1.3.2 in Appendix A, Exhibit A.3.

[a] Some facilities received ongoing TA or EmOC training across phases and are thus represented in multiple columns; the Overall Strategy Contributions column provides a unique count of facilities across all periods.

Investments in strengthening providers' skills and improving facilities' QA capabilities have been critical to the supply substrategy, but these improvements cannot be sustained without support at the health systems level to provide financing, technical assistance (TA), and political will. For this reason, the MHQoC strategy intended to provide TA for health agencies' statewide implementation of quality guidelines. Although these specific state-level grants did not come to fruition due to governmental funding policies to international non-profits, other grants under this approach supported the provision of TA more generally, including for core maternal health skills such as EmOC. Investments in these health systems supports were intended to promote delivery of consistent and sustainable care in alignment with acceptable quality standards.

Through TA and ongoing quality improvement efforts, facilities can be better prepared to adhere to nationally and internationally recognized protocols and guidelines, thereby ensuring a sustainable, long-term supply of quality maternal health care. As noted above, 422 facilities have demonstrated adherence to quality protocols and guidelines through accreditation. In addition, more than 300 facilities across four states have received TA to support adherence to specific standards related to intrapartum care and referrals, and most of these facilities (including all facilities covered in the endline period) have added the ability to offer EmOC services. Many facilities have received ongoing support across most of the MHQoC strategy to fully codify and institutionalize best practices. In several places, including Rajasthan and Madhya Pradesh, local and state governments have demonstrated an interest in adopting and expanding grantees' TA initiatives, increasing the likelihood of a broad impact on health systems' ability to ensure high quality care.

Although it seems likely that supporting health systems to develop and enact quality-focused policies will improve the supply of quality care, MHQoC strategy grantees working on this approach are still developing evidence on how much these activities impact health care. However, state governments' interest in some TA programs, such as Pathfinder's nurse mentor model in Madhya Pradesh, is a promising signal that policymakers have an appetite for adopting and implementing state-level models for MHQoC. This indication is consistent with findings that Indian health officials, researchers, and activists have noted a pressing need for innovative state-level policies to promote skilled attendance at birth (Sharma et al. 2015).

Contributions of strengthened supply to maternal health outcomes. The MHQoC strategy has made the following important gains in strengthening the supply of quality care: developing standards and guidelines that have gained both state- and national-level traction, providing trainings and curricula for large numbers of providers, introducing facility-level quality improvement and certification, and generating preliminary interest in state-level adoption of promising quality improvement policies. However, it remains to be seen whether these quality improvements will ultimately lead to better maternal health outcomes such as a reduction in morbidity or mortality. Existing evidence linking supply-side quality interventions to improved health outcomes is limited and often of poor quality (Dettrick et al. 2013). This lack of evidence that quality interventions impact outcomes may be because the factors most likely to have a big impact on these outcomes are much more "upstream" issues, such as literacy, poverty, or geographic location. It might also be that the behaviors targeted by common supply-

side quality interventions are necessary but not sufficient to improve the quality of maternal health care (Delaney et al. 2019). More research is needed to understand the relationship between quality and health outcomes to better focus supply-side interventions to improve quality.

Considerations for the future supply of MHQoC

As the maternal health field looks beyond the MHQoC strategy and its achievements in the three targeted supply-focused approaches, the findings to date reveal several cross-cutting next steps that could strengthen the supply of quality maternal health care:

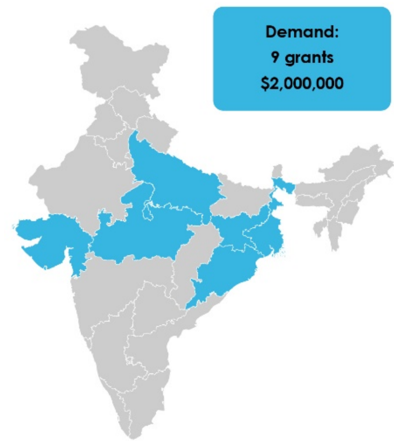
- **Scaling up and sustaining clinical and quality management standards to promote consistent quality of care across the country.** Many strategy-supported training programs, such as Pathfinder's nurse mentorship program, have been pilots or relatively localized efforts. More information is needed on what works *at scale* to put guidelines into practice and institutionalize quality improvement. Access to ongoing support and mentorship for providers is likely to be a key component of this expansion; MHQoC strategy-supported grantees have succeeded at training large numbers of providers and developing and testing strategies to give these trainees recurring supportive supervision or mentorship, but questions remain about the ideal frequency, mode, and sustainability of this ongoing support. It is also important to consider the design and structure of this support; several grantees have found that collaborative and adaptive trainings, TA, and other forms of support have been most effective at promoting long-term adherence to standard clinical and management practices, but that more hierarchical models are less effective.

- **Measuring and documenting the impact of quality improvement on quality of care and health outcomes.** To make the case for adopting quality of care standards, it is essential to have strong measurement and evaluation approaches to assess the effect quality improvement has on care and health outcomes. Specific studies by grantees have illustrated the power of evidence in motivating government to adopt strategy approaches. These studies and other data surfaced through the supply substrategy represent an initial contribution to the evidence base on quality of care interventions. However, more evidence about the long-term health outcomes of quality improvement efforts is needed to disentangle the relative importance of facility-level quality improvement for strengthening the supply of quality care, motivate providers and facility staff to undertake quality improvement, and lay the groundwork for state- and national-level policies to improve quality.

- **Looking beyond the focal areas of the MHQoC strategy to address other critical gaps in the MHQoC health ecosystem.** Grantee organizations and other stakeholders have made significant progress in building and supporting an MHQoC ecosystem in which key actors—including community members, providers, policymakers, and researchers—work together to improve the supply of quality maternal health care. However, these stakeholders have also pointed to important, longer term systemic changes that are needed to improve the quality of maternal health care available in the country. These modifications include changing health system financing to ensure equitable access to quality care, strengthening information systems to support the coordination of care across settings, and implementing functional referral systems.

2. Demand

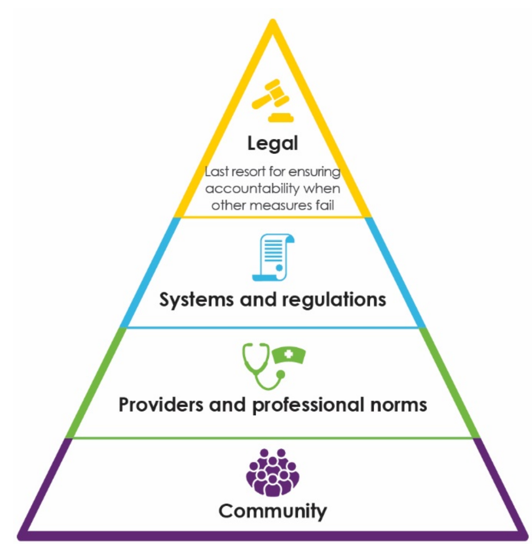
Existing evidence has shown that community-based education campaigns can increase women's knowledge of and demand for quality maternal health services. Such campaigns are aligned with the National Health Mission's commitment to "communitizing" health services by informing communities of their health rights and promoting community participation in planning and monitoring of health services. Yet few other funders have chosen to work in this area for MHQoC in India. Thus, the MHQoC strategy has made key contributions in defining and conceptualizing accountability in this context, and in testing novel accountability mechanisms as a way to generate demand for quality services. The MHQoC strategy addresses the different layers of accountability in the health system, starting with the community as the first and most important agent of accountability, and ending with legal strategies as a last resort for ensuring accountability when other mechanisms fail (Exhibit 4). Specifically, the demand substrategy focused on three approaches:



- Thousands of people participated in **accountability activities**
- **Five novel community accountability mechanisms** tested
- **Legal strategies** used to protect health rights

- *Informing women and families about quality and rights:* Ensuring that communities are aware of their rights and entitlements related to MHQoC.
- *Developing and testing community accountability mechanisms:* Identifying community accountability approaches that could strengthen demand for quality care.
- *Scaling up legal strategies:* Using public interest litigation and other legal mechanisms to hold the government accountable for delivering quality maternal health care.

Exhibit 4. Layers of accountability in the Indian health system



2.1. *Informing women about quality and rights*

	Early stage progress	Midline period progress	Endline period progress	Overall strategy contributions
	6 active grants under approach	5 active grants under approach	3 active grants under approach	8 grants reported on this approach
	All 6 grants increased awareness of rights	4 of 5 grants increased awareness of rights	1 of 3 grants increased awareness of rights	Most grants reported greater awareness of rights
	~10,000 women participated in community accountability activities	9,560 women participated in community accountability activities	Number of women participating not reported by grants	~20,000 women participated in community accountability activities
	More than142 leaders engaged in accountability activities	1,048 leaders engaged in accountability activities	Number of leaders engaged not reported by grants	More than 1,000 leaders engaged in accountability activities

Note: Data in this table provide information on the indicators associated with Outputs 2.1.1 and 2.1.2, and Outcomes 2.1.1 and 2.1.2 in Appendix A, Exhibit A.3.

Community-based information and mobilization campaigns to increase women's demand for quality care are most likely to be successful when they have a relatively narrow focus (Tripathy et al. 2010; More et al. 2012). Thus, grants in the demand substrategy focused on women's rights to care as the common platform for raising awareness among women, their families, and community leaders.

Efforts to inform women and communities about health rights and entitlements facilitated the participation of about 20,000 or more women in accountability efforts and increased community members' knowledge about MHQoC steadily over time—though limited capacity after grants ended might have affected participation at the endline. These engagement efforts took the form of informational hotlines, poster campaigns, and community meetings. Although every campaign did not measure the number of individual women or community leaders who were engaged, community meetings to share information about the state of health services and the results of monitoring activities seemed to hold promise for reaching especially large numbers of community members. Organizations holding such meetings at the village and block levels reported that, often, hundreds of community members would attend them.

There is a large evidence base in the health sector demonstrating that community-based education campaigns are effective at increasing women's knowledge of maternal health services. These programs are often also associated with increased demand for contraceptive services, improved at-home maternal care practices, and more care-seeking from trained providers for maternal and newborn health concerns (Achyut et al. 2016; Leon et al. 2014; Kumar et al. 2012). For this reason, community education, and especially participatory learning approaches, are seen as key steps in generating demand for quality services (Prost et al. 2013).

2.2. *Developing and testing community accountability mechanisms*

Early stage progress	Midline period progress	Endline period progress	Overall strategy contributions
7 active grants reported testing community accountability mechanisms 12 active grants reported on results of accountability programs	2 active grants reported testing community accountability mechanisms 4 active grants reported on results of accountability programs	1 active grant reported testing community accountability mechanisms 3 active grants reported on results of accountability programs	8 grants reported testing community accountability mechanisms 12 grants reported on results of accountability programs
5 mechanisms tested	2 mechanisms tested	1 mechanism tested	5 mechanisms tested

Note: Data in this table provide information on the indicators associated with Outputs 2.2.1 and 2.2.2, and Outcomes 2.2.1 and 2.2.2 in Appendix A, Exhibit A.3.

Community accountability mechanisms in other policy areas and in other contexts have been shown to spread awareness among community members about their rights and entitlements, generate feedback on the quality of a public service, and hold service providers accountable (Banerjee and Duflo 2006; Bjorkman and Svensson 2009). However, the specific community accountability mechanisms to improve MHQoC in India have not yet been tested rigorously, and as a result, there is less supporting evidence on what works and what doesn't.

To optimize the design and implementation of these mechanisms, the strategy developed and tested five mechanisms (all beginning in the early stages of the strategy) to produce promising and effective models for community accountability in MHQoC. Although these accountability mechanisms defined success differently depending on their stage of implementation, the outcomes that they targeted fell into three key domains: (1) increasing community engagement in accountability activities, (2) increasing institutional responsiveness to accountability data, and ultimately, (3) improving MHQoC outcomes. As grants ended over time, all mechanisms have achieved some measure of success in the first two domains, but only community-based monitoring has demonstrated impacts on more distal MHQoC outcomes to date (Exhibit 5).

Exhibit 5. Community accountability: mechanisms tested under strategy and results achieved

Accountability mechanism	RESULTS ACHIEVED		
	Community engagement in accountability activities	Institutional responsiveness to accountability data	MHQoC outcomes
Community-based monitoring	Increased participation of community members in community-based monitoring-related meetings	• Increased material and monetary support from community leaders to transport pregnant women to hospitals for delivery	• Improved early pregnancy registration, awareness of high-risk symptoms, and use of ambulances • Increased institutional deliveries
Help lines	Increased number of calls from community members	• Agreement from district health officials to review help line data and address issues • Improved availability of equipment and electricity in public facilities	No evidence of MHQoC outcomes was found for this approach
Hospital management societies (Rogi Kalyan Samiti)	Increased awareness of responsibilities and increased activities among members	• Improved grievance redressal mechanisms • Improved availability of medicines and equipment • Improved attendance of health workers • Improved facility infrastructure	No evidence of MHQoC outcomes was found for this approach
Maternal death reviews and social autopsies	Increased community engagement in monitoring and discussing maternal deaths	• Willingness from district and state officials to review reports and identify systemic issues that might contribute to maternal deaths	No evidence of MHQoC outcomes was found for this approach

Source: Analysis of MHQoC strategy documents and data collected by Mathematica.

All of the accountability mechanisms tested under the strategy have shown some promise through relatively small-scale pilot testing. However, more study is needed to assess which mechanisms hold the most potential for yielding wide-reaching, sustained quality improvements. Findings from the accountability program in Gujarat suggested that accountability mechanisms might be most successful at the local and district levels, but attaining buy-in and responsiveness at higher levels of government is much more challenging (Hamal et al. 2018).

2.3. *Scaling up legal strategies*

	Early stage progress	Midline period progress	Endline period progress	Overall strategy contributions
	2 active grants under approach	**1 active grant under approach**	**1 active grant under approach**	**2 grants reported on this approach**
Professionals trained	**More than 1,400 professionals trained**	**314 professionals trained**	**1,150 professionals trained**	**More than 2,500 professionals trained**
State-level networks	**6 state-level networks formed**	**No state-level networks formed**	**No state-level networks formed**	**6 state-level networks formed**
Cases	**~20 cases filed and won[a]**	**198 cases filed and 95 won**	**232 cases filed and 102 won**	**450+ cases filed and 200+ won**

Note: Data in this table provide information on the indicators associated with Outputs 2.3.1 and 2.3.2, and Outcomes 2.3.1 and 2.3.2 in Appendix A, Exhibit A.3.

[a] The number of cases in the early stage period are estimated across SLICs two grants.

Legal approaches under the strategy complement the more grassroots community accountability mechanisms designed to hold the government accountable for providing specific maternal health services. When other accountability mechanisms fail, legal strategies are a last resort for holding governments accountable for meeting citizens' health needs. These strategies can help address past failures of government institutions to live up to the rights guaranteed to their people, and to prevent abuses (MacArthur Foundation 2013).

The only grantee under the strategy, Socio-Legal Information Center (SLIC), took several steps to advance legal strategies to ensure access to quality services under two successive MHQoC strategy grants. SLIC trained more than 300 lawyers and more than 800 allied professionals and activists on its legal strategies. This preparation led to the establishment of six state-level networks of legal and allied professionals who identify potential cases, share strategies and best practices on legal options, and advance public interest litigation. Through these networks of trained professionals, SLIC has supported the filing of 232 new cases by SLIC participants and allies and the receipt of more than 100 orders from the Supreme Court and High Court mandating the availability of safe abortion services, nutritional supplements to pregnant and lactating women, and payments to frontline workers.

SLIC's approach to legal accountability

SLIC relies on local and state-level networks of legal and allied professionals to identify MHQoC issues that the legal system should address and formulates strategies for litigating these issues. This approach allows legal advocates with a strong understanding of local contexts to pursue cases that are likely to have a large impact. In one such high-profile case, Devika Biswas v. Union of India, the Supreme Court affirmed women's right to reproductive autonomy and banned sterilization camps taking place outside of medical facilities—a judgment with wide-ranging implications for all women receiving contraceptive services, especially in the public sector.

The global health and development communities have long asserted that maternal health is a human right and have advocated for rights-based approaches to implementing policies and programs to reduce maternal mortality (UNHCR 2012). However, researchers and policymakers have noted that this right does not come with any globally recognized "legal teeth." There are no internationally enforceable consequences for failing to ensure a person's right to quality maternal health care (Bergstrom 2016). At the national level in India, using the legal system to hold the government accountable for delivering on its ambitious maternal health policies is a novel strategy that will likely generate important lessons for other countries.

Contributions of increased demand to maternal health outcomes. The MacArthur Foundation has been a leader in conceptualizing accountability frameworks, testing accountability approaches, and linking accountability to increased demand for quality health services (MacArthur Foundation 2013). Although evidence is limited, accountability programs, especially community-based monitoring, seem to hold promise for improving health outcomes (Gullo et al. 2016; George et al. 2018). Furthermore, a recent review found that many of the major causes of maternal mortality and poor maternal health equity in India are a result of issues such as gaps in provider and facility performance, weak bureaucracy and poor administration of health agencies, and failure to enforce laws mandating high quality and equitable care—all issues that are best addressed through community, professional, and legal accountability mechanisms (Hamal et al. 2018). These findings suggest that a continued focus on community and legal

accountability as mechanisms for generating demand could lead to more utilization of quality services and help improve maternal health outcomes.

Considerations for future demand for MHQoC

The strategy has largely succeeded at catalyzing action on and interest in accountability mechanisms to improve the availability of quality maternal health care. For instance, much of the accountability work started under the MHQoC strategy goes on today, with several organizations continuing to implement community accountability programs and seeking opportunities to refine or expand this work. Continued testing, implementation, and scaling of accountability work will be necessary to keep advancing this field. In particular, lessons learned from the strategy have highlighted these necessary next steps:

- **Emphasize sustaining and deepening community engagement in community accountability**. Community accountability mechanisms under the strategy have not definitively demonstrated whether these programs can—or need to—cultivate deeper, more sustained engagement from community members. Recognizing and respecting the day-to-day demands on individual community members, most programs are set up to require minimal participation, such as attending regular community meetings or occasionally providing feedback on health services to a health worker or local elected representative. As a consequence, programs are rarely equipped to encourage, recognize, or capitalize on participants' interest in engaging more deeply to hold the health system accountable for delivering high quality services. Although community accountability programs have demonstrated success at eliciting quality improvements with these light-touch models, deeper community involvement and engagement could make them even more successful at attracting the attention of health officials and ensuring their responsiveness to community needs (Prost et al. 2013).

- **Deliver on the National Health Mission's stated commitment to encouraging communities to lead health planning and monitoring.** The innovative programs piloted under the MHQoC strategy have been developed and tested in a context of growing national interest in community accountability. In particular, the National Health Mission's development of guidelines for the "communitization" of health has signaled an interest in widespread rollout of accountability efforts, but implementation of these guidelines has been uneven (Vellakkal et al. 2017). Thus, efforts to work closely with state and national health officials to support the scale-up of community accountability mechanisms will be important to move implementation of these mechanisms forward.

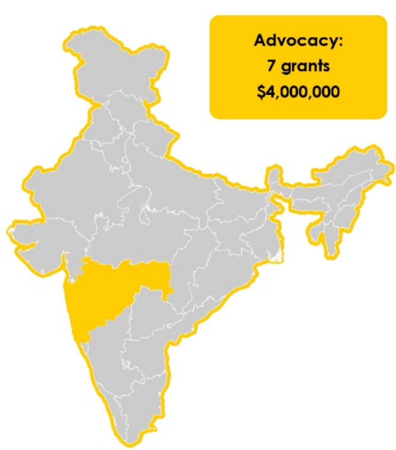
- **Document the impact of community accountability on health care utilization and health outcomes.** The MHQoC strategy has found that women who were exposed to information about maternal health rights and entitlements were more likely to use publicly provided maternal health services in Gujarat (George et al. 2018). These findings indicate that meaningful community participation in the design of accountability tools, support and capacity building for participating community members, and local political will to take accountability efforts seriously were critical factors in the program's success. They also provide important information about how community accountability programs can effectively generate demand for quality services. Unfortunately, evidence on this topic is generally limited. Deeper and longer-term investigations of whether and

how community accountability programs can foster community ownership of health planning and monitoring, and whether this increased engagement and quality improvement can promote service utilization and improve health outcomes, will inform continued support for these programs.

- **Continue to support legal strategies to promote accountability when other methods fall short.** Successful public interest litigation can have a large impact on the demand for and availability of quality maternal health services. Given the large potential impact of legal strategies for making quality care available, as well as the complementary role that legal strategies play within a broader accountability framework, legal strategies could be an important mechanism for strengthening demand for quality care.

3. Advocacy

As India's health agenda has shifted to tackling non-communicable disease and universal health coverage, the MHQoC strategy's targeted advocacy has maintained a focus on addressing maternal health as a right. The advocacy substrategy has proved instrumental in generating evidence to build the intellectual scaffolding to support other advocacy activities, as well as building networks and coalitions to enable coordinated and sustained maternal health advocacy. The substrategy has also supported grantees to conduct ad hoc advocacy to take advantage of emerging opportunities to advance the MHQoC agenda, and to consider how best to sustain their work and advance the MHQoC agenda after the strategy ends. The approaches this substrategy targets have helped generate and make use of the information needed to advance the goals of the demand and supply substrategies:



- Dozens of **research articles and reports** published
- 10 national and state **advocacy networks** established
- All strategy grantees plan to **continue MHQoC work**

- *Generating and disseminating evidence*: Conducting research and producing journal articles, reports, briefs, and advocacy tools to promote evidence-based MHQoC policy.

- *Promoting civil society advocacy*: Supporting advocacy networks, coalitions, and one-on-one conversations to promote the goals of the supply and demand substrategies.

- *Sustaining MHQoC efforts*: Supporting MHQoC strategy grantees as they identify ways to sustain their work after the strategy ends.

3.1. *Generating and disseminating evidence*

Early stage progress	Midline period progress	Endline period progress	Overall strategy contributions
13 active grants under approach	10 active grants under approach	8 active grants under approach	19 grants reported on this approach
▸ More than 10 research studies	▸ 26 research studies	▸ More than 16 research studies and reports	▸ More than 50 research studies and reports

Note: Data in this table provide information on the indicators associated with Outputs 3.1.1 and 3.1.2, and Outcomes 3.1.1 and 3.1.2 in Appendix A, Exhibit A.3.

Indian policymakers have demonstrated a willingness to fund and adopt maternal health interventions that have been found to improve quality (O'Neil 2017), which has been borne out by some strategy-supported efforts, such as Society for Education Welfare and Action (SEWA) Rural's success in collaborating with the Gujarat government to scale up its ImTeCHO, an mHealth intervention, to improve frontline workers' performance after SEWA Rural demonstrated the intervention's effectiveness (Modi et al. 2017). The availability of key evidence on MHQoC can assist key stakeholders (including policymakers, health officials, non-governmental organization [NGO] leaders, and advocates) and influence their decisions on MHQoC.

The advocacy substrategy has supported continual generation and strategic dissemination of relevant evidence through multiple channels over time. More than 50 peer-reviewed journal articles, technical reports, and non-technical publications leveraging MHQoC-related evidence have been published under the substrategy. This evidence has led to actions by policymakers at the state and national levels (Exhibit 6).

Exhibit 6. Leveraging evidence for advocacy

State	Evidence used	Application of Evidence
Rajasthan	Quarterly monitoring reports using **quality improvement indicators**	Used by district health manager and reproductive and child health officer to advocate for MHQoC
Tripura	Continued and strengthened support to the national and state governments for **improved availability and quality of comprehensive abortion care (CAC) services** at the state and district levels, especially to states where need is high	Used to assist the government of Tripura in conducting a state-level training for trainers on CAC
Madhya Pradesh	Results from a descriptive study of a **continuing medical education (CME) program** for doctors (Sethuraman et al. 2015)	Used to advocate for statewide scale-up of the CME program
Andhra Pradesh	Results from multiple studies of **mHealth tools** such as a coordinated primary health model developed and piloted at Karuna Trust-run primary health centers in Gumballi (Karuna Trust n.d.; 2018)	Assisted the government of Andhra Pradesh in deciding to run a program on non-communicable diseases for 9 million women
Uttar Pradesh	Results from study on the functioning of **QA mechanisms** in five selected health facilities in Lucknow district in November 2017 (Population Foundation of India 2017)	Helped state mission director of the National Health Mission and State Program Management Unit to advocate for a plan to address the issues and gaps in facility QA
Gujarat	Results from randomized controlled trial on an **mHealth** application (Modi et al. 2017)	Used to advocate for scaling up the intervention to the entire state
National	Results from research conducted by early-career Indian researchers on a **variety of maternal health topics**, using national data sets	Used to advocate for positive MCH policies at a meeting of key government officials from the MCH division of the Ministry of Health and Family Welfare (MoFHW)

Source: Analysis of MHQoC strategy documents and data collected by Mathematica.

The advocacy substrategy has also been used to grow local capacity to generate meaningful evidence to support MHQoC moving forward. For example, Population Council's support of early-career researchers through the RASTA program has begun to bear fruit: at least nine manuscripts on MHQoC topics have been submitted for peer review or are in preparation. The cultivation of a new generation of locally based MHQoC researchers is a particularly valuable contribution to the field, helping to strengthen the research capabilities of India-based individuals and organizations working in maternal health.

Uses of such rigorous evidence to inform public health policies and programs have helped generate positive and equitable population health outcomes and continue to do so (Macintyre 2003). However, there is little information available on the role that evidence plays relative to other factors in shaping policymakers' decision making (Oliver et al. 2010). Rigorous documentation of how and to whom researchers and advocates disseminate information is an important first step toward better understanding this link.

3.2. *Promoting civil society advocacy efforts*

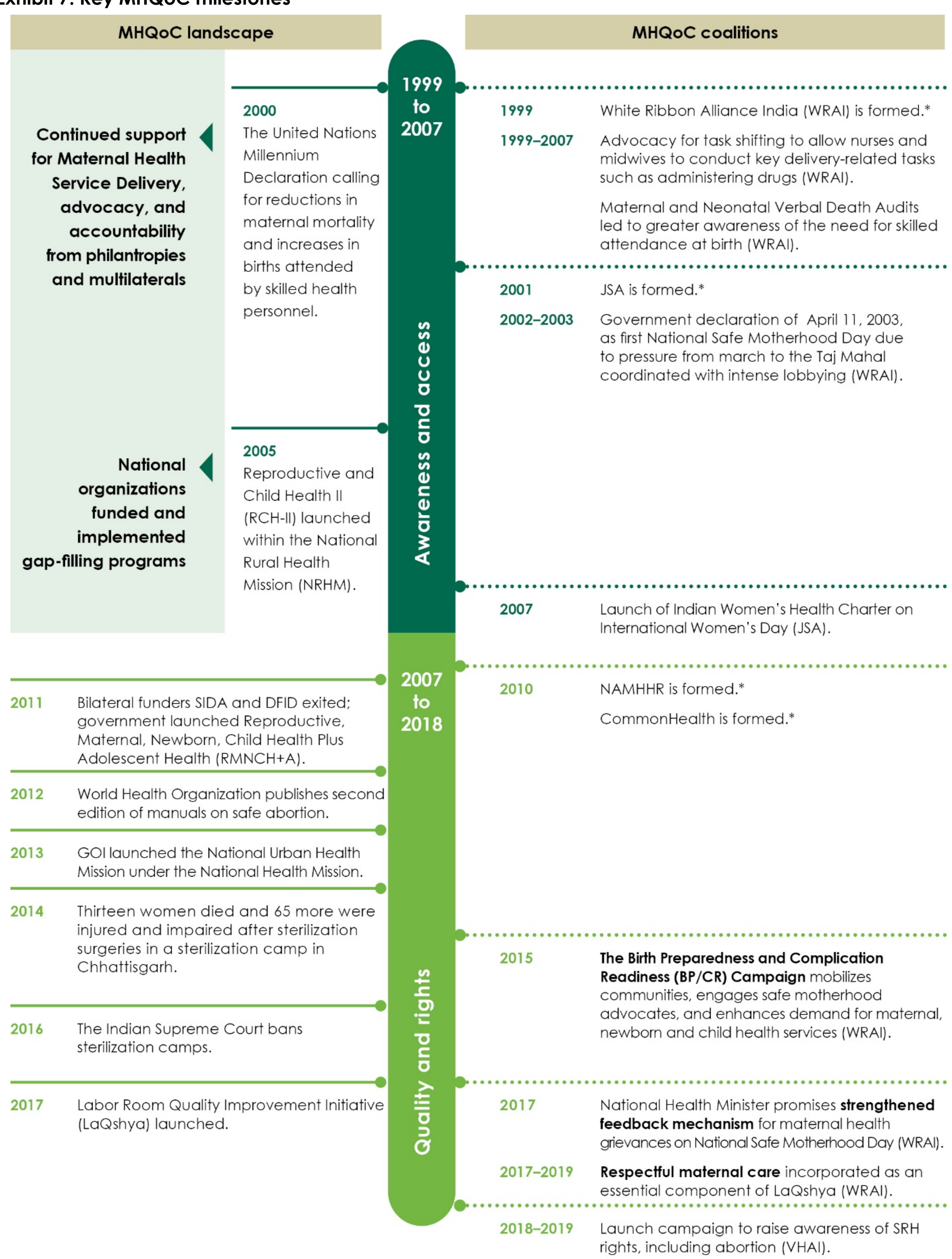
	Early stage progress	Midline period progress	Endline period progress	Overall strategy contributions
	10 active grants under approach	1 active grant under approach	6 grants reported under approach	16 grants reported on this approach
	5 instances of policymaker support for some advocacy efforts	8 instances of policymaker support for some advocacy efforts	6 instances of policymaker support for some advocacy efforts	More than 15 instances of policymaker support for some advocacy
	10 national and state advocacy networks established	No new advocacy networks established	No new advocacy networks established	10 national and state advocacy networks established

Note: Data in this table provide information on the indicators associated with Output 3.2.1, and Outcomes 3.2.1a and 3.2.1b in Appendix A, Exhibit A.3.

MHQoC grantees have engaged in a range of advocacy efforts, from ad hoc, one-on-one conversations with policymakers to formal presentations on their programs to building networks and coalitions to influence policymakers to focus on and prioritize MHQoC issues.

At its start, the strategy supported 10 state- and national-level advocacy networks to promote MHQoC throughout the entire strategy and beyond. Several coalitions had a rich history of working in the population and reproductive health field for more than two decades. Under the strategy, these coalitions worked to promote respectful maternity care (RMC), promote person-centered care, strengthen community accountability, and advocate for quality maternal health services. Because these networks function in complex environments, their impacts can take a long time to materialize and are difficult to attribute to any specific activity. However, when the key activities and achievements of strategy-supported coalitions are mapped against major events in India's maternal health landscape, it becomes clear that these coalitions are well attuned to the national policy environment, and that they have both responded opportunistically to this environment and have pushed proactively to promote maternal health (Exhibit 7).

Exhibit 7. Key MHQoC milestones



* Indicates coalition supported by the MacArthur Foundation under its MHQoC strategy.

Source: O'Neil et al. 2017; analysis of MHQoC strategy documents and data collected by Mathematica.

As part of their focused efforts, grants under the advocacy substrategy have leveraged existing relationships with policymakers; connections to advocacy networks and coalitions; and new, relevant evidence to advocate for MHQoC where possible. Exhibit 8 summarizes these ad hoc advocacy efforts at the national, state, and local levels. The commitments policymakers have made as a result of this advocacy have varied significantly. Some grantees have expanded or institutionalized MHQoC's work by, for example, establishing Rogi Kalyan Samitis (RKSs, or hospital management societies) and scaling up to ensure the government incorporates RMC into its LaQshya labor room guidelines. Other efforts have targeted local governments—for example, by identifying MHQoC champions at block and district levels.

Exhibit 8. Lobbying and ad hoc advocacy by MHQoC grantees

Grant	Level of government	Result
ARTH 106482	• Block and district	• Advanced MHQoC efforts at local levels of government
JSS 109126	• Block and district	• Advanced MHQoC efforts and programs at local levels of government
SAHAJ 109340	• District and state	• Local certified district health officials attended SAHAJ advisory meetings
MAMTA 107329	• District and state	• District officers and state leaders made quality of care for young married women a priority area
SEWA Rural 108398	• State	• State department of health and family welfare decided to scale up ImTeCHO interventions and other policies and training programs
Anusandhan Trust 107328	• State	• Findings presented to the head of the department of medical education in Maharashtra so that screening for domestic violence tool could be integrated into the academic medical teaching for bachelor of medicine and bachelor of surgery students
PFI 108897	• State	• Supported and funded scale-up efforts to improve RKS functioning
C3 108898	• National	• Incorporated RMC as an essential component of the government's LaQshya initiative
Pathfinder 151209	• State and national	• Pathfinder was included in the national and state mentoring teams for the LaQshya program • ANM induction trainings monitored • Part of a maternal death surveillance and response committee for periodic maternal death review in all intervention districts • Monitored skill lab trainings of LaQshya initiative for medical colleges

Source: Analysis of MHQoC strategy documents and data collected by Mathematica.

ImTeCHO = Innovative Mobile phone Technology for Community Health Operations, RKS = Rogi Kalyan Samitis, RMS = respectful maternity care, SAHAJ = SAHAJ-Society for Health Alternatives

Although the strategy has likely influenced some actions to promote MHQoC, stakeholders noted that other health issues (non-communicable diseases, urbanization, and persistent socioeconomic inequality) could de-prioritize maternal health. As a result, coordinated, sustained advocacy will be necessary to continue the advancement of maternal health quality of care (Kendall et al. 2015).

3.3. Sustaining MHQoC work

The Foundation sought to equip grantees with the ability to carry on, evolve, and scale up their work after the strategy ended. Instead of funding a capacity-building or resource center, as many strategies have done, the Foundation took the unusual step of awarding a grant to Dasra, an organization that works to strengthen NGOs, to provide technical assistance to grantees on marketing and organizational sustainability strategies. In particular, Dasra supported five grant organizations to help them tell their stories, brand and market their work, build the capacity of their organizational leaders, and seek other

sources of funding. Grantees also conducted additional efforts beyond collaborations with Dasra to secure support for their MHQoC work after the strategy's end and the Foundation's exit.

The fruition of these efforts can be seen in the almost half of MHQoC strategy grantees; 9 out of 20 secured additional funding for their MHQoC work. Most of the others are actively pursuing alternative sources of support. All have committed to continuing their MHQoC programming by sustaining, modifying, or expanding the programs supported by the Foundation, and all have obtained relatively long-term funding to support this work for at least one year. Notably, four grantees reported obtaining state government support to scale up their MHQoC work, and other grantees are actively exploring similar possibilities. This finding points to critical state-level interest in and support for MHQoC initiatives.

Because the organizations supported by the MHQoC strategy represent many of the key stakeholders working to advance a quality agenda in India, continuing their work and leveraging it for advancement could prove key to institutionalizing MHQoC in the country and maintaining a focus on quality in the face of shifting political priorities.

Contributions of advocacy to maternal health outcomes. Current evidence on the effectiveness of supply- and demand-side interventions for reducing maternal morbidity and mortality is limited (Dettrick et al. 2013; Gullo et al. 2016), and contributions to this evidence base could be valuable to policymakers and advocates (Kendall et al. 2015). A strong advocacy landscape will also require the continued operation of functional coalitions and partnerships to advance quality. Such networks have been shown to have a significant impact on policymakers' decisions on public health policies and planning (Butterfoss 2007).

Considerations for future advocacy for MHQoC

As the Foundation prepares to exit, continued advocacy by communities and coalitions will help keep MHQoC a state and national priority, especially as other goals such as universal health coverage gain momentum. Key areas for continued advocacy activities include:

- **Fulfilling policymakers' appetite for evidence by documenting the results.** Health officials have repeatedly demonstrated an interest in the evidence that MHQoC stakeholders generate and a willingness to base policy decisions on that evidence. However, policymakers' unwillingness to attribute specific policy changes to the advocacy work of MHQoC strategy has made it difficult to evaluate the influence of these activities. A more rigorous documentation of these efforts, perhaps as part of an advocacy evaluation or outcomes tracing exercise, could help establish the importance of ongoing advocacy efforts and position grantee organizations as influential actors in the MHQoC landscape.

- **Strategically positioning MHQoC within the broader health landscape, including attention to the growing pressure to achieve universal health coverage.** At the beginning of the MHQoC strategy, key stakeholders were concerned that growing national and global interest in universal health coverage could sideline maternal health in general and MHQoC in particular. Moving forward,

framing MHQoC in an equity context and acknowledging that maternal health is a fundamental component of universal health coverage should help keep MHQoC on the agenda. Achieving universal health coverage and reducing inequities in maternal health are closely related goals; evidence from other countries has demonstrated that universal care can drive women's health, and access to essential maternal health services is seen as a core indicator of progress toward universal care (Miller et al. 2015).

III. MOVING FORWARD FOR MHQOC IN INDIA

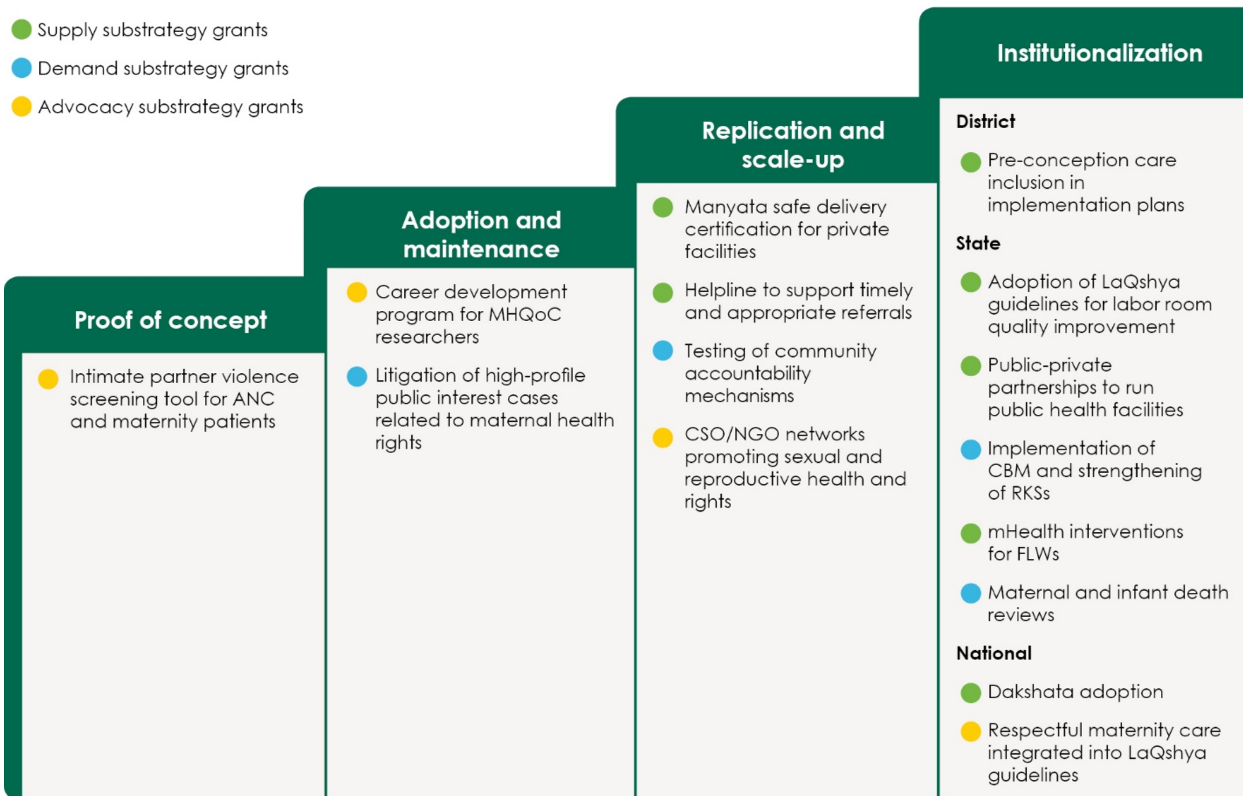
From 1990 until 2015, maternal mortality ratios in India declined to about 130 maternal deaths per 100,000 live births, but the country still has a way to go to reach the Sustainable Development Goal of 70 maternal deaths per 100,000 live births (Government of India 2018; Government of India n.d.). Reaching this goal and improving health for women, children, and their families will involve sustaining efforts begun under the strategy and beyond. Below, we highlight the key considerations for sustaining current momentum and then discuss the stakeholders remaining to carry on the work of maternal health in India.

1. Sustaining the momentum to address maternal health

Sustaining the MHQoC strategy's work require different approaches depending on the stage of the intervention for a specific grant. Analysis of the progress made by strategy grantees revealed that interventions fell into one of four key stages toward sustainability. For grants providing **proof of concept**, sustainability will involve further **adoption and maintenance** to show consistent value when an intervention is attempted again. Interventions already showing this value will need to demonstrate their transferability in various settings—ultimately, that stakeholders can **replicate and scale up** core components of the intervention. Finally, widely applicable and relevant interventions could be at the stage that warrants **institutionalization** through policy.

Most of the interventions implemented under the MHQoC strategy have moved beyond the proof of concept to adoption and maintenance phases; organizations in all three substrategies, working on a range of interventions to advance MHQoC, have focused on replicating and institutionalizing their programs (Exhibit 9). Thus, the MHQoC strategy has conducted much of the work to refine and establish interventions for success, leaving approaches ready for scaling by stakeholders that remain.

Exhibit 9. Stage of MHQoC activities along the pathway to sustainability



Source: Analysis of MHQoC strategy documents and data collected by Mathematica.

ANC = antenatal care, CBM = Community-based monitoring, CSO = civil society organization, FLW = frontline worker, NGO = non-governmental organization, RKS = Rogi Kalyan Samitis

Several common themes have emerged as interventions have advanced along the pathway to sustainability:

- **Evidence can be a valuable foundation for making the case for scale-up and institutionalization.** The ability to produce evidence for the efficacy of a program or intervention helps substantiate the need for it to be scaled up. Strategy grants, even those not explicitly focused on advocacy or generating evidence, have tried to generate and disseminate evidence on their programs. National and state governments have used such evidence to adopt private–public models to run facilities as well as curriculums and approaches to training nurses and other frontline workers.

- **Government partnerships are a promising path to institutionalization.** As several MHQoC strategy grants have demonstrated, government adoption of MHQoC programs can help make these programs widely available across local, state, and national levels of the health system. These relationships can take many forms, including public–private partnerships, in which nongovernmental organizations help run public health facilities with an eye toward improving MHQoC; government adoption of standards, curricula, or guidelines developed by NGOs; and integration of tools such as mHealth job aids developed by NGOs into government protocols for care delivery. Identifying appropriate allies within government agencies requires understanding local context and needs—for example, knowing whether particular state officials are likely to be open to

scaling up training programs for mid- and lower-level health providers, or whether district health officials are likely to be willing to respond to community accountability programs.

- **Outside of government partnerships, sources of funding and support for replication and scale-up are often difficult to identify.** Bilateral and multilateral funders, such as USAID and WHO, have signaled some interest in strategy-supported programs, such as the development of a midwifery curriculum. However, leveraging corporate social responsibility (CSR) funding has met with mixed success. CSR funds often come with strings attached, such as which locations receive interventions; which health issues are addressed; and whether innovations align with geographic areas, disease burden, and the overarching interests of the corporation. When NGO interests meet unique criteria, synergies are possible. Unfortunately, for organizations that have worked long-term on different or broader issues than those typically supported by CSR, the need for external funding with greater flexibility from government and other funders persists.

2. Stakeholders who remain to carry on the work

Sustaining the strategy's momentum will require all sectors to collaborate and coordinate. In particular, it will be necessary for stakeholders in all sectors to closely collaborate with the government through a variety of partnerships and to identify other allies and funders. Key stakeholders all have roles to play:

- **India-based and international NGOs.** These organizations, including those supported under the MHQoC strategy, work with communities to identify needs, develop and test programs, and find partners to expand and institutionalize interventions that work.

- **Government of India**. Government agencies at the local, state, and national levels play important roles in adopting, expanding, and institutionalizing MHQoC interventions. They help to legitimize and disseminate standards and guidelines and to enforce adherence, and they are ultimately responsible for enforcing laws and policies that guarantee the right to quality maternal health care.

- **National and international donors.** A mix of local philanthropic institutions, CSR efforts, international funders, and bilateral and multilateral donors will also need to work together. In particular, forward-thinking and innovative funders will be needed to support less popular or visible MHQoC initiatives, such as legal strategies for advancing access to quality and research related to abortion care.

IV. LOOKING AHEAD

The MHQoC landscape has changed relatively little since the strategy began. In general, key government programs to promote institutional delivery and develop providers' skills remain in place to facilitate access and provision of maternal health services. One new and significant addition is the Government of India's launch of the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana health insurance program. This scheme offers Rs 500,000 (approximately US $7,125) to more than 100 million eligible families every year. The Government of India has also made policies to increase immunization rates, expand access to pharmacies, and reform medical education during this time. Long-standing efforts to promote RMC have also caught on, drawing more attention from the government and field (White Ribbon Health Alliance

2011; Srivastava et al. 2018; Sharma et al. 2019). Unfortunately, the impact these efforts could have on MHQoC is yet to be fully realized. In many parts of the country, deficiencies such as poor and inequitable delivery of clinical care, lack of patient and community engagement, and inefficient health systems, remain.

Reaching the Sustainable Development Goal of a maternal mortality ratio of 70 will likely require more than the incremental changes of the past few years. It will require coordinated and sustained efforts that go beyond any single agency, organization, or individual. Improving quality requires a concerted effort across multiple dimensions of quality—clinical, experiential, and contextual (O'Neil et al. 2017). The MHQoC Strategy has provided information on a range of supply, demand, and advocacy interventions—some evidence-based and others emergent—that if scaled up could have far-reaching impacts on maternal health. With this strong menu of options, the field needs more studies to prove their potential for transferability, scale-up, and effect on outcomes. In particular, studies designed to examine the longer-term outcomes of these potential approaches will be especially important and will help to establish a link between specific interventions improving maternal health care and changes in health outcomes.

Stakeholders should also not lose sight of the multifaceted approach put forward by the strategy and its recognition that supply-side interventions focused on clinical care alone are unlikely to bring about change and move the needle on maternal mortality. Furthermore, even though research has shown isolated tactics with promising effects, strategies focusing on multiple interventions do not show definitively whether and how broad, sweeping quality-of-care improvements affect maternal health (Wong and Kitsantas 2019; Semrau et al. 2017; Nair and Panda 2011). Few studies document the interaction of quality improvement strategies and their collective effect—whether it is simply additive or greatly amplifying. To advance the field, the effect of combined approaches within and across substrategies forwarded by the strategy needs further exploration. This information could convince stakeholders of the value of adoption and collaboration.

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APPENDIX A. SUPPLEMENTAL EXHIBITS

Exhibit A.1. Overview of monitoring, evaluation, and learning questions and approaches

	Questions	Approach	Use of results
Monitor	• What social, economic, and political contexts influence maternal health quality of care in India? • What are the facilitators and barriers to grant implementation? • What (short-term intermediate) outcomes have grants achieved?	**Landscape assessment:** (1) social, political, and economic environment, (2) ongoing quality initiatives; (3) current stakeholders; (4) opportunities, challenges, and direction **Collection and review of grant data:** (1) Collection/documentation of individual grant data; (2) compilation and synthesis of individual grant progress along priority indicators	• Identify and describe external influencing factors • Measure grant-level progress along priority indicators • Assess grant-level implementation and outcomes
Evaluate	• What implementation strategies or approaches have been the most effective? • What progress is being made toward the India Legacy Strategy's objectives?	**Assessment of strategy progress:** (1) review strategy-level implementation and progress, (2) assess combined grantees' contribution to outputs and outcomes and conceptual framework and logic model components	• Assess progress toward the objectives of the conceptual framework and logic model • Assess the contribution to maternal health quality of care
Learn	• Evidence of success and emerging, promising, and best practices were generated? • To what extent are grantees playing a catalytic role?	**Strategy progress:** **Compile key findings from strategy:** (1) synthesis of facilitators and barriers to implementation and outcomes; (2) MEL framework, conceptual framework, and LM updates **Assess sustainability and scale-up capacity and potential:** (1) current evidence and resources for sustainability and scale-up; (2) plans for sustainability and scale-up; (3) other resources and support available	• Compile initial evidence about merging and promising practices • Identify approaches to forward sustainability and scale-up of maternal health quality of care grants

MEL Partners

PRH team	Other Foundation stakeholders	Evaluation and learning partner	Grantees
• MEL vision and guidance • Resource and allocation • Strategy-level monitoring • Critical reflection on MEL findings • Application of learnings to strategy decisions	• Alignment of PRH and Foundation learning needs • Critical reflection on MEL findings • Application of learnings to other Foundation strategies	• Synthesis and clarification of MEL priorities • MEL support and TA • Translation of MEL data/findings to actionable learning • Support PRH learning processes and TOC refinements	• Grant reporting • Participation in MEL activities • Critical reflection on MEL findings • Application of learnings to maternal health quality of care efforts

LM = logic model; MEL = monitoring, evaluation, and learning; PRH = population and reproductive health; TA = technical assistance; TOC = theory of change.

Exhibit A.2. Status of grants in MHQoC portfolio

				Contributed information to:		
Grant number	Grantee	Close date	Status	Early stage report	Midline report	Endline report
93784	Karuna Trust	9/30/2012	Closed*	X		
101465	Jhpiego	4/30/2014	Closed*	X		
97735	Centre for Health and Social Justice	5/31/2014	Closed*	X		
95544	Action Research & Training for Health	12/31/2014	Closed*	X		
106484-0	Jhpiego	9/30/2015	Closed	X		
99541-0	SAHAJ—Society for Health Alternatives	12/31/2015	Closed	X		
100982-0	Centre for Catalyzing Change	3/31/2016	Closed	X		
104990-0	Sahayog	8/31/2016	Closed	X		
108813-0	Centre for Health and Social Justice	12/31/2016	Closed	X		
103736-0	Guttmacher Institute	2/28/2017	Closed	X	X	
101049-0	Socio Legal Information Centre	3/31/2017	Closed	X	X	
108851-0	Ipas	5/31/2017	Closed	X	X	
106701	Population Council	8/31/2017	Closed	X	X	
107329	MAMTA Health Institute for Mother and Child	9/30/2017	Closed	X	X	
106724-0	Karuna Trust	9/30/2017	Closed	X	X	
108398-0	Society for Education Welfare and Action (SEWA) Rural	9/7/2018	Closed	X	X	X
109340-0	SAHAJ-Society for Health Alternatives *	3/31/2018	Closed	X	X	X
108830-0	Socio Legal Information Centre	7/31/2018	Closed		X	X
107328-0	Anusandhan Trust Centre for Enquiry into Health and Allied Themes*	8/31/2018	Closed	X	X	X
106482-0	Action Research & Training for Health	3/31/2019	Closed	X	X	X
108898-0	Centre for Catalyzing Change	3/31/2020	Ongoing	X	X	X
109194-0	Federation of Obstetric and Gynecological Societies of India	11/30/2018	Closed		X	X
1511-150369	Dasra	5/31/2018	Closed	X	X	X
1609-151209	Pathfinder International	3/31/2019	Closed		X	X
109245-0	Population Council	1/31/2019	Closed		X	X
108897-0	Population Foundation of India	9/31/2019	Ongoing		X	X
109126-0	Jan Swasthya Sahyog	12/31/2019	Ongoing	X	X	X
1703-151795	World Health Organization	3/31/2020	Ongoing		X	X

* These grants are considered precursors to the grants made in the MHQoC strategy and, thus, included in Phase 1 analyses.

Exhibit A.3. Strategy-level indicators

<table>
<tr><th>Strategy component</th><th>Priority indicator</th><th>Cumulative progress</th></tr>
<tr><td colspan="3">Substrategy 1: Strengthen supply of quality maternal health services in public and private sectors</td></tr>
<tr><td colspan="3">Approach 1.1. Strengthen human resources to increase provision of quality services (provider level)</td></tr>
<tr><td rowspan="3">Output 1.1.1. Facility-level providers (for example, doctors and nurses) trained using improved guidelines, standards, and technology-based job aids to provide quality care

Output 1.1.2. Community-level providers (for example, FLWs) trained using improved guidelines, standards, and technology-based job aids to provide quality care

Outcome 1.1.1. Facility-level providers (for example, doctors and nurses) have improved capacity to provide quality maternal health service

Outcome 1.1.2. Community-level providers (for example, FLWs) have improved capacity to provide quality maternal health services</td><td>Number and types of curricula developed for training facility-based providers to support quality maternal health services (for example, in-service midwifery curriculum)

Evidence of guidelines and standards for FLWs</td><td>20 curricula and training guidelines developed</td></tr>
<tr><td>Number of facility-based providers trained on maternal health quality standards and/or technology-based job aids

Number of FLWs trained on maternal health quality standards and/or technology-based job aids</td><td>~48,000 FLWs and facility-based providers trained</td></tr>
<tr><td>Evidence of facility-based providers reporting improved ability to deliver quality maternal health services

Evidence of FLWs reporting improved ability to deliver quality maternal health services</td><td>In programs whose providers were asked to report on skills, most trained FLWs and facility-based providers reported improvement</td></tr>
<tr><td colspan="3">Approach 1.2. Strengthen facility-based quality assurance systems (facility level)</td></tr>
<tr><td rowspan="3">Output 1.2.1. QA trainers and mentors to support state QA teams are identified and trained

Output 1.2.2. Facilities conduct monitoring to assess their performance in delivering quality care

Outcome 1.2.1. Facilities implement QA models and procedures

Outcome 1.2.2. Facilities use monitoring information to improve their capacity to provide quality maternal health services

Outcome 1.2.2. Facilities are accredited to provide quality care</td><td>Number of facilities or catchment areas that offer training on maternal health quality standards</td><td>8 grants offer training centers/programs</td></tr>
<tr><td>Number and proportion of targeted facilities that have adopted QA models and procedures

Number and proportion of targeted facilities that regularly use quality data and/or information from QA team to address service provision</td><td>~538 facilities with new or ongoing QA procedures, including the use of QA data to guide service provision</td></tr>
<tr><td>Number of facilities prepared for accreditation</td><td>422 facilities accredited</td></tr>
<tr><td colspan="3">Approach 1.3. Improve adherence to existing quality protocols and guidelines (health systems level)</td></tr>
<tr><td rowspan="2">Output 1.3.1. Service delivery guidelines for quality maternal health care adopted by state governments

Output 1.3.2. Technical assistance provided to improve intrapartum and immediate post-partum services, including referrals

Outcome 1.3.1. High quality maternal health care is delivered consistently in public and private sector facilities

Outcome 1.3.2. Facilities receiving technical assistance improve delivery of services during childbirth</td><td>Number and proportion of targeted facilities reporting that they have received technical assistance</td><td>More than 700 facilities received new or ongoing technical assistance</td></tr>
<tr><td>Extent that quality of routine and basic EmOC procedures are improved among facilities receiving technical assistance</td><td>More than 300 facilities received new or ongoing EmOC training and technical assistance</td></tr>
</table>

Strategy component	Priority indicator	Cumulative progress
Substrategy 2: Strengthen demand for quality services by supporting accountability mechanisms		
Approach 2.1. Inform women and families about the importance of quality and their related rights (awareness)		
Output 2.1.1. Women and their families are provided with information about their health rights Output 2.1.2. Community leaders are provided with information about their health rights Outcome 2.1.1. Women and families know about and participate in efforts to demand high quality health care Outcome 2.1.2. Community leaders know about and participate in efforts to demand high quality health care	Number of women demonstrating knowledge of their health rights Number of family members demonstrating knowledge of their health rights	**Most grants** reported anecdotal and qualitative evidence of greater awareness of rights
	Number of women and their families participating in community accountability processes	**~20,000** women participated in community accountability activities
	Number of community leaders participating in community accountability processes	**More than 1,000** leaders engaged in community accountability activities
Approach 2.2. Support development and testing of community accountability mechanisms (mobilization)		
Output 2.2.1. Technical assistance provided to support development and maintenance of hospital management societies Output 2.2.2. Tools and mechanisms tested to gather community feedback for quality improvement, including technology solutions, are developed Outcome 2.2.1. Hospital management societies monitor and work to improve the quality of health services Outcome 2.2.2. Community accountability tools and mechanisms for quality maternal health services are actively used	Number and type of community accountability mechanisms tested	**5** distinct mechanisms tested
	Actions taken by providers, facilities, or policymakers based on community accountability efforts, including any efforts to establish or strengthen hospital management societies	See Exhibit 5 of the report for examples of actions taken and outcomes achieved
Approach 2.3. Scale up application of legal strategies to strengthen access to quality services (public accountability)		
Output 2.3.1. Trainings at the state or national level conducted for lawyers and other allied professionals (such as social workers, activists, or public health professionals) about government accountability related to quality maternal health services Output 2.3.2. Public interest cases related to maternal health are brought to trial Outcome 2.3.1. Increased awareness among judiciary members, legal professionals, allied professionals, and government representatives about legal obligations related to respectful maternal health care Outcome 2.3.2. Network of lawyers, social activists, NGOs, and communities use public interest litigation to hold the government accountable for providing quality maternal health services	Number of legal professionals trained in a legal strategy for promoting access to quality maternal health services Number of allied professionals (such as social workers, activists, or public health professionals) trained in a legal strategy for promoting access to quality maternal health services	**More than 2,500** legal and allied professionals trained
	Number and nature of networks of legal professionals, social activists, and other allied workers for advancing MHQoC	**6** state-level networks formed
	Number of court orders advancing implementation of policies and programs related to maternal health	**450+** cases filed and **200+** won

Strategy component	Priority indicator	Cumulative progress
Substrategy 3: Build evidence and support advocacy for quality maternal health services		
Approach 3.1. Generate new and leverage existing evidence (evidence)		
Output 3.1.1. Research on MHQoC conducted Output 3.1.2. Existing evidence on MHQoC used to support updates and changes to programs and policies Outcome 3.1.1. Expanded availability of evidence on key indicators of maternal health, including quality of maternal health services Outcome 3.1.2. Increased availability of evidence-based programs to improve quality of maternal health care	Research studies conducted and reports produced on MHQoC by grantees	**More than 50** research studies and reports published
	Number of and extent to which grantees use evidence to advocate for changes to policies and programs	See Exhibit 6 of the report for examples of using evidence to advocate for changes to policies and programs
Approach 3.2. Promote civil society efforts for maternal health advocacy and support (social movement)		
Output 3.2.1. CSO networks and partnerships are active in advocating for improved maternal health policies and programs and greater funding Outcome 3.2.1.a. Policymakers, program managers, and practitioners prioritize MHQoC in developing strategic plans Outcome 3.2.1.b. Increased adherence to existing policies and implementation of programs to improve quality of maternal health services	Number and types of advocacy efforts for MHQoC led by CSO networks or partnerships at the state or national levels	**10** national and state advocacy networks established
	Extent to which policymakers and program managers report that quality of care is a high-priority issue	**More than 15** instances of policymakers' support for advocacy efforts
Approach 3.3. Use evidence and advocacy to sustain maternal health quality of care efforts supported under the strategy (sustainability)		
Output 3.3.1. Grantees identify sources of funding and support to sustain their work at the end of their strategy grants Outcome 3.3.1. Grantees can sustain their specific project work and/or launch new, related projects after the end of their strategy grants	Number of grantees sustaining current project work or launching follow-on projects after their strategy grants	All **20** grantees committed to sustaining current projects or launching follow-on MHQoC work
	Number of grantees receiving other funding (for example, from a foundation or multilateral organization) to support MHQoC	**9** grantees secured additional funding for MHQoC work

Sources: MacArthur Foundation grant proposals, reports, and other documents (2009–2016).

CSO = civil society organization; EmOC = emergency obstetric care; FLW = frontline worker; MHQoC = maternal health quality of care; NGO = nongovernmental organization; QA = quality assurance.