

MacArthur Foundation

**EXPERT CONSULTATION ON ‘TOWARDS  
SAFE MATERNAL HEALTH’: A REPORT**

*September 20, 2013*

## **MacArthur Foundation**

This publication is a synthesis of our consultative discussions on maternal health, held in New Delhi on September 20, 2013, at the India Habitat Centre, New Delhi. The content and recommendations do not necessarily represent the decisions or policies of the MacArthur Foundation.

## **ACKNOWLEDGMENTS**

The MacArthur Foundation is deeply indebted to the panel of experts who attended this consultation and galvanized fresh approaches, investments and deep insights with evidence-to-date for the road ahead.

## **ACRONYMS**

ANC: Ante natal care

ANM: Auxiliary Nurse Midwife

ASHA: Accredited Social Health Activist

ASG: Anti-shock Garment

CHC: Community Health Center

EMoC: Emergency obstetric care

FRU: First Referral Unit

ICPD: International Conference on Population and Development

ICT: Information Communication Technology

HB Meters: Haemoglobin meters

HRH: Human resources for health

IFA: Iron and folic acid

IUD: Intra uterine devices

JSSK: Janani Sishu Suraksha Karyakram

JSY: Janani Suraksha Yojana

MDG: Millennium Development Goals

MDR: Maternal Death Reviews

MH: Maternal health

MMU: Mobile Medical Units

MMM: Maternal mortality and morbidity

MoHFW: Ministry of Health and Family Welfare

NRHM: National Rural Health Mission

OHCHR: Office of the High Commissioner of Human Rights

PHC: Primary Health Center

PPH: Postpartum hemorrhage

QA: Quality Assurance

SRS: Sample Registration System

SHC: Sub Health Center

TBA: Traditional Birth Attendants

TFR: Total fertility rate

WIFS: Weekly Iron and Folic Acid Supplementation

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## 1. CONSULTATION RATIONALE

This expert consultation stemmed from MacArthur Foundation's decision to initiate a critical reappraisal and realignment exercise of its grant making strategy on maternal health (MH), post 10 years of intense engagement in this arena in India.

The consultation was convened specially to seek help from experts in the field to propel the process of foregrounding priority intervention areas (within the structural, implementation, advocacy and policy ambit) in the approaching five-ten years – especially those where there is high promise of leverage and scope for improvement. To ensure positive, long term health outcomes, MacArthur Foundation believes in working strategically with a vision (culled from collaborative wisdom) that can guide future program design, implementation and monitoring and aid policy formulation.

Reducing maternal mortality and morbidity (MMM) has been a focus area for MacArthur Foundation's grant making since 2003. Qualitative and quantitative evaluations in this arena are indicative of the need for swift, high impact interventions for women to exercise informed reproductive choices and have access to health services that are available, accessible and equitable, and making safe motherhood possible.

The Foundation's grants have supported the development of innovative community-based models; strengthening the skills of health professionals to provide safe delivery services; and promote informed advocacy on critical issues related to reducing maternal mortality and morbidity. It also supports research, leadership and national networks to complement these objectives for MH.

Intended areas for MacArthur's future intervention in India are human rights and international justice, and conservation and sustainable development. At this consultation, expert advice was solicited to ascertain whether the priorities that were previously identified for grantmaking in India on the theme of reducing MMM are to remain target intervention areas or fresh touch points for grants need to be sought.

***MacArthur Foundation's investments in reducing maternal mortality and morbidity so far***

MacArthur Foundation's grantmaking investments in MH its India under its Population and Reproductive Program includes:

1. Developing innovative community-based models for MH, which focus on strengthening birth preparedness, handling emergency complications and piloting community financing mechanisms in the three focus states;
2. Enhancing skills of health professionals, including Traditional Birth Attendants (TBAs) for specific functions, nurse-midwives and medical doctors;
3. Promoting informed advocacy on critical issues related to reducing MMM, such as women's unmet needs for appropriate contraception, delaying age at marriage, and improving access to quality maternal care especially emergency obstetric care and safe abortion services.

The India program area also supports research, leadership and national networks to complement these objectives for MH.

## **2. ADDITIONAL CONSIDERATIONS FOR THE CONSULTATION**

Apart from the need for this focussed reappraisal exercise, the MacArthur Foundation realises that there are several other immediate and compelling concerns in need of redress.

In the last decade, political commitment to MH has spurred policies and programs for improved health services, provision for entitlements, and expansion of infrastructure and human resources. Without doubt the National Rural Health Mission (NRHM)<sup>1</sup> launched in 2005, demonstrates visible, dramatic and measurable progress in reducing MMM.

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<sup>1</sup> The first phase of the National Rural Health Mission (NRHM) was launched between 2005 and 2012. It sought an architectural correction of the country's health system in 18 states by binding several social sector departments and activities.

Yet there is cause for concern: despite health being a guaranteed constitutional right, 56,000 mothers continue to die annually. This accounts for 19 percent of maternal deaths in the world.<sup>2</sup> There is deepening disquiet over the possibility of missing the 2015 MDG (Millennium Development Goals). At 212 maternal mortalities for every one lakh births, India lags behind the MGD goal of 109 by 2015. Worsening the discomfiture is the fact that safe motherhood is easily within reach with timely, low cost interventions. Understandably, then the *'time is now'* refrain by MH advocates is not misplaced. The Foundation, too, recognizes that now more than ever before, there is a need for concrete examination of issues and solutions for safe motherhood.

Also, as two international accords -- the Programme of Action of the International Conference on Population and Development (ICPD) (1994) and the MDGs -- draw nearer to their finish lines (in 2014 and 2015 respectively) and the world moves towards a fresh set of development goals, it is an appropriate and judicious time to review ground realities in the Indian MMM arena. This is because the imminent adjustments and redirections in global development policies will unfailingly impact the way policy is made at national levels, which in turn will change contours of program implementation.

The intent behind this expert consultation was, thus, to also attempt an immediate, shared understanding on how to protect past and present gains in the MH ambit and meaningfully carry forward unfinished business into future programs and policy.

### **3. OBJECTIVES OF THE CONSULTATION**

This collaborative, consensus building consultation by experts sought to stimulate wide ranging discussions on a spectrum of critical MH issues for accelerated, timely, tangible and positive maternal health outcomes.

The aim was to review issues along these thematic categories so as to assemble evidence-based lessons for programming and policy, and thereby work towards ensuring quality health services that make safe child bearing possible:

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<sup>2</sup> *State of World's Mothers report, Save the Children, May 2013*



- What are actions required to sustain and accelerate improvements in reducing MMM with respect to institutions, systems and processes? What are promising strategies that ensure access to and quality MH care for population groups that are most difficult to reach? How can accountability for MH be strengthened?
- How can technology be used to effect improvements in the delivery of services and/or strengthen accountability?
- What are the priority issues for research in MH?
- What are the issues that should be targeted for strategic advocacy?

#### 4. GAINS IN MATERNAL HEALTH: A SCRUTINY

Significant gains in reducing maternal mortality are reflected in the government's Sample Registration System (SRS) Bulletin figures<sup>3</sup>. They show a distinct downward trend in maternal deaths from 1997-98. Currently, nine percent maternal deaths are reported in the 15-19 age group, 36 per cent in the 20-24 age group and 27 percent in the 25-29 age group. Maternal deaths among young women in the age group of 15-24 years constitute 45% of all maternal deaths in India.

Undertaking an analysis of MH in the public health system (2005-2012), experts at the consultation, pointed to several other advancements: **165.5 percent increase in First Referral Units (FRUs)**<sup>4</sup> from 2005; **stepping up of human resources at health facilities** (the NRHM has added 1, 40,278 contractual skilled providers) ; **skill building through trainings** (it has paved way for task shifting; MBBS doctors have been trained to give anesthesia and perform C-section in emergency

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<sup>3</sup> Sample Registration System is a process of continuous evaluation of births and deaths in the country as part of the enormous census exercise undertaken by the government of India.

<sup>4</sup> First Referral Unit (FRUs)s: An existing facility (district hospital, sub-divisional hospital, community health center etc) can be declared FRUs if equipped to provide round-the-clock services for obstetric and newborn care and blood storage facilities, in addition to all emergencies that any hospital is required to provide.

situations and Auxiliary Nurse Midwives (ANMs)<sup>5</sup> have been enabled to give Misoprostol and inject Gentamicin); **improvements in referral transport** (against a baseline of zero before NRHM, an estimated 7521 ambulances have been added across 17 states as a state wide emergency response and patient transport system); **increase in the number of *Janani Suraksha Yojana* (JSY)<sup>6</sup> beneficiaries** from 734,000 in 2005 to almost 5189,000 women by March, 2012, and the launch of the ***Janani Sishu Suraksha Karyakram* (JSSK)** in 2012, which entitles every pregnant woman and newborn free access to health care services, referral transport, diet during hospitalization, drugs and diagnostics.

**Outreach services also report improvements.** A reported **580,000 Village Health and Nutrition Days<sup>7</sup> per month have been held** in 638,000 villages. **Of a total of 147,069 Sub Health Centres (SHCs)<sup>8</sup>, 95.8 percent have at least one ANM** and 42 percent have a second ANM in place. **Untied grants of Rs. 20,000 (\$ 375) have been set aside for every SHC** to improve infrastructure and equipment availability. **Currently over 890,000 lakh Accredited Social Health Activists (ASHAs)<sup>9</sup> have been trained** to identify maternal complications and make birth plans with pregnant women for safe delivery. They also facilitate access to ante natal care (ANC) safe institutional delivery, and promote family planning use. **Mobile Medical Units (MMUs)** have been deployed in 442 districts across the country – mainly providing ANC care and immunization services. **Extended family planning services** have led to a fall in the total fertility rate (TFR) from 2.9 in 2005 to 2.4 in 2011.

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<sup>5</sup> Auxiliary Nurse Midwife (ANM) is a trained female health worker who is the first point of contact at the community level and assists in preventive and curative health.

<sup>6</sup> *Janani Suraksha Yojana* is a safe motherhood intervention under the NRHM that promotes institutional deliveries with a financial package attached for mothers.

<sup>7</sup> Village Health and Nutrition Day innovatively tackles community health care concerns by addressing them on an appointed day of a month; representatives of institutional health staff are present to interact with the community.

<sup>8</sup> There is one Sub Center for about 5,000 population at the district level.

<sup>9</sup> Accredited Social Health Activists (ASHAs) are trained community health activists at the village level who act as health educators and promoters; their focus is encouraging women to deliver in health institutions and immunization.

Other noteworthy gains are: **skill labs for ANMs; Maternal Death Reviews (MDRs); Community Based Planning and Monitoring; use of Information Communication Technology (ICT) to track improved coverage; better reporting and supplement training; quality certification of facilities; and Weekly Iron and Folic Acid Supplementation (WIFS).**

A JSY evaluation, 2011, demonstrates equity in access to institutional deliveries; and the Ministry of Health and Family Welfare (MoHFW's) order in early 2013 to remove all barriers to financial incentives in home deliveries has been hugely beneficial. The burden of enormous out of pocket expenditures, however, persists.

Civil society, international donors (bilateral, multilateral, and Foundations) and the private sector have made remarkable efforts to: reach the last mile (approximately one third of the population); assess and improve guidelines and protocols; evolve models for multitasking; promote rights based work for MM; accountability initiatives (budget studies); promote the use of technology (Anti-Shock Garment (ASG) and haemoglobin (HB) meters); insurance models for maternity; and safe abortion services.

## **5. SUMMARY OF RECOMMENDATIONS THAT EMERGED FROM THE EXPERT CONSULTATIVE PROCESS**

We present below a summary of the findings of the expert consultation process under the four thematic categories outlined in the report's objectives:

### **1) Actions required to sustain and accelerate improvements in reducing MMM with respect to institutions, systems and processes/strategies for access to and quality MH care for population groups difficult to reach/strengthening accountability for MH**

#### ***a. Heading to social determinants of MMM***

While recent achievements in MH are indeed laudable, experts pointed out the huge unfinished agenda that remains.

Socio-economic causes like poverty, lack of education, malnutrition, anemia, early and forced marriage, absence of adolescent sexual health information and services, lack of awareness and inadequate access to contraception, and serious barriers to accessing safe healthcare facilities continue to kill mothers in India. Poor reproductive health for women means that they (and their children) carry a disproportional and enduring burden of physical and financial burden of health care. The multi-faceted nature of maternal health demands a wide range of complex and comprehensive interventions for defined improvements in MMM.

***b. Redoubled focus on the Foundation's core strengths and expansion to new areas***

A critical understanding that emerged from this consultation was that maternal deaths - during deliveries and in the postpartum period - were happening within institutions like the district hospitals or Community Health Centers (CHCs). Experts underlined that the Foundation's contribution could come from a renewed and redoubled focus on its core strengths. It could envision methods to provide immediate and quality service in health facilities; attempt to regenerate CHCs, Primary Health Centers (PHCs) and SCs<sup>10</sup> through capacity building and competency-based training for its staff; facilitate partnerships between facilities and the community; and build up community networks to address MH.

Undoubtedly, many of the Foundation interventions in the above mentioned areas have been effective. To further progression, the Foundation could make twin efforts: approach fresh areas of work within this framework and firm up initiatives on a scale large enough to improve the situation at a fundamental level. While the experts did understand that the Foundation cannot aspire to the level of scale ups that the government aims for, yet, they felt, impetus to MH

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<sup>10</sup> At the district level, there is one Community health center for every 80,000 to 1, 20,000 population and one Primary Health Center covering a population of 30,000.

can come only with larger interventions. This, they said, is vital to meet national development aspirations and MGD goals.

***c. Making safe pregnancy and delivery a reality***

Women's inability to survive childbirth result from a host of factors. Major reasons are: anemia and postpartum hemorrhage (PPH), eclampsia, sepsis, toxemia, other medical causes (tuberculosis, malaria and hypertension), lack of blood transfusion facilities, lack of transportation to the hospital and from one facility to another in case of referrals, caesarean complications, and poor emergency obstetric care (EMoC). Dealing with each of these issues separately and with great attention to detail, the experts urged the Foundation to undertake risk management programs in a focused manner in one or many areas. Alternately, it could look to address a broader range of issues (that continue in the post-partum period) under a continuum of care approach. This can make accomplishments in morbidity issues (that have suffered from protracted oversights) possible. Experts drew sharp attention to risk assessment. The Foundation could formulate risk assessment tools that are designed to detect, prioritize, address and follow up on risks. An ANM, for example, in her three ANC visits with a pregnant woman can be taught to go through this process. Similar attempts can be made with other informal health workers.

As the Foundation has made headway with programs in PPH and EMoC, it could redirect its attention to other challenges – blood banks, referral transport and mobile health units could be potential work areas. A welcome initiative would be undertaking an analysis of strengths and weaknesses of various emergency medical transport systems, education and training for emergency response personnel, ensuring the vehicles have EMoC equipment, establishing linkages with communities, and a critical appraisal of public-private partnerships for emergency services. In the area of mobile health units, initiatives like 'doc-in-the-box' where medicines reach remote regions in a box, ferried either on cycles or other rural transportation modes, could be explored.

The Foundation could strengthen its existing work on providing safe abortion services and access to contraception. Work can be undertaken with pharmacies to avoid the indiscriminate use of abortion drugs.

***d. Prioritizing rights-based interventions***

The Foundation could perhaps use the well-recognized ‘three-delays’ categorization (delay in recognizing complications and seeking skilled care, delay in reaching the health facility, and delay in receiving care at the facility) to shape a rights-based program model. Using the technical guidelines of the Office of the High Commissioner of Human Rights (OHCHR), the Foundation can evolve programs around crucial areas so that accountability becomes a priority. Possible areas of work could be addressing issues of post-delivery care (women are often discharged in a day or two though they suffer from PPH or other complications), out of pocket expenses and postpartum insertion of intra uterine devices (IUDs) without consent.

***e. Three immediate areas of intervention***

Three immediate areas of intervention were identified. They could be rolled out with relative ease as they are cost-effective and the primary input required is basic training. The areas are: monitoring hemoglobin levels prior/post-delivery (using HB meters); administering a regimen of magnesium sulfate (to stem eclampsia) and the management of the third stage of labor (to prevent postpartum hemorrhage). Perhaps tie-ups with medical colleges, organizations or professionals for training could be explored.

***f. Small remedies, big difference***

Efforts could also be invested in strengthening the basic infrastructure, hygiene and facilities of labor rooms. Attempts to halt the indiscriminate use of oxytocin to induce deliveries and other unsafe obstetric practices could also be a salient areas of work. Programs to distribute iron and acid (IFA) tablets to young girls and women could also address anemia and provide the big leap needed to improve women’s health and birth preparedness. Experts

repeatedly made the point that anemia is one of the major causes of maternal death in India and also a severe morbidity. Initiatives that improve young women's Hb status need to be prioritized.

***g. Finding opportunities to strengthen quality of care***

Quality of care in health system -- an unresolved yet surmountable challenge -- requires an interplay and overlap of miscellaneous factors and processes. Attention to infrastructure, facility and human resource performance monitoring, grievance redress, training, engagement with medical colleges, understanding patient perspectives and measuring quality through structured indicators must be both simultaneous and rigorous. While the nature of the Foundation's work would preclude it from approaching some areas, it can made meaningful contributions in others.

Strengthening human resources for health (HRH) is a familiar terrain for the Foundation. The outstanding role ASHAs, ANMs, General Nurse Midwives (GNMs), and midwives play in linking women to public health services, makes it imperative that focus be retained on them. Work in this area can be accentuated through short, concise training and refresher courses (using virtual classrooms, webcasts and offline training through DVDs) and practical skills training. This would be a vast improvement on the dense, turgid material they have to cope with. Offline courses would have the added advantage of minimizing travel for ASHAs and ANMs. There is need to analyze the extent of the NRHM training ASHAs and ANMs have retained, their understanding of roles and responsibilities (it has been noticed that ASHAs and ANMs often engage in tasks not meant for them) and what kind and level of skills upgrade is required. As ASHAs are used to gauge the quality of maternal services, they should be required to understand the outcomes of maternal deaths so that perceptions of quality services are enhanced. More important, an understanding of requirements that would help them perform better would go a long way in bolstering the efficiency of the health system. Attempts can be made to revitalize delivery of health services

through AYUSH<sup>11</sup>s at the PHC and district hospital level so that there is an additional health worker tier to help, especially in light of the high attrition of health staff at facilities.

There was emphasis on the need to formulate short, effective courses to upgrade midwives skills. While it is happening in many states like West Bengal, there is need to boost such initiatives as well as ensure that trained midwives are absorbed within the system. The Foundation can look into this and also institute awards for informal health workers to recognize and motivate efforts at the grassroots levels.

***h. Addressing the accountability agenda***

Enforcement of maternal death reporting and improvements in maternal death notifications are needed. The Foundation can work to step up synergy between the community, civil society and district magistrates to spur maternal death reviews (MDRs) and increase accountability of health systems. While accountability is crucial, it is also important to remove barriers to notification of deaths. Facility staff are constrained to report maternal deaths as they feel they will be held responsible. The community is often not able to identify a woman's death as one caused by unsafe childbearing practices. Government forms are unclear and verbal autopsies get distorted. The Foundation could support work that address these ambivalences and initiate third party audits that are objective.

A plethora of national and state protocols, global best practices and professional group mandated rules befuddle staff at the health facilities and Quality Assurance (QA) cells at the divisional and district levels. The introduction of new protocols work to antagonize health facility managers and staff who view it as an added workload. But as the backbone of service delivery for maternal and neonatal health, the Foundation can aid in playing the role of an external agency that

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<sup>11</sup> AYUSH refers to practitioners of India Systems of Medicine and Homeopathy which covers the fields of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH).



aids in protocol standardization, addressing gaps, providing updates and adaptation to global processes. The Foundation can be innovative and focus on separating the protocols cadre wise.

Work on accountability can happen through initiatives on community perception of quality and their involvement. Appropriate, timely and equitable maternity care that is respectful is needed. Studies show women patients to be keen on the presence of doctors, good medical care, pain management, availability of transport, prompt disbursements of monetary incentives, presence of family members during treatment, and a calm environment to quieten fear and anxiety during delivery. Working on patient satisfaction and grievance redress could be done by building bridges between community representatives and facility authorities. This would raise community awareness of MH and enable increased organization of work processes for patient safety, comfort and satisfaction.

Apart from social audits, an informed use of law can be used to push for accountability. Public interest litigations can be filed to bring public attention to irregularities. Groundwork has been done before approaching the law by gathering evidence-based proof. This is an area that the Foundation can intensify its existing work.

***i. Improving availability and access of high quality maternal health services to difficult to reach and most vulnerable populations***

While there have been significant gains for the country as whole, national estimates hide wide disparity between states. Maternal health indicators for women from socio-economically backward communities, such as Scheduled Castes and Scheduled Tribes, young women from poor communities, women residing in urban slums continue and women located in geographically remote areas continue to lag behind national estimates. The Foundation could make an effort to support maternal health interventions that target these vulnerable sub-populations.

***j. Partnering with the private sector***

The private sector's multi-pronged efforts in the health sector have not gathered momentum as they remain disconnected from the government and community efforts. The Foundation can work to build partnerships between them for programs, especially with NGO-operated hospitals and clinics. However, experts did point to the challenges of engaging with the private sector.

**2) Use of technology to effect improvements in the delivery of services and/or strengthen accountability**

Technology can play a complimentary role in improving maternal health. There have been several pilots on maternal health in India but it does not appear that any of these initiatives have been scaled-up.

Technology – mobile phones, radio, TV and the social media – can be harnessed to provide information of services and address queries.

It can used (as discussed) to impart training and refresher courses, both online and offline with great effect. Virtual classrooms minimize travel and wastage of time. The Foundation's investments in this area can be impactful as their effective training models can be put to wider use.

Teleconferencing can be made use of to discuss, dialogue and address queries by connecting expert doctors on one end to doctors and informal health workers on the other. It has been tried with success and the Foundation can fine tune projects using a lessons-learnt trajectory.

Telemedicine can be used to make access of expert doctors possible to rural patients.

Databases created online can streamline the work of health providers; enable monitoring and also collating MDR compilation.

### **3) Priority issues for research in MH**

Research provides factual evidence to foster an understanding on the need for a particular intervention, the urgency for it, its design and the improvements needed.

Experts were keen on a range of research areas: causes, extent and treatment of anemia and PPH; challenges in blood transfusions; gestational diabetes; maternal morbidity; cost of providing MH services in rural areas; outcomes of specific projects (JSSY, for instance); social determinants of MMM; reliability of oxytocin in the active management of the third stage of labor; causes for maternal death in early and the later stages of delivery; shortcomings in medical curricula and midwife courses. Research to file public interest litigations on MH would be a good initiative.

The Foundation can work towards becoming a Knowledge Organization on MH: a nodal knowledge hub that can mentor and shape a future generation of leaders through fellowships or mentoring programs.

### **4) Issues in need of strategic advocacy**

With the health system caught in a state of impasse regarding quality of care, this is an area that needs strong rights-based advocacy, a call to action.

The Foundation can take up a medley of other issues to bring them at the center of public and policy discourse: improving curricula of medical colleges to instill correct medical practices in facilities; reaching the last mile, so that women in remote regions and those from disadvantaged classes can equitably access maternal services; addressing corruption within the health system (especially in the area of JSY where women are stripped of their financial entitlements by health staff); behavioral change communication (where efforts are directed to make health staff more receptive, friendly and performance-oriented); right to access contraception and family planning methods; access to safe abortion services; strengthening the functioning of Village Health and Nutrition Day so that women's MH issues are addressed purposively at village levels; and strengthening ties with media (for dissemination of information) and the political leadership (for

impactful policy). The political leadership is in a position to roll out surveillance on MH, improve health infrastructure, demand evidence-based information from health centers, mobilize transport for women and push for health as a human right in current laws and future policies.

## **Conclusion**

MacArthur Foundation hopes to use these expert perspectives to navigate its future course of action, create better plans and programs, and be better prepared to manage the forewarned risks.

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