

FIGO SAVING MOTHERS AND NEWBORNS PROJECT IN NIGERIA

Saving mothers and newborns in Edo, Amambra and Kaduna States

FINAL EVALUATION

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Contents

Acronyms	3
Acknowledgments	4
Executive Summary	5
1. INTRODUCTION.....	8
2. BACKGROUND	9
2.1 FIGO.....	9
2.2 Saving Mothers and Newborns Initiative	9
2.3 The Nigerian Context.....	9
2.4 Project context: SMN Nigeria 'at a glance'	10
2.5 SMN Nigeria key timelines, activities & means of verification (MoV) at evaluation - March 2011.....	12
3. EVALUATION METHOD	13
3.1 Evaluation Challenges, Timetable and Limitations	13
4. PROJECT ACHIEVEMENTS	15
4.1 Data Collection	15
4.2 Case Fatality Rates (CFR).....	16
4.3 Training in Emergency Obstetric Care	17
4.4 Protocol Development.....	18
4.5 Advocacy	19
4.6 SOGON / NANM representation and dissemination of project findings	21
4.7 Sustainability	22
5. PROJECT CHALLENGES	23
5.1 Data Collection Challenges.....	23
5.2 Involvement of the Nigerian Association of Nurses and Midwives (NANM)	23
6. PROJECT MANAGEMENT	25
6.1 The logframe	25
6.2 The Nigeria project team.....	25
6.3 FIGO.....	26
6.4 Relationship with mentor / twinning society.....	26
7. LESSONS LEARNT	28
7.1 Lessons learnt for FIGO.....	28
7.2 Lessons learnt for the Project	28
8. CONCLUSION AND RECOMMENDATIONS	29
8.1 Conclusion.....	29
8.2 Key Recommendations.....	29
Annex 1 Terms of Reference	31
Annex 2 Key Lines of Enquiry and Means of Verification (MoV).....	34

Acronyms

ALARM	Advances in Labour and Risk Management
BDSH	Barau Dikko Specialist Hospital
CFR	Case Fatality Ratio
EOC	Emergency Obstetrics Care
EmONC	Emergency Obstetric & Newborn Care
FIGO	International Federation of Gynaecology and Obstetrics
ICM	International Confederation of Midwives
IMNCH	Integrated Maternal and Newborn Child Health
MGD	Millennium Development Goal
MoH	Ministry of Health
MoV	Means of verification
NANM	Nigerian Association of Nurses and Midwives
NAUTH	Nnamdi Azikwe University Teaching Hospital
NDHS	Nigeria Demographic and Health Survey
PIH	Pregnancy Induced Hypertension
PPH	Postpartum Haemorrhage
SBCU	Special Baby Care Unit
Sida	Swedish International Development Cooperation Agency
SMART	Specific, Measurable, Achievable, Realistic, Time bound
SMN	Saving Mother and Newborns
SMNH	Safe Motherhood and Newborn Health
SOGC	Society of Obstetricians and Gynaecologists of Canada
SOGON	Society of Obstetricians and Gynaecologists of Nigeria
SRH	Sexual and Reproductive Health
TBA	Traditional Birth Attendants
TOT	Training of Trainers
UBTH	University of Benin Teaching Hospital

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Executive Summary

Sexual and reproductive health is a major global public-health challenge that contributes to high morbidity and mortality rates. Women bear the greatest burden of sexual and reproductive ill-health; the sequelae of which cause a wide range of psychogenic and organic illnesses, as well as significant long-term disability and an estimated 342, 900 deaths in 2008¹ alone. Eighty percent of deaths are from treatable or preventable causes and Nigeria remains a significant contributor to the global maternal mortality burden with a lifetime risk of maternal death of 1 in 23² (2008).

The overarching four year Federation of Gynaecology and Obstetrics (FIGO) Saving Mothers and Newborns (SMN) Project, aims to reduce maternal and newborn morbidity and mortality and to contribute towards achievement of the Millennium Development Goals (MDG) four and five³, within a series of low income countries – in this case Nigeria.

The SMN Nigeria project has been implemented through a collaborative approach between the Society of Obstetricians and Gynaecologists of Nigeria (SOGON) and the Nigerian Association of Nurses and Midwives (NANM), with the aim of reducing maternal mortality through professional society capacity building and strengthened cooperation between national societies. As with other FIGO SMN country projects, mentorship (from Sweden) and twinning society arrangements (with Danish Society of Obstetrics and Gynaecology) were encouraged from project outset.

At country-level, bespoke project purpose, objectives and indicators were identified; and these, along with the overarching SMN project goal and secondary objectives have been considered within this evaluation. Both in-country and remote Means of Verification (MoV) have been sought and reviewed to objectively report back on the end of project performance of the SMN Nigeria project, 2007-2010.

Key Achievements

The project has produced a number of achievements in respect to its objectives. While year one of the project relied on retrospective data collection, years 2-4 saw prospective data collected and in excess of 20,000 birth register entries have been collected from across the three project sites. All maternal deaths at the three sites have been recorded and routine audit of fatal outcomes is carried out for each death. This means there is now a robust and growing body of data that adds to the knowledge-base and decision-making in relation to maternal health issues.

The project has also facilitated the introduction of Magnesium Sulphate at Barau Dikko Specialist Hospital in Kaduna and discussions with manufacturers has also resulted in reduced costs for this drug so that on occasions when it is not available in the hospital, women are now more able to pay for it themselves. This has been a considerable accomplishment for the SMN Nigeria/Kaduna site where case fatality ratio (CFR) of Eclampsia was 35% in 2007, down to 7.1% in 2010.

¹ Maternal mortality for 181 countries, 1980—2008: a systematic analysis of progress towards Millennium Development Goal 5. The Lancet, [Volume 375, Issue 9726](#), Pages 1609 - 1623, 8 May 2010. [Available at: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2810%2960518-1/fulltext?_eventId=login

² http://www.unicef.org/infobycountry/nigeria_statistics.html#75

³ **Millennium Development Goals 4:** Between 1990 and 2015 reduce by two thirds the mortality rate among children under five; **MDG 5:** Between 1990 and 2015 reduce by three quarters the maternal mortality ratio

Fifteen standardised training modules have been developed and subsequently adopted by SOGON for national use. Through the project's Training of Trainers (TOT) and step down training, 368 doctors and nurse-midwives have received training on emergency obstetric care. And an advocacy toolkit titled '*To work together to save the lives of mothers and newborns*' has been developed to ensure consistent /standardised messages are relayed at professional, government and community meetings.

SOGON has also made progress to raise its profile at government level through advocacy visits to two Ministers and two First Ladies of Nigeria.

Key Challenges

While the project has made progress in several areas over the four years of activity, a number of challenges have impacted on progress. In some instances the project team were able to respond to these challenges; however, others have not been resolved.

In particular the north-south mentoring and twinning society ethos failed to produce the real collaborative working relationships and cross-fertilization of knowledge, skills and abilities that it could bring; and participation and representation of nursing and midwifery colleagues and the professional body (Nigerian Association of Nurses and Midwives - NAMN) has remained challenged throughout the project's life.

Key Lessons Learned

- The north-south mentoring and twinning society ethos can bring real collaborative working relationships and cross-fertilization of knowledge, skills and abilities in both directions. However, mentoring and twinning society arrangements need to be mutually beneficial and need to reflect the sensitivity, awareness and flexibility to support the local society's mission and *modus operandi* in relation to socio-cultural aspects and the health care delivery system. The need for mentorship must also be clearly linked to specific needs such as technical / clinical support or project management support.
- In-country projects that are reliant on the good-will of busy clinicians working fulltime are susceptible to slippage and challenges in meeting project objectives due to competing priorities of project staff.
- The use of the logframe as a management tool needs to be user-friendly, and easily understood by project staff. Greater support on logframe development and use at project outset is essential and simplified work plans/GANTT charts can be beneficial.
- Management of projects operating in fragile and insecure countries is challenging, requiring flexibility to change and adapt projects to cope with external and unexpected obstacles. When project management is undertaken by staff who have little experience in this area and other professional commitments, support may be required by FIGO to support them in fulfilling their project management role in an effective and timely fashion.

Key Recommendations

- Memoranda of Understanding which includes roles and responsibilities of mentors and twinning societies should be formalised. FIGO should performance manage this aspect of future project activities with clear outcome measures.

- Given the pivotal role that nurses and midwives have to play in addressing maternal mortality, FIGO should consider partnering with midwifery organisations such as the International Confederation of Midwives (ICM) to advance national midwifery societies capacity to address clinical skills and decision making.
- Where donors require a logframe approach to project management,, greater support on development and use at project outset is essential. Simplified work plans/GANTT charts within a SMART (specific, measurable, achievable, realistic, time bound) framework can be beneficial.

1. INTRODUCTION

This end of project evaluation has been prepared for the International Federation of Gynaecology and Obstetrics (FIGO) and summarises the processes and outcomes in achieving the objectives and outputs of the *Saving Mothers and Newborns Project in Edo, Amambra and Kaduna States, Nigeria*.

The SMN Nigeria project is one of ten FIGO projects that are part of its Saving Mothers and Newborns (SMN) Initiative. Other participating countries are Haiti, Kenya, Kosovo, Moldova, Pakistan, Peru, Uganda, Ukraine and Uruguay.

This report is structured into the following sections (Box 1):

Box 1: Signpost for report sections	
Section 2	Sets out the background to the Saving Mothers and Newborns initiative and the country specific project. This is presented in detail for completeness.
Section 3	Outlines the evaluation methodology .
Section 4	Summarises the project achievements .
Section 5	Summarises the project challenges .
Section 6	Reviews project management .
Section 7	Lists the lessons learnt .
Section 8	Provides the conclusion and recommendations .

2. BACKGROUND

2.1 FIGO

FIGO brings together professional societies of obstetricians and gynaecologists on a global basis to promote the well-being of women and their children and to raise standards of practice in obstetrics and gynaecology. The successor to FIGO's Save the Mothers Initiative, The Saving Mothers and Newborns (SMN) Initiative secured 4.6 million US dollars, of which a large part was contributed from the Swedish International Development Co-operation Agency (Sida)⁴.

2.2 Saving Mothers and Newborns Initiative

The Saving Mothers and Newborns Initiative was launched in 2006 with the goal of reducing maternal and newborn morbidity and mortality and to contribute to the achievement of Millennium Development Goals (MDG) 4 and 5 (Box 2). Its secondary objectives include:

1. Strengthening the capacity of national professional societies to engage in maternal-newborn health through the design and implementation of projects in the field;
2. Strengthening cooperation between FIGO and national societies, and also between societies in regions or of different economic levels;
3. Strengthening cooperation between national societies and national stakeholders involved in safe motherhood and newborn health;
4. Increasing the credibility of national societies locally to provide technical support to Ministries of Health and national professional councils.

Box 2: Millennium Development Goals

MDG 4: Between 1990 and 2015 reduce by two thirds the mortality rate among children under five.

MDG 5: Between 1990 and 2015 reduce by three quarters the maternal mortality ratio.

The Initiative aims to build and sustain the capacity of obstetrics, gynaecology and midwifery societies in participating developing countries to conduct essential projects relevant to the promotion of safe motherhood and the improvement of maternal health.

Two key features of the initiative are: 1) north-south partnerships through the establishment of twinning mechanisms between obstetrics, gynaecology and midwifery societies in developed and in the implementing countries; and 2) increasing women's access to new, cost-effective and evidence-based technology for the reduction of maternal and newborn mortality.

The ethos underpinning this evaluation was that women should have access to safe emergency obstetric care and, to meet this, an effective Nigeria project response requires a multifaceted approach to address the complex biological, socio-cultural and political imperatives at play to improve safe motherhood within the three chosen sites / States.

2.3 The Nigerian Context

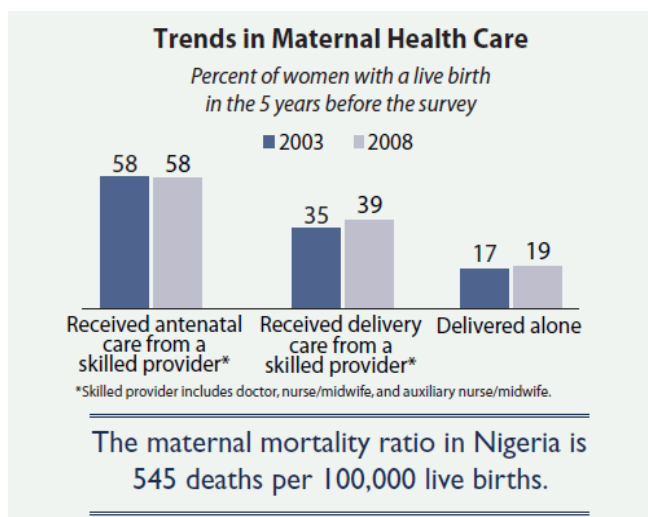
Nigeria remains a significant contributor to the global maternal mortality burden.

The 2008 Nigeria Demographic and Health Survey (NDHS) provides the most up-to-date information on the population and health situation in Nigeria and shows that the estimated maternal mortality ratio during the seven-year period prior to the survey is 545 maternal deaths per 100,000 live births.

⁴ From WHO website, **FIGO Saving Mothers and Newborns Initiative (SMN)**, updated on 18 June 2010, available from URL: <http://www.figo.org/projects/newborns> [Accessed on 22 February 2011].

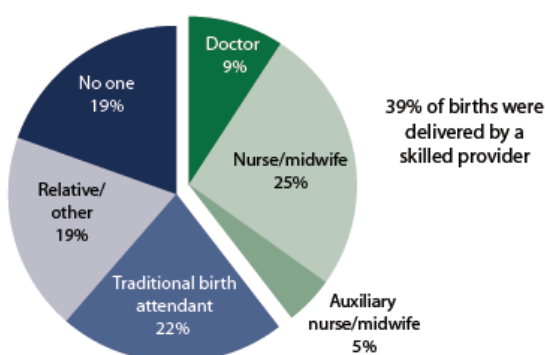
Women in Nigeria aspire to have 6 children. On average they have 5.7 children and this ranges from 4.7 in urban areas to 6.3 in rural areas. Overall, 23% of women aged 15–19 are already mothers or are pregnant with their first child. The median age at first birth for all women aged 25–49 is 20.4.

Related to maternal health, more than half of all women who had a live birth in the five years preceding the survey received antenatal care from a health professional (58 percent);



Assistance During Delivery

Percent distribution of births in the 5 years before the survey



23 percent from a doctor, 30 percent from a nurse or midwife, and 5 percent from an auxiliary nurse or midwife. Thirty-six percent of mothers did not receive any antenatal care.

More than one-third of births in the five years before the survey were delivered in a health facility (35 percent). Twenty percent of births occurred in public health facilities and 15 percent occurred in private health facilities. Almost two-thirds (62 percent) of births occurred at home.

Nine percent of births were assisted by a doctor, 25 percent by a nurse or midwife, 5 percent by an auxiliary nurse or midwife, and 22 percent by a traditional birth attendant. Nineteen percent of births were assisted by a relative and 19 percent of births had no assistance at all. Two percent of births were delivered by a caesarean section.

Overall, 42 percent of mothers received a postnatal check-up for the most recent birth in the five years preceding the survey, with 38 percent having the check-up within the critical 48 hours after delivery.

2.4 Project context: SMN Nigeria ‘at a glance’

SMN Nigeria has been implemented through a collaborative approach between the Society of Obstetricians and Gynaecologists of Nigeria (SOGON) and the Nigerian Association of Nurses and Midwives (NANM) - with the aim of reducing maternal mortality through the key project goals of professional society capacity building and strengthened cooperation between societies.

The project has been working in three facilities, each located in a different state: University of Benin Teaching Hospital (UBTH) in Benin City, Edo State; Nnamdi Azikwe University Teaching Hospital (NAUTH) in Nnewi, Anambra State; and Barau Dikko Specialist Hospital (BDSH) in Kaduna, Kaduna State. Through activities such as emergency obstetric and neonatal care training and advocacy, the project team hope to show decreased maternal and neonatal mortality and morbidity. A large component of the project is data collection and analysis at the three sites.

As with other country projects, mentorship (from Sweden) and twinning society arrangements (with Danish Society of Obstetrics and Gynaecology) were encouraged from project outset.

The overall SMN project goal, secondary objectives, and SMN Nigeria specific objectives, outputs and indicators are shown below.

Overall super-goal	To reduce maternal and newborn morbidity and mortality and contribute to the achievement of MDG goals 4 and 5 in a series of low income countries
Secondary goals	<ol style="list-style-type: none"> 1. Strengthening the capacity of national professional societies to engage in maternal-newborn health through the design and implementation of projects in the field; 2. Strengthening cooperation between FIGO and national societies, and also between societies in regions or of different economic levels; 3. Strengthening cooperation between national societies and national stakeholders involved in safe motherhood and newborn health; 4. Increasing the credibility of national societies locally to provide technical support to Ministries of Health and national professional councils.
FIGO Nigeria Purpose	To improve maternal and neonatal outcomes in three selected states (Edo, Amambra & Kaduna)
Output 1: To improve the quality of emergency obstetric and neonatal care in 3 selected hospitals in Edo, Anambra, & Kaduna States	Indicators <ol style="list-style-type: none"> 1. 10% decrease in case fatality rates (CFR) of 3 maternal morbidities and 1 neonatal morbidity (eclampsia, Postpartum Haemorrhage - PPH, obstructed labour and neonatal asphyxia) 2. Percent (%) increase in the number of women with obstetrics complications attending the 3 hospitals 3. Number of health personnel trained on Emergency Obstetric & Newborn Care (EmONC) in the 3 States 4. Number of staff trained from each sites referring health centres 5. Percent (%) increase in post test scores
Output 2: To strengthen the capacity of professional associations (SOGON & NANM) to improve EmONC services	Indicators <ol style="list-style-type: none"> 1. Update of SOGON website, including: <ul style="list-style-type: none"> - Development of protocols for major obstetric complications (PPH, eclampsia, obstructed labour) and neonatal asphyxia - Updating SOGON website with protocols for PPH, eclampsia, obstructed labour and neonatal asphyxia - Dissemination of these protocols by the 2 association 2. Advocacy <ul style="list-style-type: none"> - Advocacy training for the members of the 2 associations - Development of advocacy tool - Advocacy by members of the 2 associations (national and state levels)

2.5 SMN Nigeria key timelines, activities & means of verification (MoV) at evaluation - March 2011

Project Year	2007	2008	2009	2010
Activities to meet Logframe outputs	<p><i>Professor Staffan Bergstrom (Mentor) visited December 2006</i></p> <ul style="list-style-type: none"> Project initiation (<i>January</i>) Twinning Society Visit (Dr Morten Lebech) (<i>November</i>) Options Consultancy Baseline Review (<i>December</i>) 	<ul style="list-style-type: none"> Prospective data collection commenced Professor Staffan Bergstrom (Mentor) visited Data challenges identified i.e. variation in coding required agreed definitions developed Training of trainers began (<i>March</i>) Cascade training implemented at sites Advocacy made to Barau Dikko Specialist Hospital Kaduna re: no availability of Magnesium Sulphate for treatment of eclampsia 	<ul style="list-style-type: none"> On-going data collection On-going cascade training Advocacy visit made to ministry of Health (<i>March</i>) FIGO budget cuts introduced (<i>April</i>) Advocacy visit made to First Lady (<i>April</i>) Moya Crangle, FIGO visit (<i>September</i>) SOGON participation at FIGO congress in South Africa (<i>October</i>). <p><u>Staffing changes:</u> Kaduna Project co-ordinator went on sabbatical</p> <p>Midwifery Representative changed</p> <p>Mentor resigned. Efforts made to find another mentor (see point 6.4).</p>	<ul style="list-style-type: none"> On-going data collection On-going cascade training 2nd training of trainers course Second advocacy visit made to Ministry of Health (new Minister) Community sensitization workshop in Kaduna (<i>September</i>) Second advocacy visit made to First Lady (new First Lady) (<i>November</i>)
MoV @March 2011 evaluation.	<ul style="list-style-type: none"> 2005 Proposal bid to FIGO Jan-Dec 2007 narrative Options Baseline Review 	<ul style="list-style-type: none"> 2008 annual narrative report 2008 work plan Training modules Advocacy toolkit 	<ul style="list-style-type: none"> Jan-June 2009 narrative July-Dec 2009 narrative Sept 2009 Moya Crangle visit report Mentor resignation email (Aug2009) Communication with Prof Stefan Bergstrom (April 2011) 	<ul style="list-style-type: none"> Jan-Dec 2010 narrative FIGO 2010 Annual Report Written responses from Benin, Nnewi & Kaduna project co-ordinators Interview with Ms Moya Crangle (previous FIGO project manager)

3. EVALUATION METHOD

This evaluation, managed by Options Consultancy Services, London, UK, was conducted by Peter Carter, an Independent Consultant in Sexual and Reproductive Health (SRH) (*‘the consultant’*).

To meet the FIGO agreed Terms of Reference (see annex 1), the consultant set out to sample participants’ views as widely as possible within a ‘three dimensional’ perspective, so as to triangulate evidence and both in-country and distance means of verification (MoV) and data capture were identified in advance (see annex 2).

As part of evidence gathering, it was expected that interviews would be conducted with FIGO staff, mentors, twinning society leads and community groups but inclusion of these key informants was not possible. Please refer to section 3.1 below.

As a result, the evaluation took place in Nigeria in the Northern State of Kaduna, between March 21st – 23rd 2011. The consultant reviewed project documentation provided by FIGO, evaluating progress, achievements and challenges, as well as identifying additional in-country documentation with the Project Director, Project Researcher and Kaduna site co-ordinator. Discussions focused on project activities, management and the logical framework outputs and indicators. In addition, one site visit was undertaken at Barau Dikko Specialist Hospital Kaduna.

3.1 Evaluation Challenges, Timetable and Limitations

Final confirmation of the in-country visit and associated travel arrangements were only agreed by the Nigeria project team 48 hours prior to the evaluation. As a result, and also due to the heavy clinical commitments of the project team, they were unable to organise meetings with local community/women’s groups in Kaduna, as requested by the consultant.

Additionally, the following key challenges were also experienced:

- The geographical distances between the Nigeria project sites / States and heightened security concerns reported from Benin State prohibited travel to two of the three project sites / States;
- As the project officially ended on 31st December 2010, there were no resources available to reimburse Nigeria staff for their travel to meet the consultant in a ‘safe-zone’ i.e. Kaduna - necessitating remote contributions to the evaluation process;
- Limited availability of the Project Director / Project Researcher in-country due to clinical commitments - this information was only received once the evaluator was in-country;
- Three email communications were sent to the link person of the twinning society via two separate email addresses. The consultant offered phone interview or a written submission. However, no response was received from the twinning society at the time of report completion.

As such, the final evaluation visit timetable required adaption once in-country. This included reducing the amount of time spent in-country and increasing the emphasis on desk-based inputs. The final evaluation timetable is shown below.

Sunday 20 th March 2011	Departed London, UK to Lagos, Nigeria
Monday 21 st March 2011	Lagos to Kaduna, North Nigeria. Met Kaduna project site staff
Tuesday 22 nd March 2011	Full site visit to obstetric department, labour ward & paediatric units at Barau Dikko Specialist Hospital Kaduna. Met Medical Director, Deputy Matron,

	Senior Midwives
	Meeting with Dr Akuse (Project Director), Dr Galandanci (Project Researcher), Dr Eandeyantso (Kaduna site coordinator) and Mr Andrew (Kaduna data clerk)
Wednesday 23 rd March 2011	Desk-based review and analysis of data / remote data collection via email
Thursday 24 th March 2011	Departed Kaduna – Lagos – London
Friday 25 th March 2011	Arrived London, UK
	Written submissions received from Benin (24/03/2011), Kaduna (03/04/2011) and Nnewi (05/04/2011)
Sunday 24 th & Monday 25 th April 2011	Email communications with Prof Stefan Bergstrom
Tuesday 26 th April 2011	Telephone interview with Ms. Moya Crangle (FIGO)

The consultant triangulated evidence through reports and key informant interviews. It is acknowledged that a limitation of this evaluation is that the number of interviews with key informants was small and only one site visit was possible. This is significantly fewer than planned in the original evaluation method and timetable due to internal security issues; and that engagement with mentors has not been possible due to lack of responses to emails. As a result participant involvement in the evaluation and means of verification were significantly reduced.

Nevertheless, the consultant is confident that, despite these challenges, sufficient information was gathered to make an objective conclusion which is a true reflection of the SMN Nigeria end of project status.

4. PROJECT ACHIEVEMENTS

Overall, the SMN Nigeria project has progressed since Options baseline review in 2007. The Project Director and Project Researcher have been responsive to recommendations made by Options (2007) and FIGO (2009); and overall the project has made progress towards achieving the project purpose through the outputs set out in the project logframe. The key achievements are set out below.

Output 1: To improve the quality of emergency obstetric and neonatal care in 3 selected hospitals in Edo, Anambra, & Kaduna States

4.1 Data Collection

A large component of this project has been improved data collection and analysis. Improving the quality of maternal health data is important in order to better understand the true nature of maternal and newborn health issues at the three project sites. Prior to the project, data collection was sporadic and inconsistent, making analysis and comparisons across sites difficult. While year one of the project relied on retrospective data collections, years 2-4 saw prospective data collected and in excess of 20,000 birth register entries have been collected from across the three project sites. Additionally, all maternal deaths at the three sites have been recorded and routine audit of fatal outcomes is carried out for each death. This means there is now a robust and growing body of data that adds to the knowledge-base and decision-making in relation to maternal health issues. The Project Researcher, Dr Hadiza Galandanci should be commended for the progress made in this aspect of the project and in responding to the challenges of ensuring uniformed data collection (see challenges section). Examples of how improvements in data collection are shown in Box 3 below.

Box 3: Examples of how the project has facilitated improvements in data collection and analysis

Relating to fatal outcomes records:

“The Department of Obstetrics and Gynaecology have morning reviews Mondays to Fridays. This is like audit review of cases managed the previous 24 hours. Every Wednesday maternal mortalities that occur during the week are critically reviewed using power point presentation. Every six months review of maternal mortality and labour ward admissions are also audited. Every quarter a joint meeting is held between the Department of Obstetrics & Gynaecology and Child Health to review babies that were admitted to special baby care unit and their outcome”.
Benin Coordinator.

Relating to birth register records:

“When the SMN Project started, the birth register that was in use in the hospital did not contain enough information as was required by the project. We had to prepare a separate sheet of paper that included the needed information for each delivery and that was to be filled by the midwife for each delivery in addition to the delivery register. This became quite cumbersome for the often overworked midwives and a lot of defaults in filling these were noted. This necessitated the development of a new birth register which harmonized these and made the work much easier for the midwives. This register was adopted by the other project sites and by some organizations working in Nigeria”. Kaduna Coordinator.

4.2 Case Fatality Rates (CFR)

Focusing on case fatality rates (CFR) of the three most common maternal morbidities as a proxy measure of improved maternal health has been an aim of the Nigeria team. As seen in Table 1 below, there is variation across the three project sites.

Unfortunately, the project team only provided percentages for CFRs. Discussion with the consultant highlighted that case numbers were low (although no detail on numbers was provided) and so caution is needed in interpretation of the table.

Discussions with the project director indicate that the annual differences within sites shown in Table 1 reflect delayed referral of acute cases by private providers of care e.g. traditional birth attendants. As a result, by the time women did reach the project sites, their prognosis was poor. The fact that, overall, the 2010 figures reflect a general (and in some cases a substantial) reduction of CFR from the start of the project indicates a level of project success. In addition, the issue of timely referral has been identified by the project team as a pivotal issue to address. As a result, greater inclusion of private / other providers was prioritised within the project's emergency obstetric care training (see 4.3 below).

Table 1 Case Fatality Rates

Benin	2007	2008	2009	2010
Eclampsia	7.3%	13.3%	11%	8.6%
PPH	5.0%	5%	19%	3.3%
Obstructed Labour	0	0	0	0
Kaduna	2007	2008	2009	2010
Eclampsia	35%	11.1%	17.9%	7.1%
PPH	7%	4.4%	19.6%	4.1%
Obstructed labour	3.8%	2.9%	0	7.6 %
Nnewi	2007	2008	2009	2010
Eclampsia	50.0%	22.2%	29.3%	23.1%
PPH	33.3%	9.5%	22.0%	20%
Obstructed labour	0	0	0	0

Of note is the introduction of Magnesium Sulphate at Barau Dikko Specialist Hospital in Kaduna as a result of advocacy / awareness raising meetings led by the SMN Nigeria project team / SOGON to Kaduna hospital administrators. Discussions with manufacturers has also resulted in reduced costs for this drug so that on occasions when it is not available in the hospital (reported as rare by key informants) women are now more able to pay for it themselves. This has been a considerable accomplishment for the SMN Nigeria / Kaduna site where CFR of Eclampsia was 35% in 2007, down to 7.1% in 2010 (see box 4 below).

Box 4: Case study introducing Magnesium Sulphate for treatment of Eclampsia

Barau Dikko Specialist Hospital (BDSH) is a Secondary Health care facility run by Kaduna State Government while Nnamdi Azikiwe University Teaching Hospital (NAUTH) and University of Benin Teaching Hospital (UBTH) are tertiary health facilities run by the Federal Government.

Retrospective data collection and analysis was carried out for the year 2007 to provide baseline data. Data was then collected prospectively for the years 2008-2010.

In 2007, eclampsia was the main cause of maternal mortality in the 3 sites. In BDSH Eclampsia contributed 35% to the Case Fatality Rate (CFR), in UBTH 7.3% and in NAUTH 50%. NAUTH and UBTH were already using Magnesium Sulphate in the treatment of patients with eclampsia. Magnesium Sulphate was not available at BDSH so the FIGO/SOGON SMNH project team had to procure supplies of Magnesium Sulphate for use at BDSH. The project team developed a treatment protocol and trained the staff of BDSH and the surrounding nearby hospitals that refer cases to BDSH.

In 2008, CFR due to Eclampsia at BDSH fell from 35% to 11.1%.

When it was clear that the introduction of Magnesium Sulphate was having such a dramatic effect, the FIGO/SOGON SMNH team organized advocacy visits to Kaduna State Ministry of health and also to the manufacturers of the drug. The Ministry of Health, Kaduna State agreed to purchase Magnesium Sulphate and make it available in all their hospitals in Kaduna state. The Manufacturers agreed to reduce the price of the drug so that patients who need it could afford to buy it privately. This is important as there are periods when the drug is not available in the state hospitals – times when the drugs have been ordered but not yet supplied. This means that even after the project is over, the use of Magnesium Sulphate to treat eclampsia will continue.

These efforts by FIGO/SOGON are yielding results as the case fatality rate due to eclampsia in BDSH continues to fall. In 2010 the CFR dropped further to 7%.

4.3 Training in Emergency Obstetric Care

Emergency obstetric care training has increased as a result of the project. Following the SMN Nigeria project team's attendance at Advances in Labour and Risk Management (ALARM) training at the start of the project, fifteen standardised training modules were developed and subsequently adopted by SOGON for national use.

A Training of Trainers (TOT) course with 13 doctors and nurse-midwives was conducted in March 2008. Each of the three project sites then conducted a step down training with a total of 45 doctors and nurse-midwives trained that year. Following FIGO visit in 2009, mannequins were procured to aid clinical skills training and 2009 / 2010 saw increased numbers of cascade training delivered across the three sites – including staff from referral hospitals.

The SMN Nigeria team recognised the need to increase training sessions for external referral staff and responded to this need with an additional TOT course. This has been a commendable achievement and reflects the project team's commitment to respond to a key area of need. The value of this additional training will still need to be seen in future referrals of women from private providers into the project sites but it is hoped it will be significant given the acute nature of referrals into the three sites from external referral providers as mentioned above as causation for variation in case fatality rates.

Across the life of the project, a total of 368 doctors and nurse-midwives from sites both internal and external to the project have received training on emergency obstetric case (Table 2).

Table 2: Provision of emergency obstetric care training

Project site	2009 staff trained	2010 staff trained
Benin	6 internal / 49 external	40 internal / 10 external
Kaduna	20 internal / 35 external	25 internal / 30 external
Nnewi	20 internal / 35 external	16 internal / 42 external

Pre- and post-test scoring to evaluate increased levels of knowledge was presented by the project team. As can be seen in Table 3 below, scores are variable and further analysis would be beneficial to discover the reasons for this; e.g. whether it is related to disciplines undertaking the training (nurse-midwives versus doctors); the skills of the trainers; or differing levels of baseline knowledge.

Table 3: Percentage increase in knowledge resulting from emergency obstetric care training

TRAINING	BDSH (% increase and date)	UBTH (% increase and date)	NAUTH (% increase and date)
1 st training	40.2% (Feb 09)	22.7% (Feb 09)	13.2% (Feb 09)
2 nd training	37.7% (June 09)	22.6% (July 09)	12.8%(June 09)
3 rd training	28% (Nov 09)	24.4% (Nov 09)	14.9%(Dec 09)
4 th training	-	24.2%(June 10)	13.64%(July10)
5 th training	-	29.5%(Dec 10)	9.24%(Oct10)

The project team reported that hospital-based staff completing training have frequently been rotated to other facilities / community hospitals. As a result of this, more trained staff are community based and more easily accessible to women when complications arise. However, there has also been a concomitant loss of trained staff from the hospitals. This attrition from the hospital service was noted, and, as a result, additional training sessions were implemented in 2010.

Output 2: To strengthen the capacity of professional associations (SOGON & NANM) to improve EmONC services

4.4 Protocol Development

As part of the emergency obstetric training, clinical protocols were developed to address the four major complications of post-partum haemorrhage, eclampsia, obstructed labour and puerperal sepsis.

While development of protocols is a significant achievement, their impact on quality of care is dependent upon organised dissemination, staff awareness, adoption as best practice and implementation and monitoring of the use of the protocols. During the observational site visit to Barau Dikko Specialist Hospital in Kaduna, it was noted that protocols were not displayed and the consultant request to view protocols on the labour ward was met with some discussion between the project site-coordinator and senior midwife as to the protocols existence.

The SOGON website has also been updated as part of this project and its appearance is professional and easy to navigate. Three of the above protocols are accessible from the SOGON website and the SMN Nigeria team are continuing discussions to amend the final protocol upload.

4.5 Advocacy

An advocacy toolkit titled *‘To work together to save the lives of mothers and newborns’* was developed for use by the project team and SOGON / NANM to ensure that consistent / standardised messages are being relayed at professional, government and community meetings. The toolkit aims to raise awareness of the three-stage delay to accessing emergency obstetric care (Box 5); and puts forward SOGON’s call for priority actions (Box 6):

Box 5. Three-stage delay to accessing emergency obstetric care

1 st stage delay	2 nd stage delay	3 rd stage delay
<ul style="list-style-type: none"> - Lack of knowledge of danger signs - Delay in decision making - Lack of decision-making power 	<ul style="list-style-type: none"> - Long distances - Poor state of roads - Inadequate referral and feedback systems - Households with low income 	Inadequacies in : <ul style="list-style-type: none"> - Numbers of skilled staff - Equipment - Drugs and consumables - Low motivation of staff - Poor Attitude of Staff

Box 6: Advocacy toolkit

<p>SOGON call for priority actions:</p> <ol style="list-style-type: none"> 1. Commit 15% of the national budget to health 2. Timely release and monitoring of funds 3. Create a budget line for RH 4. Allocate at least 10% of the health budget to RH, including: <ul style="list-style-type: none"> • 25% for EONC • 5% for contraceptive commodities security 5. Domestication of Integrated Maternal Newborn and Child Health (IMNCH) Strategy 6. Deployment of National Youth Service Corps doctors and other health workers to the rural communities 7. Support and implement Community Midwifery Scheme: <ul style="list-style-type: none"> • Establish more midwifery schools • Deployment to the rural health centers with appropriate incentives to ensure retention 8. Ensure access of our women to Emergency Obstetric and Neonatal Care Services: <ul style="list-style-type: none"> • Capacity building • Provision of essential EONC commodities e.g. Magnesium sulphate, oxytocics and misoprostol • Efficient and effective blood transfusion services.
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Through its advocacy work, SMN Nigeria / SOGON has made representation at national and local levels (Box 6); and this has resulted in increased recognition of SOGON as well placed to support Government policy / direction in relation to maternal and newborn health.

SOGON has clearly led the advocacy aspect of the logical framework. While NAMN participated in advocacy training in March 2009 that resulted in the advocacy toolkit, the overall role of NAMN could not be clarified due to their absence at the baseline review (2007), final evaluation (2011) and their lack of response to the project team's request for updates on activities (discussed in Section 5 below).

Box 7: Advocacy effectiveness

"The project has done a lot to raise the awareness of Emergency Obstetric Care in the hospital as well as in the community amongst the providers in the maternity homes, clinics, hospitals outside UBTH that manage obstetric patients and also refer to us."
(Benin Coordinator)

Advocacy activities - senior levels

In 2009 representation was made to the Minister of Health which resulted in a request for SOGON to provide the Ministry of Health (MoH) with a proposal to assist national capacity building. This proposal resulted in a Community Midwifery Scheme to increase women's access to skilled professionals at time of birth and that the 36 local governments should pay for these midwife positions. This is now underway.

Advocacy was also made to the First Lady of Nigeria in 2009 which resulted in a statement from the First Lady that all 36 local governments should include SOGON members on their local Safe Motherhood Committees. While this was a considerable outcome for SOGON, the Minister unfortunately died and, following elections, the First Lady statement has not been actioned by the new First Lady – resulting in variable SOGON representation at local government level.

In 2010, SOGON made repeated advocacy visits to the new Minister and First Lady to maintain the Society's profile. It is yet to be seen if these visits have achieved significant outcomes.

Advocacy activities – local project site levels

Intensified community-level advocacy was recommended by both Options (baseline review 2007) and FIGO (Trip Report 2009); along with increased media coverage, and results / outputs documented. Information from all three project sites highlighted a range of local level advocacy. Examples are cited below, however, the results of most activities are unclear as no progress tracking was attached to monitor the impact of these activities.

All sites

- Medical Directors and Heads of Departments of Obstetrics and Gynaecology of hospitals that refer patients to the project site. One advocacy visit was made to provide information about the project and the need to send health workers to participate in the trainings conducted by the project.

Benin

- Members of the Department of Obstetrics & Gynaecology: The Department of Obstetrics and Gynaecology hold clinical meetings every Wednesdays. The meeting comprises Consultants, resident doctors, nursing and midwifery staff, medical students, student nurse-midwives. These groups are all providers of clinical services to obstetric patients.
- Consultants in the Department were used as resource persons for the emergency obstetric care training. The SMN project was also able to provide limited funding for a limited number of resident doctors to attend the training.

Nnewi

- An advocacy visit was made in Nnewi to the hospital Management Team and Board as well as to doctors and nurse-midwives working in the labour room and special care baby unit. The main message was on the impact of maternal/perinatal morbidity and mortality. Participants were encouraged to support the project by providing necessary data including proper documentation on patients' case files.
- Community level (Nnewi): advocacy was also carried to the community. Participants included community leaders, women leaders, security agents and religious groups. The issue of maternal mortality was discussed. Participants were informed how to recognise emergency signs in pregnancy and to seek appropriate care. The concept of birth preparedness and emergency readiness was explained to them. Provision of a community ambulance service was encouraged.

Kaduna

- Medical Director at Kaduna (a total of 5 advocacy visits). The purpose of these visits was to inform him about the project, to gain support for the local SMN committee; the need to support the training of health workers in the hospital on Life Saving skills; the need to change the birth register and for the hospital to print the registers using its own finances and also to obtain permission to use the seed stock of magnesium sulphate donated by the SMN Project for the treatment of severe Pregnancy induced hypertension (PIH) and Eclampsia.
- The Honourable Commissioner, Permanent Secretary and Director of Hospital services of the Kaduna State Ministry of Health. There were 5 advocacy visits in total covering basic project rationale and updates on the provision of magnesium sulphate by the SMN Project for the treatment of severe PIH and eclampsia; the third visit was to report the marked reduction of maternal mortality from eclampsia and the fourth visit was made to solicit for the inclusion of magnesium sulphate among the free drugs provided for pregnant women by the Kaduna state Government. The final visit addressed the need for the Ministry of Health and the Kaduna State Government to support Maternal and Child Health, the Integrated Maternal and Newborn Child Health (INMCH) Strategy, and the need for a budget line for the strategy within the annual state budget and for timely release of funds.
- Advocacy at provider level (Kaduna). There were three advocacy meetings. The meetings informed midwives and nurses working in the labour room, maternity ward and paediatric unit at the project site about the SMN project. During the visits providers were also informed about the introduction of a new birth register and the introduction of magnesium sulphate for the management of severe PIH and eclampsia.
- Community. There was one advocacy meeting in Kaduna, mainly attended by pregnant women, aimed at sensitising them about maternal and newborn health and providing them with messages about the causes of maternal mortality, birth preparedness, the need to attend for antenatal care and delivery under the supervision of a skilled birth attendant in the hospital.

4.6 SOGON / NANM representation and dissemination of project findings

Following FIGO site visit in 2009, it was recommended that SOGON needed greater involvement. This appears to have improved and at the institutional level SOGON appears to have supported the SMN Nigeria project. The President of SOGON and the Secretary General were invited to all project meetings. The President attended one meeting and the Secretary General attended 2 meetings; and both attended and participated at the April 2010 TOT course.

The SMN Nigeria project report was presented at the SOGON Annual General Meeting at conference in Abuja in 2010. The SMN Nigeria project team also participated in the SOGON 2010 conference in Abuja where a plenary session was devoted to saving mothers and newborns and five papers were presented on project findings and data analysis.

SOGON members also participated at the FIGO congress in South Africa in October 2009 which allowed for networking opportunities and contributed towards capacity building of the association.

Box 8: Summary of key project achievements

Data Collection	Training	Advocacy
<ul style="list-style-type: none"> - Improved quality of maternal health data to better understand the true nature of maternal and newborn health issues. - Prospective data collected and in excess of 20,000 birth register entries from across the three project sites. - All maternal deaths at the three sites have been recorded and routine audit of fatal outcomes carried out for each death. 	<ul style="list-style-type: none"> - Across the project life, 368 doctors and nurse-midwives have received training on emergency obstetric care. - Fifteen standardised training modules have been developed and subsequently adopted by SOGON for national use. 	<ul style="list-style-type: none"> - An advocacy toolkit titled <i>'To work together to save the lives of mothers and newborns'</i> was developed - Through its advocacy work, SMN Nigeria / SOGON has made representation at national and local levels. - Increased recognition of SOGON as well placed to support Government policy / direction in relation to maternal and newborn health.

4.7 Sustainability

The SMN Nigeria project originally set out to address phase three delays in access to emergency obstetric care at the three project sites. This was identified by Options in 2007 as too narrow focused and a broader approach was recommended.

The SMN Nigeria team have gone some way to address this by including referral hospital, providers and communities within the training and advocacy programmes. However, long term sustainability of the project beyond the period of funding is likely to be reduced by only having had limited engagement at community level, and the project's focus on high level hospitals which are not attended by the majority of women. Given the large numbers of women still reliant on traditional birth attendants (22%), family members (19%) and no assistance at birth (19%), this appears to be a significant shortcoming of the project in addressing maternal mortality in Nigeria.

While it was probably beyond the scope of the project itself to address this as a priority activity, the potential for making sustainable change could have been increased if the project team had engaged, as part of their advocacy activities, with more traditional birth attendants and community gatekeepers via other NGO-led projects which work with these groups and which focus on improving maternal and newborn health.

5. PROJECT CHALLENGES

While the project has made good progress in a number of areas over the four years of activity, a number of challenges have also been faced which have had a negative impact on progress. In some instances the project team were able to respond to these difficulties, however, some challenges were not able to be resolved and these have limited opportunities for the project to have greater impact and have weakened the likelihood of sustained progress beyond the life of the project.

5.1 Data Collection Challenges

Inconsistent coding and variation in data returns was an early challenge to the project team. The Project Researcher identified that different clinicians used a range of terms e.g. “pregnancy related hypertension” and “Eclampsia or pregnancy induced hypertension”; that made data analysis difficult. These data variations were addressed through agreement of data-collection definitions and the project is confident that this has resulted in robust data collection of births and adverse case outcomes of mothers.

No data or evidence were presented to the consultant in relation to the logframe indicator of ‘Percent (%) increase in the number of women with obstetric complications attending the 3 hospitals.’ This made it impossible to assess progress made in this area. The project team reported that, in relation to this, they encountered challenges in collection of neonatal data and case tracking of babies transferred from labour ward to special baby care unit (SBCU) (Box 9). These data are important for robust monitoring of full episodes of care and outcomes. This challenge was not resolved in Benin or Nnewi and remains a gap in the project’s knowledge. Interestingly, in Kaduna where it has worked, the site coordinator is consultant paediatrician – suggesting a need for greater involvement of paediatricians in other sites.

Box 9: The challenge of accessing neonatal records of women with obstetric complications

“This is an area of challenge because the special baby care unit does not allow free access into their records, even though the SMN project has a consultant paediatrician and a paediatric nurse as members of the Implementation team. The only time one gets information about admissions of babies into the SBCU is during joint meeting of the Department of Obstetrics & Gynaecology with Child Health and presentation of admissions into Special Baby Care Unit and neonatal morbidity and mortality of the babies are present.” Benin Coordinator.

5.2 Involvement of the Nigerian Association of Nurses and Midwives (NANM)

NANM nominated a named midwife as representative on the project team for the duration of the project. Pivotal roles and responsibilities for the NANM representative included monthly visits to the three sites with subsequent reports; data collection assistance; assessment against the four developed quality of care protocols; and conducting pre- and post-training assessment of performance standards in all hospitals where health care providers were recruited for training.

No representative of the NANM was present at either the baseline review (2007), the FIGO Project Manager trip (2009) or this evaluation so it is not possible to comment fully on the role of NANM. The project team however reported the involvement of NANM as

disappointing and that key activities were never completed. FIGO recommended the team evaluate the usefulness of the midwife co-ordinator and verify the quality of her work following the 2009 FIGO site visit. This does not appear to have happened and on discussion as to actions taken by the project team, the consultant was informed that the lack of engagement was due to "lack of interest and motivation of the behalf of the NANM representative". Disappointingly the Project Director felt he had no ability to address this performance / involvement as NANM identified its own representative; and so the anticipated collaboration between medical and midwifery societies was never strengthened.

Additionally, financial support to NANM was provided for journal subscriptions and conference attendance from this project's budget. At the time of the evaluation the SMN Nigeria project team's request for an update on use of the funds had not been received from NANM.

6. PROJECT MANAGEMENT

6.1 The logframe

An early challenge identified in the 2007 baseline review was the use of the logical framework. This has been a new experience for the team who found it confusing as a management tool. The SMN Nigeria team accepted Options early recommendation to utilise a simplified logical framework and practical work plan which the team described as more useful. The work plan underwent additional developments in 2009 with support from the FIGO Project Manager to reflect activities / project direction following budget re-alignment (see 6.2 below). On review of the documentation provided, a number of logframe versions appear to have been in existence during the project life and this has been confusing according to trip notes from the FIGO Project Manager.

6.2 The Nigeria project team

Time capacity of team members remained a challenge throughout the project, with all project co-ordinators employed in full time clinical activities. Barau Dikko Specialist Hospital in Kaduna also saw a change in project site co-ordinator which required time for the local replacement to develop his new role.

Internal communications amongst the project sites via mobile phones was reported as working well by the Project Director; but recommendations made by Options (baseline review 2007) and FIGO (Trip Report 2009) for increased cohesiveness and internal communications amongst project sites via teleconferencing and use of modern technology such as Skype do not appear to have progressed.

External communications with FIGO were reported as slow, but it is noted the team always responded to the Project Manager eventually.

Overall project management also appears to have been a challenge, with challenges occurring at almost every stage of the project cycle i.e. project initiation, planning, execution and closure. The Nigerian team of clinicians do not appear to be best placed to undertake project management roles and activities and this aspect may have benefited from some specific project management technical assistance / mentorship.

An area that has challenged the team has been in financial control. The Options baseline review team (2007) heard of concerns on the scope and use of budgets. These were voiced by the SMN Nigeria team members e.g. concerns about moving funds between budget lines to pay for travel reimbursements. Options recommended FIGO clarify this situation in 2007, Which FIGO did. However, this final evaluation identified that the Nigerian team's concerns remained in respect of use of finances and worries of financial improprieties.

The FIGO 2009 annual report to Sida outlines the rationale for the reduction. Page 17 of that report states ..."Nigeria was one of the countries that was affected by the re-alignment of the UK expenditure and had its budget reduced. The decision to cut their budget was mostly based on lack of expenditure. There was a significant unused portion of money in the bank account because the project members thought that they couldn't move money from one budget line to another – particularly in the case of the equipment. The equipment they purchased was a one-time expense, yet there was a certain amount of money designated for equipment for each bi-annual financial report. The money that was in the bank was money from the equipment but they felt that they couldn't touch it. This has since been cleared up and the project understands the flexibility of moving the funds within the project. As such the team decided to reduce the number of training but to increase the number of participants at each session".

6.3 FIGO

As highlighted by FIGO in its annual narrative report (March 2010), and discussion with FIGO Project Manager, the transfer of project management in 2009 from London to the Society of Obstetricians and Gynaecologists of Canada brought its own challenges. The Project Manager had ten projects to familiarise herself with – and at a time when budget realignments occurred this required sensitive negotiation and discussions with the Nigerian team. The subsequent changes in staff has seen the SMN Nigeria project oversight change four times during its term and as stated by FIGO, “some project memory is lost and each country had to deal with a new person who had to become familiar with their projects”. Both the Nigeria team and FIGO Project Manager reported this change in oversight as challenging.

6.4 Relationship with mentor / twinning society

This aspect of the FIGO ‘north-south’ society collaboration has been a considerable challenge for the SMN Nigeria project. Despite early visits from both the mentor and twinning society, the SMN Nigeria team reported no formal written feedback or trip notes were received following those visits.

Mentorship

In 2009, the project mentor resigned leaving a gap in the anticipated collaboration objective. FIGO staff held initial discussions with both the twinning society (Danish) and the Nordic Society of Obstetrics and Gynaecology during FIGO congress in 2009, and despite follow-up discussions and email communications, no response was received and no replacement mentorship formalised.

From the original mentors resignation email to FIGO (dated 03.08.2009) and communications for this evaluation, there was clearly a frustration between the mentor and Nigerian team. The ex-mentor reported trying to address human resources for maternal survival in his correspondence with SOGON officials, with the aim of stimulating discussions on ‘task-shifting’ and the society’s role to shape a cadre of well qualified “non-physician clinicians” through short-duration training to primary and secondary providers (and that the long-duration post-graduate specialist training be reserved for highly specialised staff at the tertiary and specialist hospitals in the urban cities).

The ex-mentor reported “...*indifference (refusal) of SOGON to radically address the issue of non-physician clinicians and the crisis in human resources for maternal and neonatal survival*”.

In Nigeria, a significant number of women do deliver unaided, supporting the ex-mentor’s suggestion to discuss the human resources issues. The Save the Children Missing Midwives Report⁵; states: “The starkest example is Nigeria, where around one in five women deliver their babies alone – and this varies from 34.5% of the poorest fifth of women to 3% of the richest fifth. Six million babies are born every year in Nigeria, meaning every day 3,100 women in Nigeria face some of the most dangerous moments of their lives on their own.”

The Nigeria project team commented that the project mentor had provided useful general advice but that his suggestions of non-physician clinicians was not considered by the project team to be appropriate or in keeping with Nigerian legislation. This was reported as the catalyst for the breakdown in the mentorship.

⁵ Available at: http://www.savethechildren.org.uk/en/54_Missing-Midwives.htm

Twining society relationship

Email contact / correspondence with the twinning society was also initiated by the consultant in order to enable them to participate in this end of project evaluation; however, the consultant did not receive any response at the time of report writing. As a result, this report is not able to give an account of their perspective of the project. The FIGO Project Manager also reported no responses being received from the twinning society when occasion to contact was made.

Finally, no twinning midwifery society support was ever identified leaving a further gap in the north-south collaboration. Had such a link been agreed, for example with the International Confederation of Midwives (ICM), then it could be speculated that the NANM contribution to this project could have been better supported.

7. LESSONS LEARNT

7.1 Lessons learnt for FIGO

- The north-south mentoring and twinning society ethos can bring real collaborative working relationships and cross-fertilization of knowledge, skills and abilities in both directions. But the mentoring and twinning society arrangements need to be mutually beneficial and need to reflect the sensitivity, awareness and flexibility to support the local society's mission and *modus operandi* in relation to health service delivery and socio-cultural aspects. The need for mentorship must also be clearly defined and linked to appropriate issues such as technical / clinical support or project management support.
- In-country projects that are reliant on the good-will of busy clinicians working fulltime are susceptible to slippage and challenges in meeting project objectives due to competing priorities of project staff. Resources for dedicated project management time (and remuneration for roles) for project directors and researchers would be helpful.
- The use of the logical framework as a management tool needs to be user-friendly, and easily understood by project staff. Greater support on logical framework development and use at project outset is essential. Simplified work plans / GANTT charts within a SMART (specific, measurable, achievable, realistic, time bound) framework can be beneficial.
- The full project management cycle of programmes operating in fragile and insecure countries are prone to change, adaption and challenges for all staff involved.

7.2 Lessons learnt for the Project

- Capacity building through skills training can result in staff attrition from specialist services and this will need to be factored into staffing levels and rotation programmes.
- Advocacy and representation needs to be cyclical as one-off approaches do not bring lasting, sustainable results.
- Clinical protocols are only useful when disseminated, adopted, and implemented by all, and their use monitored and evaluated.
- An area that has remained a challenge has been collection of neonatal data and case tracking of babies transferred from labour ward special baby care. These data are important for robust monitoring of full episodes of care and outcomes. This was not resolved in Benin or Nnewi and remains a gap in the project's knowledge. Interestingly in Kaduna, where it has worked, the site coordinator is consultant paediatrician. This suggests a need for greater collaborative working and involvement between obstetricians and gynaecologists, and midwifery departments, with paediatricians not only in future projects, but also at service delivery level as part of improved daily working relationships for better mother and baby outcomes.

8. CONCLUSION AND RECOMMENDATIONS

8.1 Conclusion

The project has made progress since the 2007 baseline review and the project team's strengths in maternal health have been used to achieve objectives of improved data collection mechanisms; capacity training of skilled birth attendants through emergency obstetric training and associated protocol developments; advocacy at government and hospital administration levels and increased profile of SOGON as a national leader. At Kaduna, the project has resulted in the availability of free magnesium sulphate and where not available, the project has been the catalyst for introduction of affordable costs of this drug.

There have been a number of challenges, some of which the project team were able to resolve but some which were not resolved – notably the teams concerns of how financial governance would be viewed by FIGO, which resulted in budget reductions; the limited contribution of the nursing and midwifery society; project management and communications given geographical distances and significantly the implementation of the north-south mentoring and twinning society ethos which did not deliver the anticipated support mechanism.

The project team has maintained its commitment to the project but this has been challenged by competing priorities amongst team members already committed to full time clinical duties. And while the projects initial focus on phase three delays within the three sites was identified as too limiting, the benefits that this project could have had by engaging more traditional birth attendants and community gatekeepers as part of advocacy has not been capitalised upon.

8.2 Key Recommendations

For FIGO

- A Memorandum of Understanding which includes the roles and responsibilities of mentors and twinning societies should be formalised. FIGO should performance manage this aspect of future project activities with clear outcome measures.
- Given the pivotal role that nurses and midwives have to play in addressing maternal mortality, FIGO should consider partnering with midwifery organisations such as the International Confederation of Midwives (ICM) to advance national midwifery societies capacity to address clinical skills and decision making.
- Where donors require a logframe approach to project management, greater support on development and use at project outset is essential. Simplified work plans / GANTT charts within a SMART (specific, measurable, achievable, realistic, time bound) framework can be beneficial.

For the project team

- A large knowledge-base of data has been collected and this should undergo further interrogation and analysis and the findings disseminated at local, national and government levels.
- Further follow-up to evaluate training in relation to clinical behaviour change would be beneficial to ensure training is fit for purpose and meets evidence-based needs.
- Community outreach and empowerment is pivotal to reaching women and educating them on the complications of pregnancy that require urgent interventions. As such the

project sites need to embed this activity into normal daily practice. As part of this, tracking of outcomes from advocacy needs to be devised and implemented.

- The participation and representation of nurse-midwives and the professional body (NAMN) needs review. SOGON / FIGO should formally request NAMN to clarify use of project funds for financial governance.

Annex 1 Terms of Reference

Background:

The goal of this 4 year project has been to reduce maternal and newborn morbidity and mortality and contribute to the achievement of MDG goals 4 and 5 in a series of low income countries. Secondary objectives of the project include:

1. Strengthening the capacity of national professional societies to engage in maternal-newborn health through the design and implementation of projects in the field;
2. Strengthening cooperation between FIGO and national societies, and also between societies in regions or of different economic levels;
3. Strengthening cooperation between national societies and national stakeholders involved in safe motherhood and newborn health;
4. Increasing the credibility of national societies locally to provide technical support to Ministries of Health and national professional councils.

The project has been implemented in a number of countries wherever possible through twinning mechanisms between ob/gyn societies of developed countries with those in the implementing countries (north-south partnerships). In turn, the ob/gyn societies in the low income countries were expected to partner with national midwifery societies, Ministries of Health, civil society organizations and other relevant stakeholders to ensure harmonization of the project with the health policies and practices in the countries and the proper implementation and sustainability of the tenets of the project

The key innovation of this initiative has been to increase women's access to new, cost-effective and evidence-based technology for the reduction of maternal and newborn mortality in the countries concerned. Thus, the individual projects should have included staff training and re-training using modules such as the ALARM International program, maternal mortality audits, improvement of antenatal and delivery services, improvement of emergency obstetrics care (EOC) in selected districts, the development and dissemination of obstetric management protocols and algorithms, introduction and dissemination of partogram monitoring of labour and consolidation of the use of essential drugs like misoprostol and uninject for the prevention and treatment of post-partum haemorrhage. Projects were also intended to work with local communities to increase awareness on issues related to safe motherhood, and to promote increased utilization of interventions to reduce maternal and newborn morbidity and mortality.

Scope of work (general):

FIGO has engaged Options to undertake a final evaluation, in the form of a critical review, of each project and to provide individual country reports and an overall evaluation report to submit to the funder (SIDA). These reports will summarise and state to what extent the objectives of the project have been achieved.

Individual projects have been sited in ten countries and individual reviews are required for each project. Five reviews will take place in-country (Peru, Uganda, Pakistan, Haiti and Nigeria) and five will be desk-based (Kosovo, Kenya, Moldova, Uruguay and Ukraine). The reviews will take place between April 2010 and July 2011. Concise individual reports will be submitted to FIGO after each review. A summary report will also be prepared when all reviews are completed.

FIGO recognizes that measuring the maternal health impact of this project is not feasible. However, there may be areas/examples where this has occurred. In this case, vignettes

could be provided in the report to illustrate this. This final evaluation needs to take into consideration and highlight in the report the fact that the project has had limited funding.

Objectives of each review:

- To evaluate the acquired capacity of the ob/gyn and midwifery society to conduct projects relevant to the promotion of safe motherhood and the improvement of maternal health
- To report on and evaluate any of the following indicators that were listed in the initial project proposal:
 - Improvements in access to essential obstetrical care services and new technologies
 - Improvements in access to skilled birth attendants
 - Improved health facilities
 - Lowering of maternal case fatality rate
 - The level of community mobilization and participation
 - Improvements in access to health facilities with basic equipment, supplies and medication for basic obstetrical care services and new technologies such as tamponade and uniject
 - How social and cultural barriers to maternal care have been identified and addressed
 - Improvements in collaboration and the engagement of health providers, governments, community organizations and civil society to understand why women and newborns are dying and how to prevent it
- To describe what the project has meant to each country project and professional society as well as FIGO as an organization
- To list the lessons learnt for FIGO
- To present the successes, challenges and shortcomings of the project, together with a discussion of possible recommendations for the future direction for each country's project (if the project is continuing beyond the period of FIGO funding)

Scope of work (Nigeria):

In-country to include:

- A critical review of any written material (narrative reports etc), and other evidence individuals in the project can cite to support the endline review.
- Interviews with key individuals within the project including the partners etc. (A full list of interviewees will be provided in advance of the review).
- Interviews with mentors, FIGO staff and SMNH (Safe Maternal and Newborn Health) Committee members as necessary.
- A site visit may be undertaken if time permits.

A draft interview schedule will be provided before the evaluation, together with a draft report structure. However, the consultant will need to use his/her professional judgement in deciding if there are other issues that also need to be explored and/or which key issues need to be investigated in greater depth than the draft interview schedule provides. Both qualitative and quantitative evidence should be presented in the report to support the consultant's findings.

A brief summary of the project is provided at the end of this document.

Deliverables:

Report of the individual country evaluation. (Individual country reports will be approximately 10 pages long, although this will be confirmed prior to the evaluation).

Timeline:

The evaluation will occur following completion of the project's funding from FIGO and SIDA (December 2010). It is intended that the project will have submitted final documentation which will be made available to the consultant, as will other key documents such as the report of an earlier baseline review, annual narrative reports etc.

The review will take place in-country between the 21st and the 24th of March. **The total assignment should take no more than 7 days.** The breakdown of days is:

1.5 days	Preparation
4 days	On-site project review
1.5 day	Report writing

The evaluation should be submitted to Options 10 days after the field visit. Options will provide the first comments on the draft written outputs within 2 weeks of submission and will share the report with SOGC for feedback. The consultant will finalize written outputs, responding to comments received, and submit final versions within two days of receipt of comments.

Languages:

English is the language requirement for this assignment.

Summary of the Nigeria project:

“Saving mothers and newborns in Edo, Amambra and Kaduna States, Nigeria.”

The Society of Obstetricians and Gynaecologists of Nigeria's SMN Project is working in three facilities, each located in a different state: University of Benin Teaching Hospital in Edo State, Nnamdi Azikwe University Teaching hospital in Nnewi, Amambra State and Barau Dikko Specialist Hospital in Kaduna, Kaduna State. Through their activities such as emergency obstetric and neonatal care training and advocacy they hope to show decreased maternal and neonatal mortality and morbidity. A large component of the project is data collection and analysis at the three sites.

Annex 2 Key Lines of Enquiry and Means of Verification (moV)

(✓ denotes aspect achieved ✗ denotes aspect not achieved ± denotes variable achievement)

Purpose & Key Lines of Enquiry	MoV
<p>To evaluate country-level output- and process-based programme activities against the Logical Framework i.e.</p> <ul style="list-style-type: none"> • extent to which program met FIGO goals & objectives and FIGO Nigeria specific outputs & indicators (‘state of play’) • to identify innovative practices that could be scaled up at the country level <ol style="list-style-type: none"> 1. What is the status of the programme's progress toward achieving the FIGO outputs and associated indicators? 2. What local indicators had been agreed? How were they established? 3. How is data monitoring carried out? 4. Collating and using data issues 5. Were goals achieved according to the timelines specified in work plan? If not, then why? When will they be achieved? 6. Did personnel have adequate resources to achieve the outputs / goals? 7. If required, how should priorities be changed to put more focus on achieving the goals in the future? 8. Should any goals / outputs / indicators have been changed, added or removed at local and super-level? Why? 9. How should goals be established in the future? 10. What staff considers to be strengths of the programme? 11. What activities, research, advocacy, key messages undertaken? <ul style="list-style-type: none"> • at provider level • at higher level - participating at government levels, responding to consultations, support to O&G organisations, midwifery & nursing, MDG office 	<p>Desk research:</p> <ul style="list-style-type: none"> • Documentation review from original grant applications, memos, minutes and programme reporting to FIGO. ✓ • Review of existing data utilised for initial assessment and as baseline data. ✓ • Review of Options Baseline Review ✓ • Review of NGO / facility-based data used to guide programme implementation ± • Review of programme activity monitoring data specific to indicator activity as per LogFrame ✓ • Other written material cited by individuals to support evaluation ✓ <p>Interview/participation of: SMN Nigeria project staff / key stakeholders and service providers ✓</p> <p>Interview / participation of: , FIGO staff (Ms Moya Crangle), and ex-mentor Prof Stefan Bergstrom ✓ /</p> <p>Interview / participation of: twinning society ✗</p> <p>Observation of project site activities and campaigns to gather intelligence on how programs actually operates, particularly about the processes ±</p> <p>Interviews with women / community to fully understand impressions or experiences, awareness raised as result of project. ✗</p>