Critical Insights From Conducting a Social Return on Investment Study in Maternal and Newborn Health

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Public Health [D26]

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Contributor Biography

Dr. Aduragbemi Banke-Thomas is a medical doctor with postgraduate research training in health policy and international public health. He has experience working in public and private sectors, academia, and consultancy across sub-Saharan Africa. He is passionate about improving health outcomes for pregnant mothers and their babies in low- and middle-income countries as well as those who have been displaced from their homes. Presently, as research fellow and AXA Research Fund grantee at the London School of Economics and Political Science, his research is focused on using value-for-money assessments, economic evaluations, policy analyses, and geographic information systems to generate critical
evidence needed to inform better decision-making for maternal and newborn health in low- and middle-income countries.

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**Abstract**

Compared with traditional approaches such as cost-effectiveness, cost–utility, and cost–benefit analyses, the social return on investment methodology has the unique capacity to account for the broader social value and value for money of interventions while capturing perspectives of multiple stakeholders and relating this to the cost of implementing the intervention in a singular ratio. This case study describes the comprehensive assessment of and assesses the social impact and value for money of an emergency obstetric care training intervention for health care providers implemented in Kenya. Critical insights are shared into the practicalities of using the methodology within the maternal and newborn health area.
Insights will be relevant to any other researcher who is keen to apply the methodology in any area of health.

**Learning Outcomes**

By the end of this case, students should be able to

- Understand the stages of conducting a social return on investment (SROI) study
- Understand the challenges in data collection for SROI studies and techniques that can be used to address such challenges
- Appreciate the practicalities and lessons learned from an SROI study conducted within the maternal and newborn health area

**Case Study**

**Project Overview and Context**

I led the conduct of a social return on investment (SROI) study of training intervention of health care providers (HCPs) to improve their capacity to provide a critical care package for pregnant women called emergency obstetric care (EmOC). At the commencement of this research, this training was being implemented in 12 countries across sub-Saharan Africa and South-East Asia. The specific focus of my research was to conduct a comprehensive assessment of and assess the social impact and value for money (VfM) of this training intervention implemented in Kenya.

To help with understanding, it is important to establish the definitions of some key terms relevant to this research methods case. Social impact essentially captures the effect an organization’s actions have on the well-being of the community. VfM, on the contrary, has been defined as “the best use of resources to achieve intended sustainable outcomes and impact” (Department for International Development, 2011). So, in a broad sense, VfM reflects the social impact that is created with available funds.
For studies aimed at assessing VfM, traditional methods such as cost-effectiveness, cost–utility, and cost–benefit analyses have been used (Banke-Thomas, Madaj, Ameh, & van den Broek, 2015). However, in the years preceding my doctoral training, SROI, which is essentially an expanded form of the conventional cost–benefit analysis, had been promoted as a more comprehensive tool for assessing VfM. SROI has the capacity to account for the broader social value of interventions while capturing perspectives of multiple stakeholders, relating this to the cost of implementing the intervention, and presenting this relationship as a singular SROI ratio (Nicholls, Lawlor, Neitzert, & Goodspeed, 2012). At the commencement of my study, there had not been any previously published study in the peer-review literature using the SROI methodology in the broader maternal and newborn health (MNH) area and its application more broadly in low- and middle-income countries (LMICs) was very limited (Banke-Thomas et al., 2015). Thus, my research was certainly taking me into unchartered territory. However, this was a challenge worth taking because the SROI methodology was particularly relevant to my research as the impact of EmOC training is typically expected to extend beyond the outcomes of improved knowledge and skills experienced by the trained health care workers themselves, to better pregnancy outcomes for women and their babies that the trained health care workers manage (Bergh, Baloyi, & Pattinson, 2015).

**Section Summary**

- Traditional methods such as cost-effectiveness, cost–utility, and cost–benefit analyses have been used for assessing cost-effectiveness within VfM analyses.
- More recently, SROI methodology has been promoted as an innovative approach to use in capturing the broader social impact of interventions.
- The focus of the research in this methods case was to assess the social impact and VfM of an EmOC training intervention in Kenya.

**Research Design**
Although there had not been an SROI study published in my field at the commencement of my study, there was guidance in the gray literature on how to conduct an SROI study (Nicholls et al., 2012). Combined with this, insights gathered from a systematic review conducted a priori to look at the application of the SROI methodology in public health more generally helped to guide the design of the study (Banke-Thomas et al., 2015). SROI can be conducted retrospectively to evaluate the social impact and VfM of outcomes that have already occurred because of an implemented intervention (evaluative-type SROI) or modeled to capture the social value of anticipated outcomes of a planned intervention (forecast-type SROI; Nicholls et al., 2012). I chose to conduct an evaluative-type SROI that assessed the social impact and VfM of the EmOC training intervention, based on outcomes that occurred during a preceding 1-year period while following the principles of the SROI methodology (Nicholls et al., 2012).

**Using the SROI Methodology**

Carrying out an SROI analysis involves six stages: Stage 1 is focused on determining the scope of the research and sampling strategy to be used for the intended participants; Stages 2, 3, and 4 are primarily data collection stages; Stage 5 is data analysis; and Stage 6 is for data dissemination.

**Research Scope and Sampling**

For Stage 1 (establishing scope and identifying key stakeholders), the scope was predetermined before the commencement of the research, limiting the focus to the intervention—EmOC training—and specifically to the second phase of the program implemented in Kenya. In addition, the decision was made to limit the time scope of the SROI analysis to the number of trainings conducted over a 1-year period (2014) during Phase 2 of the intervention. In addition, the funder’s perspective was taken for the SROI analysis.
For stakeholder identification, established stakeholder mapping and analysis techniques (Bryson, 2004) were used. Contacts were identified from the various preidentified stakeholder groups. Using the snowballing sampling technique (Atkinson & Flint, 2004), the preidentified stakeholders were asked to help identify additional stakeholders, confirm, and describe their association with the EmOC training intervention.

**Data Collection**

SROI Stage 2 (mapping outcomes) was focused on responding to three research questions:

- What are the costs associated with implementing the EmOC training intervention?
- What are the outputs of the EmOC training intervention?
- What are the outcomes of the EmOC training intervention?

Program data were reviewed to collect data on the implementation cost of EmOC training in Kenya as well as the outputs of the intervention for the year 2014. Findings from qualitative methods (focus group discussions [FGDs], paired interviews [PIs], and key informant interviews [KIIs]) were triangulated with evidence from the existing literature to identify and map outcomes and develop an updated theory of change of the intervention. During the qualitative sessions, stakeholders were asked to identify the outcomes and rank the outcomes, regarding the importance to the stakeholder. Subsequently, discussions regarding the reasons for the choices made by the respondents followed. Proposed outcomes deemed “material” was inputted into the SROI impact map. The term “material” as defined in the most recent guidance for SROI refers to the relevance of any model component that its omission or misstatement would have the potential to affect the economic decision that the stakeholders will take based on the resultant analysis (Nicholls et al., 2012).

During SROI Stage 3 (evidencing outcomes and giving them a value), the research question was, “What is the financial valuation of stakeholder-described outcomes?” For this
stage, FGDs and review of the literature were primarily used. PIs or KIs were also used when it proved logistically difficult to set up an FGD, such as with relatives of women who have received EmOC as well as with medical doctors (in facilities where there were only a handful of physicians). Only material stakeholders considered as beneficiaries of the EmOC training intervention were included in this stage.

Valuation of stakeholder-described outcomes was conducted during this Stage 3. For this, stakeholders were asked to establish how long outcomes last and to place a value on the outcomes, either fixed costs or financial proxies. An adaptation of the value game, designed to aid the valuation process for SROI studies, based on a contingent valuation technique (Scholten, 2015), was used for this exercise. The approach asks consumers (beneficiaries, in the case of this study) to directly report their willingness to pay (WTP) to obtain a specified commodity, or willingness to accept (WTA) to give up a commodity, rather than inferring such valuations from observed consumer behavior in regular marketplaces (Scholten, 2015). Financial valuations were subsequently sourced from the literature and triangulated with beneficiary valuations. In cases in which beneficiaries were not able to provide clear financial valuations, insight from discussions with beneficiaries aided literature searches to find appropriate financial valuations.

SROI Stage 4 (establishing impact) was used to respond to the research question, “What portion of the stakeholder-described outcomes is/are due to the EmOC training intervention?” Similar to Stage 3, FGDs and evidence gathered from a review of the literature were primarily used to achieve this stage. PIs or KIs were considered when it proved logistically difficult to set up an FGD for the specific stakeholder group. Only material stakeholders considered as beneficiaries of the EmOC training intervention were included in this stage. Discussions regarding opinion on portions of the stakeholder-described outcomes that were due to the EmOC training intervention were conducted during these FGDs as part
of this stage. FGDs were also used to collect information on stakeholder perception on estimates for “what would have happened without the training” (deadweight), “how much of an outcome has displaced other outcomes” (displacement), “how much of the outcome was caused by the contribution of other organizations or people” (attribution), and “deterioration of an outcome over time” (drop-off; Nicholls et al., 2012). This was incorporated into the value game. Like with Stage 3, percentages for deadweight, displacement, attribution, and drop-off (if relevant) were sourced from the literature and triangulated with beneficiary estimates. In cases in which beneficiaries were not able to provide clear estimates, insight from discussions with beneficiaries aided literature searches to find appropriate percentages for the SROI model.

**Data Analysis**

Data collected in Stages 1 to 4 were analyzed before incorporation into the SROI model. For SROI Stage 1, the Bryson’s (2004) basic stakeholder analysis technique was used to systematically identify and classify stakeholders as primary beneficiaries (or not) based on their perspectives of their roles and levels of importance and influence.

Following verbatim transcription of the FGD audio recording, the thematic approach was used to reduce the data through summarization and synthesis (Ritchie & Lewis, 2003). The thematic approach focuses on detecting and describing both implicit and explicit ideas within the transcript, that is, themes. This approach was chosen because of its emphasis on transparency in data analysis, which aligns closely to the SROI principle of transparency (Nicholls et al., 2012). For this approach, we follow Braun and Clarke’s (2006) six-step approach: becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. These qualitative data were used to report the outcomes of the intervention from the stakeholder’s perspective and how much of those outcomes were specifically due to the intervention or other actors.
For the value game incorporated in the FGDs, median percentage attribution and valuation of the various stakeholder-described outcomes were identified. These values were triangulated with evidence from the existing body of evidence. Qualitative data analysis was done digitally with the aid of NVivo 10™ (QSR International, Memphis, USA).

For input (direct implementation cost of EmOC training), bottom-up costing (ingredient) approach was used to verify the amount spent. This approach was chosen because it is known to be more accurate compared with the alternative top-bottom costing approach. For output, the number of trained HCPs across Kenya and the financial valuation of each outcome for the 1-year period of study based on insight from the value game and existing evidence were computed. Financial valuation of each outcome was then reduced to reflect the effect of external influences (median percentage attribution, drop-off, and deadweight). Following the deductions, financial valuations of all outcomes were summed up (SROI Stage 5). This total outcome valuation was then divided by the total value of the input (cost of training implementation). All quantitative and financial data analyses were done in Microsoft Excel (Microsoft Corporation, Redmond, USA).

### Section Summary
- Data collection for this evaluative SROI study was based on a mixed-methods approach capturing quantitative and qualitative data.
- Analytical techniques used included the Bryson’s basic stakeholder analysis technique for the stakeholder analysis, thematic analysis for the qualitative data, bottom-up costing technique for the cost data, and SROI analysis comparing input cost and outcome financial values.

### Research Practicalities

#### Planning
The major impact of this research on the local services was the time taken off to attend FGDs, which could have been used to attend to administrative and clinical responsibilities. The key strategies used in the research to minimize the effect of this demand were the following:

- Informing the HCPs ahead of time about the FGDs and find out when it will be most convenient for them to attend, working around the least busy time in the facility. The most commonly suggested convenient time was then proposed to all attendees of the FGD to confirm their attendance.
- The timing for FGDs was structured in tandem with the health facility managers.

**Sampling Participants**

The SROI methodology requires a lot of data for developing the model. In my research, the use of both qualitative and quantitative methods allowed for a more robust understanding of the intervention’s theory of change. The qualitative methods yielded some outcomes of the training intervention that would otherwise not be considered in traditional VfM assessment methods, whereas the quantitative methods captured numerical data from the program and existing literature were used to substantiate and value the stakeholder-described outcomes. However, with a nationwide program like the one evaluated in my research, it would have been a herculean task to conduct qualitative engagements with stakeholders from across the entire country. As such, within the scope and budget of the study, it was only possible to conduct FGDs, PIs, and KIIIs with a number of stakeholders within the various stakeholder groups. In addition, I did not cover all 47 counties in Kenya. The decision was made to focus on Nairobi county as this is the capital of the country and a melting point of cultures and is the most diverse and cosmopolitan county in the country. To mitigate any bias that may occur due to the recruitment focus on the capital, an attempt was made to ensure sufficient variation among participants within each group that captured the
national distribution of the participants, by selecting them purposively (Krueger & Casey, 2009).

**Language Barrier**

Topic guides to engage with the participants were developed in English and Swahili languages, both of which are spoken locally in Kenya. The use of either was dependent on the language that the respondents were more acquainted to speak. Specifically, for the FGDs that were conducted in Swahili, translation and back-translation were done to ensure cultural equivalence and that the intended meaning of the participants was captured. I was not sufficiently fluent in Swahili to be able to moderate the FGDs, as such I had to collaborate with colleagues who were based locally and who had expertise in conducting qualitative enquiries with the population group of interest. This collaboration helped ensure that the critical voice of the end beneficiaries of the intervention—women—was captured. It is worth adding also that valuation of outcomes may have a cultural bias and it is better that the researcher is either very versed with the culture or can work with those who are versed with the culture of the beneficiaries to capture their subjective valuation of outcomes.

**Access to Program Data**

In this research, program data were reviewed to collect data on the implementation cost of EmOC training in Kenya as well as the outputs and outcomes of the training intervention for the year 2014. Typically, with such program data, there might be some restriction on access to data, but as this study was part of the evaluation of the program itself, it was relatively easy to get access to the program data. Permission to use the data was obtained from the organization that led to the implementation of the intervention.

**Asking Difficult Questions**
Two questions were asked of women to help with understanding their subjective valuation of outcomes of the training. These questions were, “What is the value you place on your life?” and “What is the value you place on the life of your newborn baby?” This was a difficult question for women, and generally, there was an aversion to placing a financial value on life and health for themselves and their babies, as outcomes of care received following training. I found out that the difficulty in estimating the value of outcomes may be due to the religious nature of Kenyans, as women viewed being alive and healthy as a gift from a supernatural being, and as such there was no price to pay for it. As such, it was important to reassure the women that it was ok if they found this to be a difficult question, but if it made it easier for them, they could think of the value of any woman’s life and not necessarily theirs.

Quality Control

For the FGDs and KIIs, research assistants were trained to ensure they could collect quality data that would be relevant for the SROI analysis. The training introduced them to the purpose of the study and where the results of the FGDs fit within the broader research. The training also covered fundamental concepts of interview techniques, moderation techniques, obtaining participants’ cooperation, and maintaining the confidentiality of participants. The research assistants could contact the principal researcher at any time to ensure that they could clarify any queries that they had. The details of this process were fully documented in the standard operating procedure manual, which was given to the research assistants during the predata collection training.

To increase the trustworthiness of the qualitative component of the study, self-reflection and sharing of observations were integrated within the quality control process. Peer debriefing sessions were conducted with research assistants to evaluate the conduct of KIIs and FGDs, to ensure that any best practices were shared, errors corrected, and lessons learnt. These sessions were also used to discuss the findings of the KIIs and FGDs. Two 5-week
periods were used for data collection, ensuring prolonged engagement with the stakeholders. Also, both positive and negative opinions were collected and analyzed. Finally, stakeholder checks were done during sessions to ascertain the interpretations made of what the stakeholders actually said (Bowen, 2005).

**Section Summary**

- Working with the local team in terms of planning and the actual conduct of the study helped to facilitate a more culturally sensitive analysis.
- Access to the program data was made easier by the buy-in of the program implementer.
- Quality control measures were put in place to guaranty agreement during the data collection process, especially as the study was being done in conjunction with a locally based team.

**Method in Action**

The availability of a comprehensive and robust database for finance as well as monitoring and evaluation data which captured progress and impact of implementation during the entire program life cycle made the conduct of the research plausible. In addition, the use of the contingent valuation technique of the value game allowed beneficiaries to value the outcomes that would otherwise not have been possible. However, this approach was also a challenge. Indeed, getting participants to place a financial value on soft outcomes such as increased knowledge, improved skills, and preservation of life was a huge challenge.

Another challenge was drawing the line on who is a beneficiary among all the 12 stakeholder groups that had been identified to be relevant or related to the intervention. In the study, beneficiaries were defined as “those who experience the outcomes of an intervention.” Of those identified, only direct beneficiaries (trained HCPs) and ultimate beneficiaries
(women identified to have received EmOC from trained HCPs and their newborns) were deemed to have experienced materially relevant and significant changes due to the EmOC training and the care received. Our engagement with the broader groups of stakeholders showed that there were other stakeholder groups who also deemed themselves as beneficiaries of the intervention. For example, husbands of the women engaged in the study posited that they benefited from outcomes of the care that their partners receive, if they are kept alive and healthy after pregnancy and childbirth. Their reason was that women play significant roles in families such as providing critical care for the children and contributing to household income and to general decision-making. However, these contributions to the family could still have happened with or without the EmOC training, as such it is difficult to classify them as “real” beneficiaries with any material change specifically due to EmOC training. In any case, such benefits were already attributed to the woman being alive and including them would have led to double counting of outcomes, which is not in line with the principles of the SROI methodology.

In future, something I could have done differently would have been to conduct a forecast SROI before conducting this evaluative SROI. A forecast SROI studies would have explored and incorporated more long-term changes that occur due to EmOC training. Such changes, as seen in this research, may include social impact of the avoidance of long-term sequelae of obstructed labor, including obstetric fistula and contributions of healthy mothers to their family and community, as well as neonates who survive to childhood. Results from such analysis could have been used as a benchmark for how much of the expected outcomes have then occurred after 1 year of implementation.

**Section Summary**

- Use of the contingent valuation technique of the value game allowed beneficiaries to
value the outcomes that would otherwise not have been possible.

- It is important to include only real beneficiaries of the intervention who are most pertinent to avoid overclaiming of social impact.

**Practical Lessons Learned**

**Planning for Recruitment**

Leveraging the in-country relationship and networks of the implementing organization, trained EmOC providers were tracked from the database of health facility address of the trained HCPs, based on data collected during the training. This was done bearing in mind the potential risk of rotation of HCPs across facilities to ensure that the same HCPs were not recruited for different FGD sessions. Letters of invitation were sent to the HCPs a minimum of 1 week before the expected date of the FGD.

Women were recruited while they were on admission in labor ward or during their stay in the postnatal ward. An available list of facilities with trained HCPs from the implementing organization was used to verify that only women who had received care from such facilities were recruited. For other stakeholder groups for which FGDs could realistically be conducted, efforts were made to ensure that their recruitment had minimal impact on their job. Letters of invitation were sent to the participants a minimum of 1 week before the intended FGD date.

**Training Local Teams on SROI**

SROI is not yet fully mainstay, and many researchers do not understand what it takes to conduct an SROI study. As such, it was important to train the local team first on the SROI methodology and then on the methods to be used specifically for the research. This helped to ensure that they understood the SROI language and their role in helping to collect the
necessary data to complete the SROI analysis. This training really helped to facilitate a smooth research process and helped improve the validity of the research.

**Preventing Stakeholder Creep**

An issue that has been reported in the literature is stakeholder creep where diverse stakeholders are deemed beneficiaries and included in the SROI analysis. A robust stakeholder analysis that categorizes stakeholders into one of funders, implementers, promoters, or beneficiaries can address this issue (Banke-Thomas, 2018), while an analysis that includes direct and indirect can always be conducted at two levels to include only direct beneficiaries as well as combine direct and indirect beneficiaries. It is important to resist the temptation of including funders, promoters, and implementers in SROI analyses.

**Collecting Financial Valuation of Outcomes From Multiple Sources**

Collecting financial valuation of outcomes from multiple sources, including directly from the beneficiaries themselves, global databases suitable for the local context, and gray literature, will help to improve the validity of valuation. Findings from the multiple sources can be triangulated and subsequently validated during discussions with experts and robustness tested using sensitivity analysis.

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<td>• It is important to plan for recruitment while leveraging networks of the local team and ensuring minimal disruption to the routine work of stakeholders.</td>
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<td>• As the methodology is not yet mainstay, it is important to give time for training local staff on the methodology itself in addition to the methods to be used specifically for the research.</td>
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Efforts should be made to collect financial valuation of outcomes from multiple sources.

**Conclusion**

Overall, this study showed that SROI is a useful approach for assessing VfM of EmOC training, as it provided additional key insight regarding the implementation of EmOC training in Kenya that would otherwise not have been captured using the traditional approaches. From this research, it is evident that the challenges that limit the application of SROI methodology are real, including the need to value soft outcomes and capture multiple perspectives of stakeholders. However, so is the benefit of the outputs of the SROI analysis. Using SROI for VfM assessments in MNH and VfM assessments more broadly is an ongoing discussion. The challenges that limit its development are not unique to the area of MNH, as evidenced by the systematic review conducted as part of this study. However, from the experience of this research, these challenges are even more highlighted within the MNH area because of the complexity of MNH interventions. With emphasis on innovative MNH interventions, innovative evaluative methods need to be considered to ensure that critical cross-cutting teams such as scalability, feasibility, appropriateness, and acceptability, in addition to VfM, are captured. For me, personally, the unique opportunity to conduct this SROI study on a large-scale intervention helped me to develop key analytical skills which I am now able to apply on other SROI studies while also making contributions to improving the methodology.

**Section Summary**

- Although there are challenges to its application, SROI methodology has benefits over traditional methods for assessing VfM.

- SROI methodology can be used for assessing social impact and VfM of MNH.
Classroom Discussion Questions

1. What techniques can be implemented by researchers to help avoid “stakeholder creep” in social return on investment studies?

2. Why is it important to get valuation of outcomes from the real beneficiaries of the intervention?

3. How can financial proxies be better developed and contextualized for the purposes of social return on investment studies in health?

4. What can be done to improve the transferability and comparability of social return on investment ratios within and between health areas?

Multiple Choice Quiz Questions

1. Which of the following captures the capabilities of social return on investment as a value for money assessment tool?
   a. The tool can mostly account for the value of outcomes experienced by one major stakeholder
   b. It accounts for the broader social value of interventions while capturing perspectives of multiple stakeholders, relating this to the cost of implementation, and presenting this relationship as a singular ratio
   c. It accounts for the broader social value of interventions while capturing perspectives of multiple stakeholders, relating this to the cost of implementation, and presenting this relationship as multiple ratios

Correct answer: b

2. What methods were triangulated to collect data on financial valuation of outcomes?
   a. Qualitative enquiry of beneficiaries and a literature review
   b. Secondary data collection and a literature review
c. Qualitative enquiry of implementers with a detailed systematic review of the literature
Correct answer: a

3. What terminology is used to refer to excessive incorporation of stakeholders who may not be beneficiaries of an intervention into social return on investment analyses?
   a. Stakeholder excessiveness
   b. Stakeholder overinclusion
   c. Stakeholder creep
Correct answer: c

4. What technique is used by the value game in collecting outcome valuation data that would otherwise not have been possible?
   a. Contingent valuation technique
   b. Divergent valuation technique
   c. Pluripotent valuation technique
Correct answer: a

5. Stage 4 of the social return on investment methodology in this case study calculating estimates for all of the following EXCEPT:
   a. How much of the outcome was caused by the contribution of other organizations or people?
   b. What would have happened without the training?
   c. Who were the main stakeholders of the training intervention?
Correct answer: c

Declaration of Conflicting Interests

The Author declares that there is no conflict of interest.

Further Reading


**Web Resources**

The Value Game website can be found here: http://www.valuegame-online.org/

The Global Value Exchange website for financial proxies can be found here:

http://www.globalvaluexchange.org/

**References**


