

Investing the Marginal Dollar for Maternal and Newborn Health: Geographic Accessibility Analysis for Emergency Obstetric Care services in Burkina Faso



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## **Table of Contents**

Acknowledgements	
Executive summary	i
1. Introduction	1
2. Reference indicators and targets	3
3. Assumptions related to the EmOC referral system	4
4. Tool used for the different analysis: AccessMod 4.0	7
5. Analytical approach	8
5.1 Accessibility coverage analyzes	8
5.2 Geographic coverage analyzes	10
5.3 Service utilization analyzes	12
5.4 Scaling up analyzes	14
6. Data and national norms used in the different analysis	17
6.1 Statistical data	19
6.1.1 National level figures	19
6.1.2 Sub national level figures	19
6.1.3 Cluster level figures	22
6.1.4 Health facility level figures	22
6.2 Geospatial data	24
6.2.1 Administrative boundaries	26
6.2.2 Geographic location of the EmOC facilities	27
6.2.3 Land cover including the extend of urban areas	27
6.2.4 Road network	
6.2.5 Hydrographic network	
6.2.6 Digital Elevation Model	
6.2. / Spatial distribution of unattended home deliveries	
6.2.8 Spatial distribution of the number of births	
6.3 National norms	

7. Results
7.1 Accessibility coverage analyzes357.2 Geographic coverage analyzes407.3 Service utilization analyzes477.4 Scaling up analyzes51
8. Conclusions and recommendations
References
Annex 1 – Indicators and minimum acceptable levels from the 1997 UNICEF, WHO, UNFPA Guidelines for monitoring the availability and use of obstetric services
Annex 2 – Indicators and minimum acceptable levels from the 2009 WHO, UNFPA, UNICEF and Mailman School of Public Health handbook for monitoring emergency obstetric care
Annex 3 – Illustration of the current EmOC referral system in Burkina Faso
Annex 4 – Regional and Province level demographic data used in the context of the project
Annex 5 – 2010 list of BEmOC and CEmOC facilities identified during the obstetrical and neonatal care emergency needs assessment
Annex 6 – EmOC number of skilled birth attendant, medical staff qualified to perform a C-section or an anaesthesiology and assisted deliveries for 201275
Annex 7 – Simplified classification for the global land cover distribution grid76
Annex 8 – Process followed in order to create the final land cover distribution grid77
Annex 9 – Process to generate the buffers around the DHS cluster location
Annex 10 – Protocol used to spatially distribute the number of birth in each country

Annex 11 – Regional and Province level number and percentage of births where the household is located within 2 hours of travel time to a BEmOC (including CEmOC) facility for both scenarios	2
Annex 12 – Travel time between each BEmOC (including CEmOC) and the nearest CEmOC	3
Annex 13 – Province level travel time statistics	4
Annex 14 – Health facility level results of the geographic coverage analysis for BEmOC (including CEmOC) facilities	5
Annex 15 – Region and Province level number and percentage of births where the household is located within 2 hours of travel time to a BEmOC (including CEmOC) when taking both travel time and coverage capacity into account	6
Annex 16 – Births referred to CEmOC for complication and corresponding number of EmOC surgical teams in CEmOC facilities	7
Annex 17 – 105 facilities considered in the first scaling up scenario	8
Annex 18 – Health facility level results for the first scaling up scenario	9
Annex 19 – Health facility level results for the second scaling up scenario (first variant)9	2
Annex 20 – Births referred to CEmOC for complication and corresponding number of EmOC surgical teams in CEmOC facilities for the second scaling up scenario (first variant)	3
Annex 21 – Regional and Province level number and percentage of births covered with the second scaling up scenario (first variant)9	4
Annex 22 – Health facility level results for the second scaling up scenario (second variant)	5
Annex 23 – Births referred to CEmOC for complication and corresponding number of EmOC surgical teams in CEmOC facilities for the second scaling up scenario (second variant)	6

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## **Executive summary**

### Objective

Progress on MDG5a to reduce maternal mortality is lagging behind in many countries and a key constraint is access to skilled care at birth including emergency obstetric care (EmOC) services. In order to expand coverage, good-quality essential services must be integrated into strong health systems.

The World Health Report 2005 proposed a "close to client" approach with back up services at referral level. While the first level should be able to provide most of the Basic Emergency Obstetric Care (BEmOC) signal functions, there is also a universal need for access to comprehensive Emergency Obstetric Care (CEmOC) referral services, in case the need arises.

In recognition of the key impact that EmOC services can have on maternal mortality and safe birth outcomes, the World Health Organization (WHO) is supporting the use of Geographic Information Systems (GIS) to analyse physical accessibility to facilities providing EmOC in five selected countries, namely (by alphabetical order): Burkina Faso, Cambodia, Lao People's Democratic Republic, and Malawi.<sup>1</sup>

Essentially, from a normative perspective every woman should be able to easily access a health facility that provides BEmOC. This is not currently the case in most low-income countries. Strategic decisions need to be made by policy makers and health planners with regards to what investments are feasible given limited resources and competing priorities.

The broader project aims to inform policy discussions on how to optimize or target the spending of the marginal dollar for maternal health at country level; in particular to examine the infrastructure requirements for scaling up coverage of institutional delivery with skilled attendance. The research undertaken as part of this project and presented here aims to investigate the current accessibility to EmOC and potential implications for future global and national level policy recommendations and norms.

#### Methodology

The analysis first assesses accessibility coverage<sup>2</sup>. It then combines the results with data on the availability of human resources in the facilities providing the concerned health services, in order to obtain a measure combining both the population needs and service availability. This measure is referred to as geographic coverage.

In the case of Burkina Faso, working in close collaboration with the Ministry of Health through the WHO Country Office, a freely available GIS extension developed by WHO to measure physical accessibility to health care, called AccessMod (See Chapter 4), has

<sup>&</sup>lt;sup>1</sup> This work has received financial support from the Norwegian Government as part of a work plan to operationalize the UN Secretary General's Global Strategy for women and children's health.

<sup>&</sup>lt;sup>2</sup> Refers to ensuring that health services are located within reasonable reach of the people who should benefit from it (Tanahashi, 1978)

been used in combination with statistical data from existing sources (including household surveys, Health Information System, etc..) to perform the following analyses for the country (See Chapter 5 for more details):

- 1. <u>Accessibility coverage:</u>
  - a. The percentage of all births where the household is located within 2 hours of travel time to a BEmOC facility;
  - b. The travel time between each BEmOC facility and the nearest CEmOC facility.
- 2. <u>Geographic coverage:</u>
  - a. The percentage of all births where the household is located within 2 hours of travel time to a BEmOC facility with enough capacity to cover all births under the assumption of normal delivery (i.e., with sufficient availability of skilled birth attendants);
  - b. The percentage of births with complications requiring blood transfusion/Caesarean-section (C-section) that will reach a CEmOC facility within 2 hours of travel time from BEmOC facilities, and where the CEmOC facility has enough capacity to manage complications (through the availability of EmOC surgical teams).
- 3. <u>Service utilization:</u> Comparison between the results from the accessibility/geographic coverage analysis with data on actual service utilization (BEmOC coverage compared with the percentage of births delivered in a health facility; sub national level estimated percentage and health facility level number of births referred to CEmOC facilities for complication compared with the corresponding percentage and number of caesarean-sections observed during a recent year).
- 4. <u>Scaling up:</u> Scenarios developed to reach universal coverage through various mechanisms of expanding the EmOC facility network.

The results coming out of these analyzes (Chapter 7) are presented under the form of tables, graphs and maps to be included into the analysis of maternal and new born health investments in the country.

## Results

The analyses performed indicate that:

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