INVESTIGATING MATERNAL MORTALITY AND HEALTH SERVICE FACTORS IN SIERRA LEONE

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BACKGROUND
In most developing countries deaths are unregistered and measuring population-based outcomes, such as maternal mortality ratio (MMR), is impractical and fails to highlight priorities at a sub-national level. The use of process indicators such as case-fatality rates (CFR) is advocated as a potential solution. This study describes health services and maternal mortality in Sierra Leone, using process and outcome indicators at district-level to identify local public health priorities.

METHODS
Administrative, policy and strategy documents were scrutinised to describe health services in Sierra Leone, including distribution of facilities and obstetric care. Routine health facility data from 13 Government District Hospitals (GDHs) were extracted, linked to geographic and demographic data and analysed at district-level.

FINDINGS
Primary health care facilities all lacked basic emergency obstetric care (EmOC) and only four of 13 GDHs had comprehensive EmOC facilities. Routine hospital data found the MMR in GDHs ranged from 2051 to 10,667 deaths per 100,000 live births and CFR ranged from 1.9% to 7.9%. The Northern Province had lower hospital mortality and the greatest availability of EmOC. Nationwide, obstructed labour was responsible for the greatest number of deaths (40%), followed by haemorrhage, eclampsia and abortion (22%, 15% and 7%).

INTERPRETATION
This study has shown that the hospital-based MMR in Sierra Leone is substantially higher than population-based estimates with great variation between districts. Health services in Sierra Leone are characterised by the unavailability, inaccessibility and inequitable distribution of EmOC and skilled health workers. Further efforts to improve maternal health must explicitly consider issues of equity.