

# HEADINGS

- Costing of free maternal health services:  
Challenges and implications for  
sustainability in Ghana
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# ABSTRACT

- Reducing the maternal mortality rate of 451 per 100,000 live births in Ghana to meet the target for Millenium Development Goal(MDG) 5 by 2015 remains challenging. Several factors including the lack of financial access pose a challenge. A free maternal health policy was therefore launched in 2008 with a grant from the British Government to improve financial access to maternal services. The main objective of this study was therefore to examine the cost of the free maternal health services to the southern part of Ghana and explore factors that contribute to these costs.
- Available routine financial claim records for 2009 were used to compile the cost information for the various maternal services with a compilation sheet for the three national insurance scheme accredited facilities and the scheme office in the area. The financial cost of antenatal, postnatal, delivery, abortion and the overall costs of all the maternal health services were obtained by facility type for both services and drugs
- Among other findings, we found that the financial cost of antenatal care was GH¢289,094.96(US\$199,375.83), postnatal care was GH¢159,913.34(US\$110,285.06) and spontaneous vaginal delivery was GH¢205,452.58 (US \$141,691.44). GH¢1,358,647.98(US\$936,998.61) was spent in 2009, which represented 7.7% of expenditure of the British grant.
- This study shows that the unit costs of maternity services were consistently higher at hospitals(Level D) compared with lower level health facilities(Levels B and C).
- Cost savings can be made if services such as antenatal care and normal deliveries, are done at Levels C and B facilities, for free maternal health services to be sustained.

# BACKGROUND

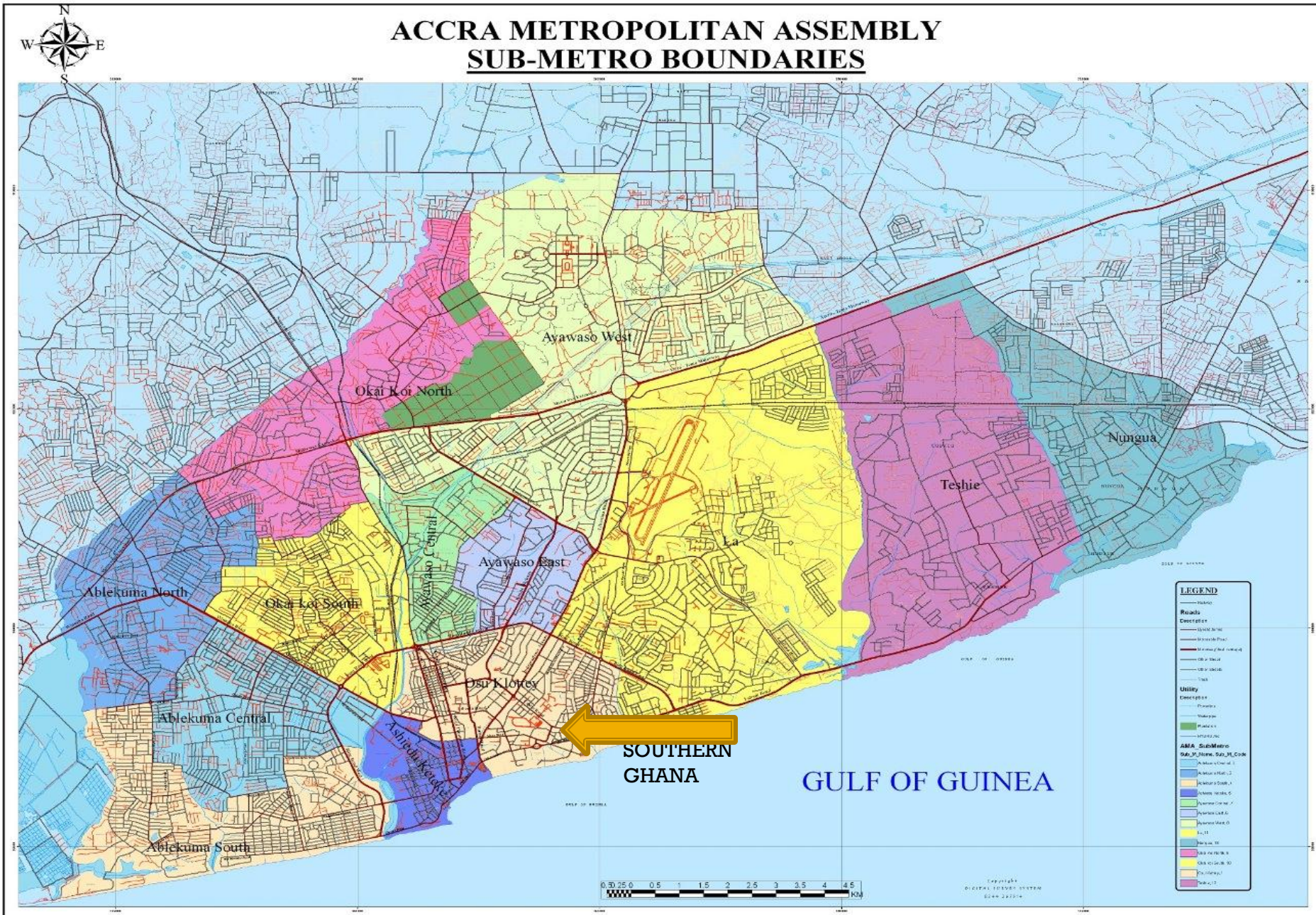
- Maternal Health Burden
  - Maternal mortality rate high in many developing countries
  - Every year half a million maternal deaths are reported globally(WHO 2004)
- Ghana's MMR is 451/100,000( GMHS 2007) Maternal Health interventions
  - High maternal deaths led to safe motherhood initiative
  - Free institutional delivery health policy under 'cash & carry' system in 2003-2005 BUT
  - Previous free maternal health services underfunded
  - Caused debts at facility level and partial intermittent suspension of scheme (Witter and Adjei 2007).
  - July 2008, Presidential announcement on Free Maternal Care Programme
- 42.5 million pounds given to Ghana for free comprehensive maternal health care.
  - The main objective of this study was therefore to examine the cost of the free maternal health services to the southern part of Ghana and explore factors that contribute to these costs.

# METHODS

- **Type of Study**
  - Cross sectional study
  - Quantitative approaches
  
- **Study Area**
  - Ridge hospital, Adabraka Polyclinic & Osu Maternity Home
  
- **Study Population:**
  - Women who attended the 3 facilities (15-49)
- Review of secondary claims data by service(antenatal, postnatal, delivery, abortions, Emergency obstetric management)
  
- **Facility data**
  - Reviewed cost records (January-December 2009)
  - Used cost compilation claim form
  - Costs were based on the Ghana Diagnostic Related Groupings

# Study area

## ACCRA METROPOLITAN ASSEMBLY SUB-METRO BOUNDARIES

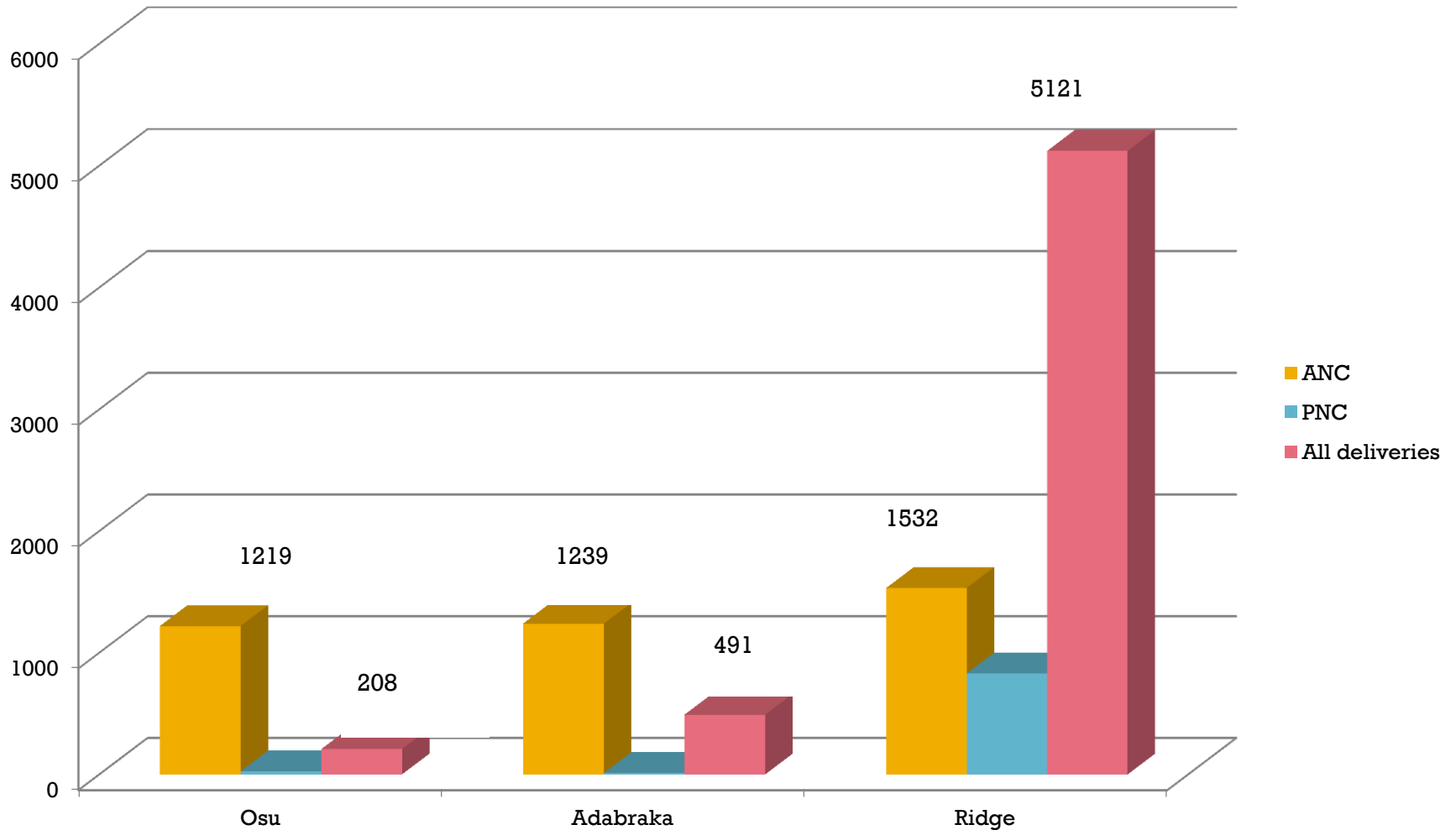


# Analysis & Limitations

- Analysis
  - Used Excel and STATA 10 for Cost analysis
  - Average cost for each non-drug and drugs by month and year and by facility
  - Total non-drug claims by service & by facility
  - Total drug claims by service & by facility
  - Total non-drug & drug claim by service & facility
- Limitations
  - Different folder numbers for many clients
  - EOM non-specific of actual diagnosis
  - Inconsistency in data capture

# Results

## Number of Deliveries per average ANC attendance by facility



# Total cost of maternal health services by Health Facility for 2009

Service cost item	Ridge Hospital(GH¢)	Adabraka Polyclinic(GH¢)	Osu Maternity Home(GH¢)	TOTAL COST
<b>Antenatal Care</b>	<b>131,330.20</b> (US\$90,572.55)	<b>112,346.70</b> (US\$77,480.48)	<b>45,418.06</b> (US\$31,322.80)	GH¢289,094.96 (US\$199,375.83)
<b>Postnatal Care</b>	<b>158,284.10</b> (US\$109,161.45)	<b>1081.50</b> (US\$745.86)	<b>547.74</b> (US\$377.75)	GH¢159,913.34 (US\$110,285.06)
<b>Spontaneous vaginal delivery</b>	<b>173,864.20</b> (US\$119,906.35)	<b>18,483.08</b> (US\$12,746.95)	<b>13,105.30</b> (US\$9,038.14)	GH¢205,452.58 (US\$141,691.44)



# COSTS OF DRUG AND NON-DRUG COSTS BY FACILITY

FACILITY	NON-DRUG COSTS	DRUG COSTS	TOTAL CLAIM	% NON-DRUG
Ridge Hospital	GH¢1,004,188.00 (US\$692,543.45).	GH¢163,445.80 (US\$112,721.24)	GH¢1,167,634.00 (US\$805,264.83)	86%
Adabraka Polyclinic	GH¢96,320.17 (US\$66,427.70)	GH¢35,615.33 (US\$24,562.30)	GH¢131,935.50 (US\$90,990.00)	73%
Osu Maternity Home	GH¢41,968.30 (US\$28,943.66)	GH¢14,965.34 (US\$10,320.92)	GH¢59,078.48 (US\$40,743.78)	63%

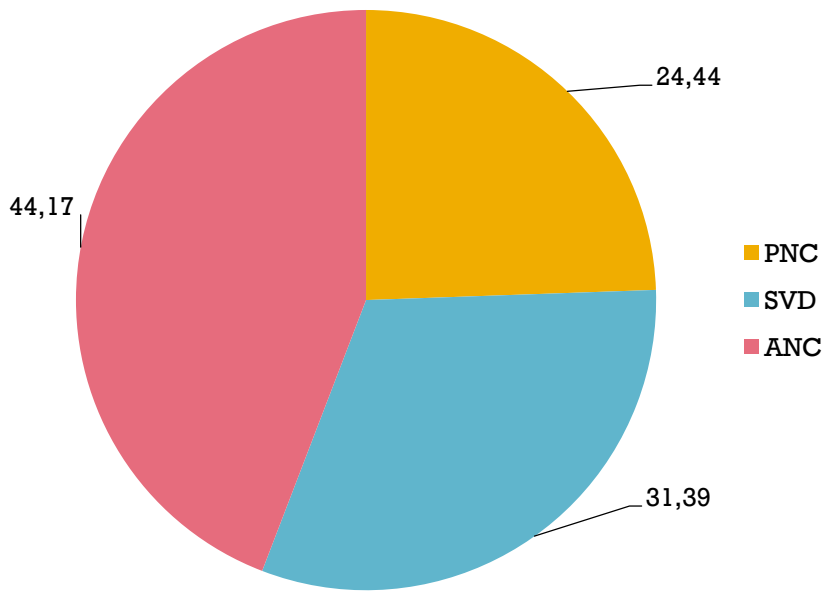
# RESULTS

## AVERAGE COST PER SERVICE BY FACILITY

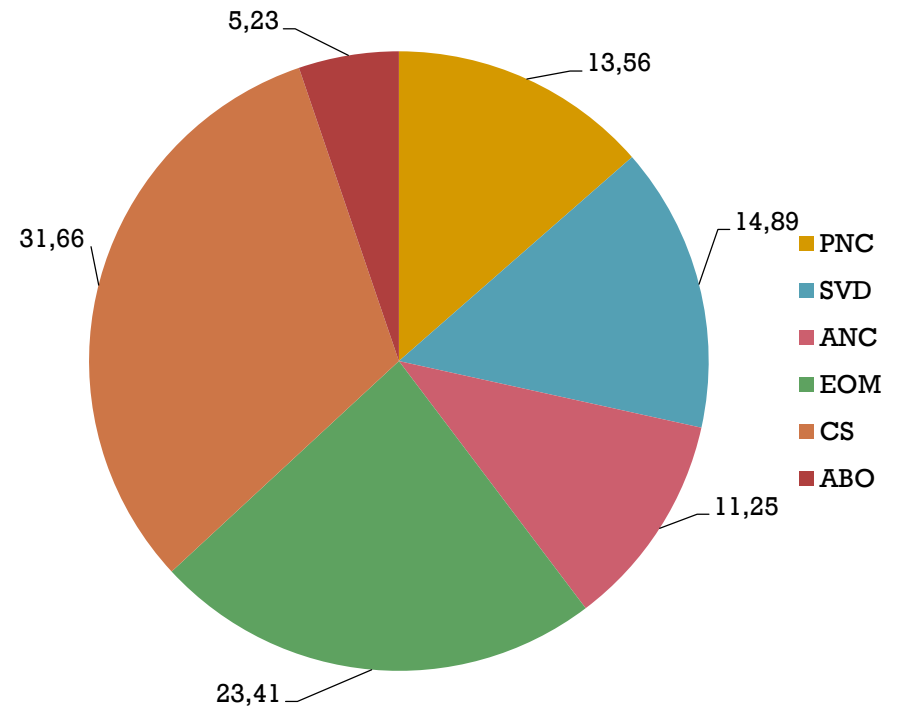
FACILITY	AVERAGE COST PER SERVICE		
	ANC	PNC	SVD
Ridge Hospital	GH¢14.28 US\$ 9.85	GH¢63.54 US\$ 43.82	GH¢51.03 US\$ 35.19
Adabraka Polyclinic	GH¢15.12 US\$ 10.43	GH¢24.03 US\$16.58	GH¢37.64 US\$25.96
Osu Maternity Home	GH¢6.21 US\$ 4.28	GH¢5.59 US\$3.86	GH¢63.00 US\$43.45

# SERVICE COSTS

**SERVICE COST AS A PERCENTAGE OF TOTAL CLAIM FOR ALL FACILITIES IN 2009**



**SERVICE COST FOR MATERNAL SERVICE COMPONENTS AT RIDGE HOSPITAL FOR 2009**



# Findings

- Antenatal and deliveries major cost drivers in all facilities
- Caesarean section & Emergency obstetric care major cost at Ridge Hospital(Level D)
- Low deliveries at Level B & C facilities
- Total claim in 2009 for all 3 facilities= 7.7% of the British Government fund
- The facilities in the southern part of Ghana alone could exhaust the British Government grant in 13 years.

# CONCLUSION AND RECOMMENDATIONS

## ■ CONCLUSION

- Unit costs of maternity services are consistently higher at hospitals
- Lower health facilities are under utilized for deliveries

## RECOMMENDATIONS

Need for more specialists at Level C facilities

- Adherence to gate keeping policy in all facilities to reduce cost

## ■ REFERENCES

- 1.Fleba S et al.2007Costing maternal health services in South Tanzania. A case study from Mtwara Urban District
- 2.Ghana Maternal Health Survey 2007
- 3.Hill K et al 2007. Estimates of maternal mortality worldwide between 1990 and 2005: an assessment of available data. The Lancet 370:1311-19