Rural and Remote Health
MEDLINE listed
Impact factor .931
FRAME
ARHEN
Wonca
RURAL HEALTH
ISSN 1445-6354
The International Electronic Journal of Rural and Remote Health Research, Education, Practice and Policy

LETTER TO THE EDITOR

Potentials of a ten dollar pre-paid public health plan for rural health in Sub-Saharan Africa

AO Umunna

Ministry of Health & Social Welfare, Lesotho, Africa

Submitted: *31 May 2011;* ***Revised:*** *1 November 2011;* ***Published:*** *24 February 2012*

Umunna AO

Potentials of a ten dollar pre-paid public health plan for rural health in Sub-Saharan Africa
Rural and Remote Health **12: 1823. (Online) 2012**

Available: http://www.rrh.org.au

Dear Editor

It is often said that for public health policy to be credible and acceptable it has to satisfy the criteria of equity, quality and efficiency. However, some studies indicate that many Sub-Saharan African (SSA) countries are unlikely to internally generate the required funding to provide efficient and quality health services[1-3]. Such countries may be unable to guarantee the required equity in financial contribution to enable universal health coverage (UHC)[4,5], leading to increasing private spending on health care.

Related studies show that episodic treatment for diseases such as malaria may cost families in SSA between US$17 and US$93 per household[6,7], with the impact being greater on rural and remote populations where household income will often be inadequate to meet such expenditure. However, even with private contributions, the quality of SSA health services will be inadequate due to the endemic financial and management challenges such as personnel retention[8], quality assurance[9], stewardship[10] and technical inefficiency[11].

Table 1: Potential revenue streams for a 'US$10 pre-paid plan' if 30% of estimated total and rural populations voluntarily enroll for 6 Sub-Saharan African countries[14-17]

Variable [ref]	Sub-Saharan African country					
	Cameroon	Ghana	Kenya	Nigeria	Senegal	Togo
Out of pocket expenditure as % of PEOH [15]	94.8	77.8	80.0	90.4	77.0	84.2
PPP as % of PEOH [15]	N/A	6.0	6.9	6.7	19.5	4.3
Total estimated population by July 2009 [14]	18 879 301	23 632 495	39 002 772	149 229 090	13 711 597	6 019 877
Estimated rural population at 2009 [14]	8 281 081	11 737 467	31 085 373	78 787 951	7 189 633	3 792 465
30% of estimated population	5 663 790	7 149 748	11 700 831	44 768 727	4 113 479	1 805 963
30% of estimated rural population	2 484 324	3 521 240	9 325 612	23 636 385	2 156 889	1 137 739
Potential funding stream from 30% enrollment at $10 pre-paid health fund (US$ million)	56.64	71.5	117.01	447.69	41.14	18.06
Local equivalent at 4 May 2011	CFA 25.14 billion	¢ 108.42 million	KShs 9.78 billion	N 69.37 billion	CFA 18.266 billion	CFA 8.02 billion
Potential funding stream from 30% enrollment at $10 pre-paid rural health fund (US$ million)	24.84	35.21	93.26	236.36	21.57	11.38
Local equivalent at 4 May 2011	CFA 11.03 billion	¢ 53.40 million	KShs 7.8 billion	N 8.66 billion	CFA 9.58 billion	CFA 5.053 billion
Total health expenditure 2007 [16] (US$ million)	303 million	728 million	639 million	2.9 Billion	N/A	52 million
2007 General government expenditure on health as % of total expenditure on health [17] (US$ million)	25.8% (~ 78.5)	51.6% (~ 375.6)	42.0% (~ 268.4)	25.3% (~ 725.1)	56.0% (NA)	24.9% (~ 13)

CFA, CFA Franc; KShs, Kenyan Shillings; N, Nigerian Naira; NA, not available; PPP, private pre-paid plans; PEOH, private expenditure on health; ¢, Ghanaian Cedi.

Differing approaches have been considered to enable UHC, such as sustainable funding models and advocacy for revenue from hypothecated, sector-specific and excise taxes[12]. However, because private expenditure on health continues to exceed government expenditure in most SSA countries, to ensure the sustainability of UHC in the rural and remote regions of 6 SSA countries (Table 1) a '$10 dollar prep-paid plan' for free basic health services is suggested, with the following assumptions:

- Although $10 is less than the World Health Assembly (Resolution WHA 58.33) ideal, it is better than no contribution.
- Subscribers will be willing to pay this in order to receive better quality health care[13].
- Subscription contributions can be made easily via dedicated GSM (Global System for Mobile communication) pre-paid cards/starter packs, with postal confirmation certificates to reduce administrative costs.
- The funds generated will increase the sustainability of rural health services provided there are explicit mechanisms to ensure expenditure for specific purposes, such as access to medicines and rural personnel retention.
- All enrollees, including those paid for by family, community members or purpose-specific social welfare grants, are covered irrespective of their demographic characteristics.

Analysis using 2009 total and rural populations[14] for the 6 SSA countries (all with an out-of-pocket health expenditure as a percentage of private expenditure on health of 70% or more, as well as private pre-paid plans less than 20% coverage by 2006)[15], shows that if 30% of the total and rural estimated populations in several SSA countries enroll in such a scheme, the revenue stream would be significant, compared with total government expenditures[16,17] (Table 1). Therefore, if appropriate mechanisms ensure the retention of such funds for dedicated expenditure on rural health services, and wider

managerial issues are addressed[9], a significant impact will be made on the sustainability of rural health services, including access to medicines[18] and improved personnel retention[7].

Anthony Umunna, MA
Ministry of Health & Social Welfare, Lesotho

References

1. Lu C, Schneider MT, Gubbins P, Leach-Kemon K, Jamison D, Murray CJL. Public financing of health in developing countries: a cross-national systematic analysis. *Lancet*. 2010; **375:** 1375–1387.

2. Mathauer I, Doetinchem O, Kirigia J, Carrin G. *Feasibility assessment and financial projection results for a social health insurance scheme in Lesotho*. Geneva: WHO; 2007 Commission on Macroeconomics and Health.

3. WHO. Macroeconomics and health: investing in health for economic development. Geneva, 2001; 167-169. Available: http://www.earth.columbia.edu/sitefiles/file/about/director/pubs/CMHExecSumm112603.pdf (Accessed 17 January 2012).

4. Xu K, Evans D, Carrin G, Aguilar-Rivera AM, Musgrove P, Evans T. Protecting households from catastrophic health spending. *Health Affairs* 2007; **26:** 972-983.

5. Leive A, Xu, K. Coping with out-of-pocket health payments: empirical evidence from 15 African countries. (Online) 2008. Available: http://www.who.int/bulletin/volumes/86/11/07-049403/en/ (Accessed 08 June 2010).

6. Akazili J, Aikins M, Binka FN. Malaria treatment in Northern Ghana: what is the treatment cost per case to households? *African Journal of Health Sciences* 2007; **14(1-2):** 70-79.

7. Goodman C, Coleman P, Mills A. Economic analysis of malaria control in Sub-Saharan Africa. Global forum for health research: promoting research to improve the health of the poor. Geneva: WHO, 2000.

8. McCoy D, Bennett S, Witter S, Pond B, Baker B, Gow J et al. Salaries and incomes of health workers in sub-Saharan Africa. *Lancet* 2008; **371:** 675-681.

9. Omaswa F, Burnham G, Baingana G, Mwebesa H, Morrow R. Introducing quality management into primary health care services in Uganda. *Bulletin of the World Health Organisation* 1997; **75(2):** 155-161.

10. Gilson L. Management and health care reform in Sub-Saharan Africa. *Social Science & Medicine* 1999; **40:(5):** 695-710.

11. Hsu J. *The relative efficiency of public and private service delivery*. World Health Report background paper 39. Geneva: WHO, 2010.

12. Stenberg K, Elovainio R, Chisholm D, Fuhr D, Perucic A, Rekve D et al. Responding to the challenge of resource mobilization: mechanisms for raising additional domestic resources for health. World Health Report background paper 13. In: *Health Systems Financing. The path to universal coverage*. Geneva: WHO, 2010.

13. Mehrotra S, Jarrett SW. Improving basic health service delivery in low-income countries: voice to the poor. *Social Science & Medicine* 2002; **54(11):** 1685-1690.

14. World Bank. Population data. (Online) 2009. Available: http://data.worldbank.org/indicator/SP.POP.TOTL (Accessed 9 May 2011).

15. WHO. *World health statistics*. Geneva: WHO, 2009; 107-115.

16. Amico P, Aran C, Avila C. HIV spending as a share of total health expenditure: an analysis of regional variation in a multi-country study. *PLoS ONE* 2010; **5(9):** e12997.

17. WHO. *World health statistics*. Geneva: WHO, 2010; 130-137.

18. Vialle-Valentin CE, Ross-Degnan D, Ntaganira J, Wagner AK. Medicines coverage and community-based health insurance in low-income countries. *Health Research Policy and Systems* 2008. Available: http://www.health-policy-systems.com/content/6/1/11 (Accessed 20 May 2010).

