"PRIORITIES OF HEALTH ECONOMICS IN AFRICA"
Inaugural Conference of the African Health Economics and Policy Association (AfHEA)
10th – 12th March 2009 - Accra. Ghana

Parallel session 5: Insurance and affordability issues

PS 05/1

Distance mediates the effect of removing financial barriers to accessing care: results of a randomized controlled trial in Ghana

Evelyn Ansah[1], Kara Hanson[2], Solomon Narh Bana[1], Brian Greenwood[2], Anne Mills[2], Christopher Whitty[2]

[1] Dangme West District Health Directorate, Dodowa, Ghana
[2] London School of Hygiene & Tropical Medicine, UK

Background:
Many countries are seeking to improve financial access to health care as part of health sector reforms. In 2005 Ghana passed legislation to create a national health insurance scheme (NHIS) which aligns a number of district-level schemes. Observational studies of the impact of health insurance enrolment on health service utilization are potentially biased because of risk selection, particularly where overall coverage is low. This study used a randomized controlled trial (RCT) design to examine the impact of health insurance on service use. The study was carried out in the Dangme West District, southern Ghana, and was part of a broader study examining the effect of improved financial access on childhood anaemia.

Aims and objectives:
To assess the impact of health insurance coverage on health service utilization among children under 5 years of age, and the interactions with socioeconomic status and physical distance.

Methods:
The study used a two-arm, open, randomized controlled design. Insurance coverage prior to the study was 10.8%. All households in the Dodowa and Prampram sub-districts with at least one child aged 6 to 59 months who had not already enrolled in the insurance scheme for the year were eligible to participate in the study. 2194 households with 2592 children were randomly selected from among the households who had not enrolled. Households in the intervention group were enrolled into a pre-payment scheme operating in the area. The control group continued to pay user fees for health services. A baseline survey in May 2004 documented household characteristics and asset ownership. A follow-up survey was conducted in December 2004. Socioeconomic status was measured using an asset index constructed from a mix of asset ownership and housing characteristics.

Health service utilization was assessed by means of picture log sheets completed by the mother of the child each month, indicating what illnesses the child had suffered from during the month and from where health care had been sought. The options for illnesses included fever, diarrhoea, vomiting, convulsion, unconsciousness and difficulty in or fast breathing. The sources of care included the clinic and hospital which were categorized as formal care. Home care, treatment from a traditional healer or chemical seller were categorized as informal care. The completed forms were picked up by a fieldworker at the end of the month and a new set left with the mother for the following month. This was done for the six months of the peak malaria transmission season. Logistic regression was used to analyse the effect of improved financial access to health care on utilization of services.

Findings:

Overall health service utilization decreased with increasing distance from a health facility in both groups. Although households in the intervention group living within 5 km of a health facility utilized primary care services more than the control households in the same vicinity, this was of borderline statistical significance. In contrast, intervention households living within 5 km of a health facility used significantly fewer informal sources. At distances 5 to 10 km away from the nearest health facility, intervention households used primary care services significantly more than the control and although they tended to use non formal sources of care less, the difference between groups was not statistically significant. However, among those households living more than 10km away from a health facility, there was no significant difference between the intervention and control households in the use of primary care services or in use of non-formal sources of care. These findings suggest that non-financial barriers are important influences in care-seeking in this environment.