

**The third AfHEA International Scientific Conference
(Nairobi: 11-13 March 2014)**



The Post-2015 African Health Agenda and UHC: Opportunities and Challenges

**Programme and
Abstract Book**



**Agenda de santé post 2015
en Afrique et Couverture
Sanitaire Universelle :
Opportunités et défis**

**Livre du Programme et
Résumés des Présentations**

[2014]

The Post-2015 African Health Agenda and UHC: Opportunities and Challenges

Safari Park Hotel, Nairobi - Kenya: 11th - 13th March 2014

AfHEA 3rd Conference – 2014

Programme and Abstract Book

The 3rd AfHEA Conference is co-hosted by:

- African Population and Health Research Council (APHRC)
- East, Central and Southern Africa Health Community (ECSA-HC)
- Kenya Medical Research Institute (KEMRI)
- Kenyan Ministry of Health
- World Health Organization (WHO-Kenya)

We gratefully acknowledge financial assistance for the conference received from:

- IDRC -Canada
- New venture Fund for Global Policy and Advocacy
- Rockefeller Foundation
- World Health Organization WHO-AFRO

**Third International Scientific Conference of the African Health Economics and Policy Association (AfHEA)
“The Post-2015 African Health Agenda and UHC: Opportunities and Challenges”**

Published by AfHEA © 2014

Compilation of the programme and abstracts of the presentations: Pascal Ndiaye & www.confex.com

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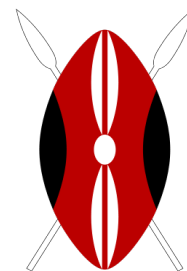
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Table des matières/Content

Parallel session 1: Universal Health Coverage and equity.....	6
Parallel session 1: Willingness to pay for maternal health	10
Parallel session 1: Health and Development	14
Parallel session 1: Contracting and incentive mechanisms	18
Parallel session 2: Access to health care services.....	21
Parallel session 2: Equity in health	26
Parallel session 2: Community Based Health Insurance	29
Parallel session 2: Maternal fee exemptions in West Africa & Morocco (Organized Session)	33
Parallel session 3: Contracting out and private sector.....	38
Parallel session 3: Human resources for health 1	42
Parallel session 3: Health and institutional development	46
Parallel session 3: Economic evaluation.....	49
Parallel session 4: Universal Health Coverage and vulnerable populations.....	52
Parallel session 4: Health financing assessments 1	56
Parallel session 4: Maternal and child health care.....	60
Parallel session 4: Evaluating PHC performance	64
Parallel session 5: MDGs and health financing	67
Parallel session 5: Performance-Based-Financing evaluation.....	70
Parallel session 5: Exclusion from social health protection (Organized session)	74
Parallel session 6: African health expenditures: latest resource tracking results (expenditure on diseases; expenditure on HRH; external funding) (OS)	79
Parallel session 6: Community participation.....	82
Parallel session 6: Non Communicable diseases.....	85
Parallel session 7: Universal Health Coverage experiences.....	90
Parallel session 7: Health insurance: country experiences	93
Parallel session 7: Governance and accountability.....	96
Parallel session 7: Studies on HIV, Malaria, TB.....	100
Parallel session 8: Early Lessons from Design, Implementation and Evaluation of Results- Based Financing Projects in the Health Sector (OS)	104
Parallel session 8: Strategic Purchasing for Universal Health Coverage in Sub-Saharan Africa – Lessons from the Ghanaian Experience (OS)	109
Parallel session 8: Resource allocation and management.....	113
Parallel session 9: Household out-of-pocket health payments	116
Parallel session 9: Social health insurance experiences	119
Parallel session 9: Human resources for health 2	122
Parallel session 9: Studies on costing of HIV, Malaria, TB	126
Poster Session 1	131
Poster Session 2	139
Poster Session 3	147
Poster Session 4	157
Poster session 5.....	165



African Health Economics and Policy Association Association Africaine d'Economie et Politique de la Santé



DRAFT OUTLINE OF AfHEA CONFERENCE PROGRAMME (Nairobi - Kenya, 11th - 13th March 2014)

The agenda at a glance

Monday 10 March 2014

Pre-conference session:

- **University of Washington:** Training on Cost-Effectiveness Analysis

- **National Institute for Health and Care Excellence (NICE):** Training on the principle of economic evaluation

17:00 - 20:00 : Pre-registration

Tuesday 11 March 2014

Registration

08:00 Participant seating

09:30 Practical information

Reception of officials

Plenary 1

09:30 Main conference hall: Jambo

10:30 Official opening ceremony

10:30 BREAK / FAMILY PHOTO / POSTER PRESENTATIONS 1

11:00

Parallel session 1

11:00	Room 1: Jambo-Tsavo/Amboseli Universal Health Coverage and equity	Room 2: Jambo-Samburu Willingness to pay for maternal health	Room 3: Bogoria Health and development	Room 4: Mount Kenya D Contracting and incentive mechanisms
12:30				

Parallel session 2

12:30	Room 3: Jambo-Tsavo/Amboseli Access to health care services	Room 2: Jambo-Samburu Equity in Health	Room 1: Bogoria Community Based Health Insurance	Room 4: Mount Kenya D Maternal fee exemptions in West Africa & Morocco (OS)
14:00				

14:00 LUNCH

15:00

Parallel session 3

15:00	Room 1: Jambo-Tsavo/Amboseli Contracting out and private sector	Room 2: Jambo-Samburu Human resources for health	Room 3: Bogoria Health and institutional development	Room 4: Mount Kenya D Economic evaluation
16:30				

16:30 BREAK / POSTER PRESENTATIONS 2

17:00

Plenary 2

17:00 Main conference hall: Jambo

18:30 High Level Policy Makers' Panel on UHC and the post 2015 African health agenda

0,792 Networking time / WELCOME COCKTAIL DINNER

Wednesday 12 March 2014

Plenary 3

09:00 Main conference hall: Jambo
10:30 Joint AfHEA-WHO/AFRO session on UHC and Health Financing in the African Region

Parallel session 4

10:30	Room 1: Jambo-Tsavo/Amboseli Universal Health Coverage and vulnerable populations	Room 2: Jambo-Samburu Health financing assessments 1	Room 3: Bogoria Maternal and child health care	Room 4: Mount Kenya D Evaluating PHC performance
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12:00 BREAK / POSTER PRESENTATIONS 3
12:30

Parallel session 5

12:30	Room 1: Jambo-Tsavo/Amboseli MDGs and health financing	Room 2: Jambo-Samburu Performance-Based-Financing evaluation	Room 3: Bogoria Health financing assessments 2	Room 4: Mount Kenya D Exclusion from social health protection (OS)
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14:00 LUNCH
15:00

Parallel session 6

15:00	Room 1: Jambo-Tsavo/Amboseli African health expenditures: latest resource tracking results (expenditure on diseases; expenditure on HRH; external funding) (OS)	Room 2: Jambo-Samburu Cartographie des régimes de financement de la santé dans 12 pays d'Afrique (OS)	Room 3: Bogoria Community participation	Room 4: Mount Kenya D Non Communicable diseases
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16:30 BREAK / POSTER PRESENTATIONS 4
17:00

Plenary 4

17:00 Main conference hall: Jambo
18:15 How to measure UHC: Presentation of ongoing work by teams from GNHE, USAID and WHO/World Bank
19:30 GALA DINNER

Thursday 13 March 2014

Plenary 5

08:15 Main conference hall: Jambo
09:15 Joint AfHEA / NICE Session: Economic evaluation: a tool for priority setting in the context UHC - Learning from the international experience

Parallel session 7

09:15	Room 1: Jambo-Tsavo/Amboseli Universal Health Coverage experiences	Room 2: Jambo-Samburu Health insurance : country experiences	Room 3: Bogoria Governance and accountability	Room 4: Mount Kenya D Studies on HIV, Malaria, TB
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Parallel session 8

10:45	Room 1: Jambo-Tsavo/Amboseli Early Lessons from Design, Implementation and Evaluation of Results-Based Financing Projects in the Health Sector (OS)	Room 3: Jambo-Samburu Strategic Purchasing for Universal Health Coverage in Sub-Saharan Africa – Lessons from the Ghanaian Experience (OS)	Room 2: Bogoria Resource allocation and management
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12:00 BREAK / POSTER PRESENTATIONS 5
12:30

Parallel session 9

12:30	Room 1: Jambo-Tsavo/Amboseli Household out-of-pocket health payments	Room 2: Jambo-Samburu Social health insurance experiences	Room 3: Bogoria Human resources for health 2	Room 4: Mount Kenya D Studies on costing of HIV, Malaria, TB
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14:00 LUNCH
15:00

Plenary 6

15:00 Main conference hall: Jambo
16:15 Panel discussion - Key messages and take-aways on main conference theme

16:15 BREAK
16:30

16:30 CLOSING CEREMONY
17:30

Parallel session 1: Universal Health Coverage and equity

PS 01/1

Equity in pathways towards Universal Health Coverage: What does the evidence say?

Lara Brearley , Save the Children UK - Daniel Cobos Munoz , Consultant - Robert Marten , The Rockefeller Foundation - Thomas O'Connell , UNICEF - Henry Lishi Li , LSHTM, London, United Kingdom

The Ghanaian National Health Insurance Scheme was introduced to provide access to adequate health care regardless of ability to pay. Even though currently voluntary it is intended to be mandatory in the future.

Recent empirical literature on disease and economic development is replete with controversial findings - similar to the famous “egg-chicken” dilemma. Using HIV/AIDS epidemic as a springboard while instrumenting it by male circumcision and distance from the first outbreak, we employ the panel instrumental variables technique to investigate the economic effects of the epidemic on economic growth – proxied as nocturnal luminosity growth - in sub-Saharan Africa. We perform our analysis at a sub-national level to be able to capture spatial temporal within-region effects of the epidemic. Our preliminary regression estimates suggest a negative role of the epidemic on growth. Coefficient estimates on our instruments indicate that while male circumcision is strong predictor of the epidemic, distance as a predictor is not significant and holds contrary to the hypothesized direction. Preliminary reduced form estimates also show negative and significant effects of the epidemic on both human capital accumulation and productivity. Epidemic’s detrimental effects on human capital and productivity appear to be the main channels through which it affects growth in the region.

PS 01/2

Will the upcoming Couverture Maladie Universelle keep its promises?

Juliana Gnamon, University Felix Houphouet-Boigny of Cocody-International Development Research Centre (IDRC)

Health strategies which consider gender elements have been noted to be cost effective and more successful than those which do not. The aim of this study is thus to investigate the gender differentials in child survival in Zimbabwe.

Objectives Other minor objectives include examining the gender differentials in child mortality over three decades of black rule from 1980 and also to examine determinants of child survival including the effects of genetic variation within the proximate determinants framework.

Methodology The Zimbabwe Demographic Health Survey births recode dataset collected between 2010 and 2011 was analysed using survival analysis to study the determinants of child survival. Kaplan Meier tests of survival curve equality were used to examine the gender differentials over each of the three decades beginning 1980. Determinants of child survival within the proximate determinants framework were evaluated using Cox proportional hazards

regression. Evidence of genetic variation impacting on child survival was investigated in a frailty effects Weibull model. Sources of gender differentials in child survival in Zimbabwe were then examined using multivariate decomposition for nonlinear response models.

Key Findings The study finds evidence of gender differentials in child mortality for the last two decades in Zimbabwe whilst none is found for the decade 1980- 1989. Sex of the child, religious beliefs, birth weight and place of residence were found influencing child survival. There is also strong evidence that biological differences in children significantly influence child survival. Decomposition analysis results show no evidence of gender differentials originating from differences in household characteristics, but rather, strong evidence that they are caused by differences in coefficients interpreted as ways in which households generate returns from these characteristics. In addition to that, there is also strong evidence of biological differences causing the gender differential.

Conclusion The study highlights the emergency of a new form of health inequities along the lines of gender in Zimbabwe disadvantaging the male child. Policy makers need to recognize the existence of this gender differential in child survival in order to develop health promotional, preventive and curative strategies that are cost effective and successful. Decomposition of the gender differential has shown that in order to reduce inequities in child survival, focus should be on the processes through which households generate health returns to the household characteristics but not necessarily the household characteristics per se. Lastly, the study confirms that biological differences between male and female children does determine survival.

PS 01/3

Equity, medical impoverishment, and the path to universal health care: Ethiopia as a case study

Stéphane Verguet,¹ Zachary Olson,¹ Joseph Babigumira,¹ Dawit Desalegn,² Kjell Arne Johansson,³ Margaret E. Kruk,⁴ Carol Levin,¹ Rachel Nugent,¹ Clint Pecenka,⁵ Mark G Shrimme,⁶ Solomon Tessema Memirie,³ David Watkins,⁷ Dean T. Jamison¹

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Aim & objectives: How a government chooses to finance a health intervention has consequences in multiple domains. The choice of financing mechanism can affect the uptake of health interventions and lead to widespread health gains. In addition to health gains, certain policies like public finance can 'insure' against the need to make expenditures

which would otherwise throw households into poverty or impose a financial burden.

Methods: We apply the method of extended cost-effectiveness analysis (ECEA) for evaluating the consequences of universal public finance (UPF) on health and impoverishment. We measure the health gains (deaths averted) and the financial risk protection afforded (cases of poverty averted), for nine interventions paid for by the government of Ethiopia. These interventions include measles vaccination, rotavirus vaccination, pneumococcal conjugate vaccination, diarrhea treatment, malaria treatment, pneumonia treatment, Cesarean section, hypertension treatment, and tuberculosis treatment.

Key Findings: We find that, per dollar spent by the government, the interventions that avert the most deaths are measles vaccination, pneumococcal conjugate vaccination, and rotavirus vaccination; while the interventions that avert the most cases of poverty are hypertension treatment, Cesarean section, and tuberculosis treatment. Our approach incorporates financial risk protection into the systematic evaluation of health policy. It provides more information than standard cost-effectiveness analysis. This allows policymakers to determine how much financial risk protection is being purchased with a given benefits package in addition to the amount of health that is being bought with incremental increases in public spending. One intervention may rank higher on one or both metrics than another intervention, illustrating how intervention choice can achieve overlapping and sometimes competing objectives.

PS 01/4

Towards achieving universal health coverage in Zimbabwe: how equitable are the maternal and child health care services?

Ronald Mutasa¹, Jed Friedman¹, Davies Dhlakama², Ha Nyugen¹, Bernadette Sobuthana¹, AshisDas¹, Margaret Nyandoro²

1 – The World Bank, 2 – Ministry of Health and Child Welfare, Zimbabwe

Background: Many countries in the world are striving to achieve universal health coverage and provide equitable access to quality services for their population. These are also the key priorities for Zimbabwe, where performance on maternal mortality over the last decade has been going against the positive trend of many Sub-Saharan African countries. This study assessed the access to maternal and child healthcare services among various socio-economic groups in health facilities against the demographic and health survey (DHS) 2010-11 reference population. It also examined and compared such services' reported quality of care and perceived satisfaction among different socio-economic groups.

Methods: Exit interviews were conducted among women (n=1864) accessing ante natal care (ANC) and care givers of children (n=1865) in 309 health facilities. The exit interview sample was compared and contrasted with the latest demographic and health survey by creating a wealth index and using similar asset weights used in the DHS. Quality of care index (maximum score 5) and client satisfaction index (maximum score 4) were developed to compare against various socio-economic groups.

Results: The results indicate that less than 4% from the poorest quintile were represented in

the antenatal care sample whereas they represent 19% in the DHS sample. Only 4.5% from the poorest quintile were represented in the child health sample compared to 25% in the DHS sample. The quality of care (QoC) mean score for antenatal care was 4.20 (95% CI 3.98-4.41) for the lowest wealth quintile and 4.29 (95% CI 4.18-4.39) for the highest quintile. However, for child health services, QoC mean score was higher for the lowest wealth quintile (mean 3.25; 95% CI 3.06- 3.45), compared to the highest wealth quintile (mean 3.18; 95% CI 3.06- 3.30). The client satisfaction score (3.30 for lowest vs. 3.47 for highest quintile) for antenatal services was significantly associated ($p<0.05$) with socio-economic groups. The remote residents were less satisfied with both services ($p<0.001$).

Conclusions: Access to maternal and child health services were inequitable in rural Zimbabwe among different socio-economic groups. Reported quality and perceived client satisfaction were more favorable for higher wealth quintiles with ANC services and satisfaction was higher among populations closer to health facilities. The study outcomes call for improving maternal and child health services in geographically remote areas and differential service delivery strategies for lower socio-economic groups. Further, the sensitization of services providers on equitable approach to the clients would enhance the satisfaction of the vulnerable populations.

Parallel session 1: Willingness to pay for maternal health

PS 01/5

Emergency Obstetric Care in Burkina Faso: Effects of changing the mode of reimbursement of the costs of deliveries in Bousé and Zorgho health centers and health districts in Burkina Faso

Joel Arthur KIENDREBEOGO Danielle YUGBARE BELEMSAGA, Séni KOUANDA

Introduction / Background: Burkina Faso has subsidized 80% of the direct costs of medical expenses for the period 2006–2015 (medical treatment, inputs, and hospitalization) deliveries and emergency obstetric care (EmOC) in its health facilities. Health centers (HC) were thus initially refunded a lump sum of 3,600 FCFA per normal delivery (initial estimate to cost 4500 FCFA), then according to the expenditure actually incurred as 4,500 FCFA seemed overestimated.

Objectives: (i) To test the hypothesis that the package providers used fewer inputs to make a profit and after the transition to actual cost they would tend to use more, (ii) to study the context of the implementation of the policy on the ground in the light of this change in method of repayment.

Methodology: Mixed study, quantitative and qualitative concomitantly performed in eleven rural health centers in two districts: Zorgho and Bousé. Economic and statistical analysis of subsidized before and after the change (5268 parturients records in total, that is to say 2,609 records for the package and 2659 records for the real refund) elements.

Reports of stakeholders' perception in relation to these two methods of reimbursement through 44 semi structured individual interviews.

Results: Same socio-demographic and clinical characteristics of parturients between the two periods. No clear relationship between the methods of reimbursement to health centers and cost of deliveries, our hypothesis is verified in some cases and not in others. Average costs found between the periods and the actual package: 3.782 versus 3.898 FCFA FCFA ($p < 0.001$) in Zorgho and 2985 FCFA FCFA versus 3.063 ($p = 0.0634$) in Bousé.

The qualitative approach teaches us that it would be unwise to draw conclusions about the effect, in terms of incentives, mode of repayment to caregivers. Indeed, it has highlighted the consequences of poor planning and precipitate policy implementation: insufficient training of actors, generalized asymmetric information (which may even be the mode of repayment), diverse understanding of the procedures to be implemented, no harmonized composition of births kits, long delay in repayment to health centers adversely affect their financial viability. This subsidy policy is viable but it would have to correct its dysfunctions in order to improve the effectiveness and efficiency, for example in the context of pay for performance. The share paid by women can even be removed if the state regularly reimburses and on time health centers.

PS 01/6

Inverse Care Law In Maternal Health Service Utilisation: Evidence From Ghana

Coretta Jonah, Institute for Social Development

The gap in health outcomes, access and utilisation between the haves and have-nots is becoming the biggest challenges in a world that is steadily becoming more unequal. Though gradual, Ghana has witnessed steady improvements in maternal health access and utilisation and the maternal mortality ratio has declined over the years. Despite the decline, it is important to know how these gains affect various groups in the society and whether certain groups continue to be disproportionately disadvantaged.

This paper illustrates the persistence of the inverse care law; which purports that populations that require good medical care are the ones least likely to have it made available to them, in maternal health services utilisation in Ghana. The paper achieves this by showing that women of low socio-economic status continue to utilise lower levels of maternal health services. This is achieved by combining descriptive analysis and logistic regression techniques to household data from the Ghana demographic and health survey 2008. The paper illustrates, using maternal health services, the need for the health system to ensure an improvement in the health outcomes of all groups in the society.

The study revealed an obvious pro-rich and pro-urban gradient in the use of hospital for delivery purposes and doctors in prenatal, postnatal and delivery. The study also showed that regions known for their high levels of poverty also featured significantly lower rates of hospital deliveries and the use of doctor's services in prenatal, postnatal care and delivery. These were mainly attributed to cost of services, accessibility or services and the fact that majority of rural women deemed it as unnecessary. The paper concludes by stressing that unless policies are changed to accommodate these groups, overall gains in maternal health will continue to be marginal and incremental.

PS 01/7

Willingness to pay for reproductive health services in the context of an output-based aid voucher program in Kenya

Lucy Kanya, Francis Onyango, Brian Mdawida, Rebecca Njuki, Timothy Abuya, Ben Bellows Population Council, Nairobi

Aim and Objectives: An economic evaluation was conducted as part of a wider evaluation of the safe motherhood voucher program being implemented in 5 counties in Kenya. The program targets poor mothers with financial incentives to help them access facility-based services. While conventional cost and cost effectiveness analyses inform the technical efficiency of programs, they do not permit normative conclusions that can guide decisions around allocative efficiency aimed at maximizing societal advantage. A cost benefit analysis is being conducted to estimate the societal benefits (or net worth) of the program. This paper focuses on poor mothers' monetary valuation (willingness to pay (WTP)) of the benefits (or losses) associated with ANC, Normal (ND) and Surgical (SD) delivery services and related transport costs not covered by the program, against the voucher cost (Kshs 200).

Methods: Approximately 444, 496 and 96 mothers seeking ANC, ND and SD services respectively in the program sites were interviewed to elicit their WTP for the services obtained during an episode of care. An income construct was used to validate the WTP data by checking for consistency with expected theoretical constructs that should present if the WTP responses are measuring the intended value. Thus, given that most goods have a positive income elasticity (including health care), higher respondent incomes should be associated with higher WTP for services.

Key findings and conclusions: Income levels were strongly correlated with willingness to pay for all the services ($p < 0.001$) with high income earners willing to pay more and vice versa, validating the income construct. Mothers with 2 or less children were willing to pay more: (>Kshs 5000) for ND services and (>Kshs 500) for ANC services while those with more than 2 children were willing to pay less: (Kshs 0-5000) for ND services ($p = 0.004$) and (Kshs 0-500) for ANC services. On average, mothers paid Kshs 154 in transport to access delivery services and were willing to pay Kshs 857 for the services (total WTP for delivery services Kshs 1011). Mothers paid Kshs 103 for transport to access ANC services and were willing to pay an average of Kshs 74 for the services (total WTP for ANC Kshs 177). The average WTP for SD services was Kshs 2855. Mothers were generally willing to pay more for services deemed to avert greater health risks. Interviewed mothers can identify and prioritize reproductive health risks associated with pregnancy and delivery and the costs associated with the services.

PS 01/7

Are respondents sensitive to scope? Willingness to pay for maternal health outcomes

Laura Ternent, David Newlands and Paul McNamee

Aim: To assess whether respondents are sensitive to scope when answering contingent valuation (CV) questions relating to maternal health outcomes

Methods: A CV survey was conducted in Nouna, Burkina Faso amongst a random but representative sample of the local population. In total 1,236 male and female individuals answered the CV questions. A split sample design was used to ask whether respondents are willing to pay more for greater reductions in the number of maternal deaths in their local community. One sample received a 25% reduction in maternal deaths scenario, the other a 50% reduction in maternal deaths scenario. The BG method was used to elicit willingness to pay.

Results: 624 respondents in total received the 25% scenario and 612 received the 50% scenario. There were no significant differences between samples with respect to demographic or socioeconomic characteristics. No significant differences in willingness to pay between respondents who received the 25% or 50% scenario were found.

Conclusion: There is no evidence to suggest that respondents are sensitive to scope in this sample. Analysing the raw willingness to pay responses, there was no significant difference between willingness to pay for a 25% reduction or 50% reduction in maternal deaths. In the multivariate regression analysis, once control is made for other explanatory factors, there is no evidence to suggest that respondents are sensitive to the size of the benefit. Further tests of

sensitivity to scope should be conducted in a health care context including both within and between sample tests of scope sensitivity. In addition to this, qualitative work, such as in-depth interviews or 'think aloud' studies, could be conducted alongside scope tests to determine the reasons behind respondents' answers to willingness to pay questions, for example by examining the respondent's attitude towards the good in question.

Parallel session 1: Health and Development

PS 01/8

Sex differentials in child mortality in Zimbabwe 1984- 2011

Lazarus Muchabaiwa, University of Science Education

Aim Health strategies which consider gender elements have been noted to be cost effective and more successful than those which do not. The aim of this study is thus to investigate the gender differentials in child survival in Zimbabwe.

Objectives Other minor objectives include examining the gender differentials in child mortality over three decades of black rule from 1980 and also to examine determinants of child survival including the effects of genetic variation within the proximate determinants framework.

Methodology The Zimbabwe Demographic Health Survey births recode dataset collected between 2010 and 2011 was analysed using survival analysis to study the determinants of child survival. Kaplan Meier tests of survival curve equality were used to examine the gender differentials over each of the three decades beginning 1980. Determinants of child survival within the proximate determinants framework were evaluated using Cox proportional hazards regression. Evidence of genetic variation impacting on child survival was investigated in a frailty effects Weibull model. Sources of gender differentials in child survival in Zimbabwe were then examined using multivariate decomposition for nonlinear response models.

Key Findings The study finds evidence of gender differentials in child mortality for the last two decades in Zimbabwe whilst none is found for the decade 1980- 1989. Sex of the child, religious beliefs, birth weight and place of residence were found influencing child survival. There is also strong evidence that biological differences in children significantly influence child survival. Decomposition analysis results show no evidence of gender differentials originating from differences in household characteristics, but rather, strong evidence that they are caused by differences in coefficients interpreted as ways in which households generate returns from these characteristics. In addition to that, there is also strong evidence of biological differences causing the gender differential.

Conclusion The study highlights the emergency of a new form of health inequities along the lines of gender in Zimbabwe disadvantaging the male child. Policy makers need to recognize the existence of this gender differential in child survival in order to develop health promotional, preventive and curative strategies that are cost effective and successful. Decomposition of the gender differential has shown that in order to reduce inequities in child survival, focus should be on the processes through which households generate health returns to the household characteristics but not necessarily the household's characteristics per se. Lastly, the study confirms that biological differences between male and female children does determine survival.

PS 01/9**Causality between child health, standard of living and economic growth in Sub-Saharan Africa**

Roméo Boye, University Felix Houphouët Boigny of Cocody; Auguste Kouakou, University Felix Houphouët Boigny of Cocody

The debt crisis experienced in the years 1980 by sub-Saharan African countries has drastically reduced all public health programs funding in general. Resource mobilization in the context of the Millennium Development Goals (MDGs), which was supposed to reach 0.7% of Gross National Product (GNP) of the industrialized countries over the period 2000 to 2015, is only

0.32 % ten years later. This negatively influences the funding programs from the MDGs, particularly those of child health. Faced with such a constraint, the creation of decent jobs for adults could be a solution to address the issue of children's health funding (Zacharias, 2010). Thus, an improvement in parental income is supposed to have positive effects on children's health. However, it was found that in most countries in sub-Saharan Africa, 30 to 50 % of the family budget is beyond the scope of financing expenses related to the well - being of the family (Koué , 2010).

The question that arises is whether the improvement of adult life through the creation of decent jobs, can actually help to increase the level of children health and at the same time increase the national wealth. In other words, what is the causality between living standards, economic growth and child health?

The objective of this article is to analyze data from sub-Saharan Africa, the causal link between child health, standard of living and economic growth. More precisely, we empirically examine the nature of the relationship between infant health as measured by the rate of mortality among children under five years, the level of adult life represented by the number of work opportunities provided and the rate of economic growth as measured by real GDP per capita. Then, we identify the channels through which these three variables influence each other.

The rationale in this study is in the line of thought that connects the parents' standard of living and children's health through an increase in family income, which itself increased from sources associated with national activity. We tested the hypothesis that, in sub-Saharan Africa, there may be a very low degree of altruism of parents towards their children. It is generally agreed that healthy adults lead to an increase in income. This leads to an improvement in the standard of living of households. The higher the income, the higher the state of health (Ross, 1998; Phipps, 2003). Indeed, a higher income in the household provides access to a multitude of goods and services and (Ambapour Hylod , 2008) improves the nutritional status of the child (Ambapour Hylod , 2008). However, the impact of income on child health depends on the type of income received by parents (Mayer, 1997). Also, household income has little effect on child health (Blau , 1999). For these authors, the importance of family income is so low for child health, that cash transfers to poor families are likely to have little impact on child development. Faced with these mixed results, the empirical model used in this study sought to know more, the nature and direction of causality between economic status of parents and child health in the context of identifying in a comprehensive manner, the impact of increased household income on child health.

The analysis in this study is being conducted through a VAR model for the period 1980-2010 in 30 countries in sub-Saharan Africa. We adopt it for two alternative methodologies. First the Mixed Fixed and Random Coefficients (MFR) Model proposed by Weinholt (1999) is applied to know whether or not there is consistency between different individuals of the panel. Finally, the Generalized Method of Moments (GMM) proposed by Arellano and Bond (1991) was applied in this work for the reason that the MCM does not detect heterogeneity in the panel.

The main results of this study shows that, in the case of most countries in sub-Saharan Africa, increased wealth is mostly a combination of labor and large investments in public and private infrastructure in sufficient quantity. In addition, job creation alone cannot guarantee a stable economic growth. Job creation will be more favorable to growth than investment in adequate and stable infrastructure. In addition, the improvement of children's health can be achieved by improving the national product. In this perspective, social security allowance to child's growth over time may be desirable and encouraged.

PS 01/10**Affordability and perceptions of the quality of public care as determinants of health insurance coverage in South Africa: implications for National Health Insurance (NHI)**

Anja Smith and Prof Ronelle burger Department of Economics, Stellenbosch University

Aim Against the backdrop of the proposed National Health Insurance (NHI) and the move to universal health coverage in South Africa, this paper examines the factors associated with selection into health insurance membership. We explore the role of affordability and perceptions of the quality of public care amongst other considerations motivating individuals to insure themselves against catastrophic health expenditure through private health insurance.

Medical schemes are the main form of private health insurance in South Africa. The transition into post-apartheid South Africa created the expectation that medical scheme membership would expand commensurate with the new economic opportunities open to all races. However, during the period 2002 to 2012 medical scheme membership experienced limited growth. Despite some growth in membership due to roll-out of the Government Employees Medical Scheme (GEMS) to previously uncovered employees and the extension of health insurance in the private sector to black employees who entered the labour market, total growth in scheme membership has been smaller than anticipated.

Objectives A better understanding of the factors that determine the demand for medical schemes is relevant not only for private health insurance, but also policy as it could provide insight into the preferences and willingness to pay of a segment of the population that is crucial to the success of the NHI funding model. This is important in ensuring a sustainable funding model that is able to improve health outcomes.

Method This paper explores the relationship between health insurance membership and socio-economic, demographic, health risk and quality of care variables. It does so by drawing on empirical analysis of a number of household surveys. The Labour Force Surveys (2000-2011), the General Household Surveys (2002-2011) and the Income and Expenditure Survey (2010/2011).

Key findings We find that participation in the formal labour market is the most important correlate of health insurance coverage. Post-high school education also shows a large positive association with health insurance membership in both the labour market and broader household context. There is a large association between public sector employment or being employed in a position associated with union membership. Both income and position in an asset and services index is positively associated with health insurance membership, while there is a positive association between health insurance cover and disease or illness and injury. By combining administrative data with household surveys data, we are able to explore how perceptions of the quality of public health services correlate with medical scheme membership.

Parallel session 1: Contracting and incentive mechanisms

PS 01/10

Using service agreements to enhance access to referral services to beneficiaries of the Community Health Fund (CHF) in Tanzania

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Aim Limited benefit package has been among the challenges leading to low enrolment to the community voluntary insurance schemes. Service agreements with private health facilities have been used to increase access to referral services in areas with limited public facilities. Despite the recognition that increasingly contracting-out mechanism is seen as a powerful arrangement for addressing access to health care, there has been limited evidence on the implementation process and associated challenges for their sustainability.

Objective This paper presents results on the implementation process of service agreements and associated challenges in Tanzania.

Method A case study investigation is being conducted in one district where there are three service agreements that have been signed with two private not-for-profit hospitals and one government regional hospital to provide referral services for community health insurance scheme members. Data has been collected through focus group discussions with district managers, health providers and communities and in-depth interviews with key informants. The analysis applies thematic data analysis method.

Key Findings Service agreement process involves a range of steps such as drafting contract, negotiations, award, monitoring and evaluation. The process of drafting the contract is the longest and prone to conflicts of interest. It is perceived that expanded benefit package has motivated many to enrol to the CHF. Also service agreements have strengthened the relationship between the council and private facilities. Among the challenges reported are distances to the contracted facilities, unavailability of referral

forms in some primary facilities limiting use of referral care. Contracted providers reported that referral reimbursement rates were low. Factors which facilitate service agreement implementation process and sustainability include private provider trust in the local government authority, district management capacity, availability of public facilities, and the availability of supplies, equipment and drugs in public facilities.

Conclusion It is expected that the findings of this study will be used to improve the process of contracting with private providers in low income settings where management and administrative capacity may be limited.

Key words: Service agreement, referral services, community health fund, benefit package.

PS 01/11**Implications of contracting out health care provision to private not forprofit health care providers: the case of service level agreements in Malawi**

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Background: The Malawi government in 2002 embarked on an innovative health care financing mechanism called Service Level Agreement (SLA) with Christian Health Association of Malawi (CHAM) institutions that are located in areas where people with low incomes reside. The rationale of SLA was to increase access, equity and quality of health care services as well as to reduce the financial burden of health expenditure faced by poor and rural communities.

Objectives: The objective of this study was to evaluate the implications of SLA contracting out mechanism on access, utilization and financial risk protection, and determines factors that might have affected the performance of SLAs in relation to their objectives.

Methods: The study adopted a triangulation approach using qualitative and quantitative methods and case studies to investigate the implications of contracting out in Malawi. Data sources included documentary review, in-depth, semi-structured interviews and questionnaire survey. The principal agent model guided the conceptual framework of the study.

Key findings: We find positive impact on overall access to health care services, qualitative evidence of perverse incentives in both parties to the contracting out programme and that some intended beneficiaries are still exposed to financial risk. An important conclusion of this study is that contracting out has succeeded in improving access to maternal and child health care as well as provided financial risk protection associated with out of pocket expenditure. However, despite this improvement in access and reduction in financial risk, we observe little evidence of meaningful improvement in quality and efficiency, perhaps because SLA focused on demand side factors, and paid little attention to supply factors resources, materials and infrastructure continued to be inadequate.

PS 01/12**Effets du financement base sur la performance sur les prestations subventionnées et non subventionnées: cas de la RD Congo**

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BUT Contribuer à la réflexion sur les effets de l'incitation financière ciblée des prestataires des soins et de leur influence explicite sur la qualité de la prise en charge des patients.

OBJECTIFS

- Apprécier les changements dans la performance des districts sanitaires de la RD Congo après l'introduction du FBP
- Analyser l'allure aussi des prestations subventionnées que des prestations non-subventionnées par le FBP

- Apprécier les effets d'une approche sélective des problèmes de santé sur le comportement des prestataires.

METHODOLOGIE Cette étude se déroule au Kasai Oriental en RD Congo dans 3 districts sanitaires (DS) sur 5, ayant bénéficié de l'appui du projet FBP du 9ème FED/UE de 2007 à 2010 et qui sont actuellement appuyés par le 10ème FED/UE. Ces DS sont ceux de Kabinda, Miabi, Tshilenge. Mais aussi dans 3 DS (Ludimbi-Lukula, Citenge, Kansele.)situées dans le même contexte socioéconomique que les précédentes, ayant reçu aussi cet appui mais actuellement sans appui ou un autre type d'appui différent du FBP.

La collecte de données dans le système d'information sanitaire (avant, pendant et après le FBP), a porté:

Pour les prestations subventionnées :

(i) le taux d'utilisation des services curatifs (ii) le taux d'accouchement assisté (iii) la couverture vaccinale en DTC3 (iv) le taux d'utilisation CPN.

Pour les prestations non-subventionnées :

(i) la couverture en CPN 2+ (ii) la détection des cas de Malnutrition protéino-énergétique (iii) la couverture en VAT 2+ (iv) la tenue des séances d'IEC (v) les visites à domicile

Les données ont été saisies, contrôlées et analysées sur Excel, et différents tableaux et des graphiques ont été construits.

RESULTATS La rupture du financement FBP a entraîné une diminution de l'offre et de l'utilisation des services favorisant ainsi le faible accès de la population aux soins de santé de qualité.

Entre 2010 et 2012, il y a un « effet plafond » dans l'évolution des indicateurs mais l'accélération initiale d'amélioration de la qualité ne s'est pas maintenue à l'arrêt de la subvention.

Cette situation n'étant pas liée au FBP mais à toute approche de financement devant être interrompue de la même manière

Pendant et après la période de financement à travers le FBP, on constate une régression du nombre de cas de détection de MPE, du nombre de séances d'IEC et de visites domiciliaires. Les autres prestations non-subventionnées ne semblent pas très affectées par le nouveau mode de financement.

Parallel session 2: Access to health care services

PS 02/01

Modalité de recours aux services de santé publique en Afrique subsaharienne : le cas de la Côte d'Ivoire

Fofana Memon Université Felix Houphouet Boigny-cocody

But: Le but est d'apporter des pistes de réponses aux comportements de recours de la population aux offres de santé publique.

Objectif: L'objectif est de comprendre les mécanismes sociaux qui structurent le comportement de recours de la population aux offres de santé publique.

Méthode: Le papier repose sur une approche qualitative à visé compréhensive sur un échantillon de 180 acteurs sociaux, axée sur les entretiens, les focus group, les observations et la documentation.

Résultat: La perspective compréhensive menée dans la présente étude a permis de rendre compte que le comportement de recours aux services de santé publique revêt une caractéristique de malléabilité. Les faits observés ont permis de dégager des traits structuraux pertinents du recours de la population aux services de santé.

Ainsi, nous avons pu mettre en évidence des références aux modèles explicatifs de la maladie fonctionnant comme des éléments de recours. Le recours aux structures de santé publique n'est pas la seule expression d'un choix raisonné résultant de barrières culturelles mais un équilibre entre les perceptions de la maladie et les perceptions que les individus mobilisent autour des structures de santé. A cet effet, il convient de constater que, les perceptions que les individus mobilisent autour des services publics de soins fonctionnent comme un opérateur qui diminue la propension de la population à recourir ou non aux systèmes de santé publique.

Ces faits font références à la ponctualité des agents de santé, la différenciation sociale que l'hôpital produit et aux problèmes structurels de fonctionnement des services de santé publique. Il est significatif de préciser que l'usager qui n'est pas en mesure de recourir systématiquement à une structure de santé publique même si l'intention y est aura pour alternative l'automédication, facilement accessible. A bien des égards, les pratiques thérapeutiques observées dans le pays sont conformes aux stéréotypes classiques associés aux populations africaines.

Il existe un véritable développement de marché de médicaments de "rue" dans le district, marché animé en majorité par les femmes. La population se caractérise par une forte pratique d'automédication (54,4 %) et des soins "Saivirigbé" (17,0 %), une faible tendance à recourir aux structures de santé publique (25,8 %). Cette prégnance de l'automédication renforcée par l'influence du groupe d'appartenance ou du "grain" n'est pas sans effet sur le recours aux soins de santé publique.

PS 02/02**Free Healthcare for All in Côte d'Ivoire from April 2011 to February 2012: Coverage Analysis in medication needs.**

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Reducing access to health care disparities is a major concern of the government. Initiatives have been developed with the introduction of user fee exemption measures to enable people especially those in need to have better access to health services and reduce the degree of impoverishment. Thus, in April 2011 after the post-election crisis in Côte d'Ivoire, a user fee exemption measure in *public health* centres (HC) for the entire *population* and for *all services* was introduced by the President of the Republic. The objective of the work is to analyze the coverage of drug requirements during the period of the "free healthcare for all." The data were collected only at the Public Health Pharmacy (PSP), the national structure responsible for the procurement and distribution of medicines and medical devices in public health facilities. The data sources, invoices and procurement plan were designed by the business management software SAGE 1000. Purchase prices were retained. The results show that only 43.9% of the drug needs accessed by health facilities were covered. Specifically, the need for antimalarials, antiretrovirals and TB, antibiotics and products related to reproductive health were satisfied respectively 46.7 %, 75.4%, 83.8%, 22% and 30.5%. It is also apparent in terms of supply, the *first level health care on the pyramid* constituted 38.2% of stocks, 28.8% were assigned to the 2nd level and 30.2 % in the 3rd level. The cost of drugs distributed during this period amounted to 13,123,962,729 FCFA or 19 121 748 Euros with a contribution from the state budget to the tune of 36.7 %. Financing the "free access to healthcare" to the entire population established in April 2011 in a post-conflict context has recorded numerous failure due to *lack of expenditure planning* and revenue forecasting *mechanisms* leading to a poor performance of the *Central Agency for the Purchase of Drugs* marked by unmet needs expressed in drugs provision.

Keywords: Free health care, health financing, coverage needs, medicines, Côte d'Ivoire

PS 02/03**Inequities in barriers to utilization of screening and treatment services for breast cancer in Enugu State, Nigeria**

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Breast cancer is the commonest cancer affecting women and a major contributor to morbidity and mortality globally and in Nigeria. The study examined the barriers that impede the utilization of screening and treatment services for breast cancer in Nigerian women. Specifically the objectives were to: Determine the demographic and socio economic barriers in the utilization of breast cancer screening and treatment services; examine if financial constraints militate against the different socioeconomic status groups in the utilization of screening and treatment services; determine how accessibility (residential location and cost of transportation) affect the different socioeconomic status groups in the utilization of screening and treatment

services of and ascertain if behavioural factors (such as fear, worry, anxiety) affect women in utilizing screening and treatment services.

Method The study site was Oncology Clinic of University of Nigeria Teaching Hospital Enugu. Data was collected from two hundred and seventy breast cancer patients who attended clinic using a questionnaire. The barriers subscale from the abridged version of the Champion Health Belief Model was used for data collection. Descriptive statistics were used to analyze the demographic variables while chi-square test was used to determine the level of significance of the barriers to utilization of screening and treatment services at 0.05 level of significance.

Results The findings showed that the major barriers to utilization of screening and treatment services were fear and pain (84%), cost of transportation (78%), medical cost (66.5%) and not having insurance coverage (61.2%). Provision of health insurance to majority of the women who were civil servants, increased utilization of both screening and treatment services ($p=0.000$). The least poor and poor SES groups utilized screening services and treatment more frequently than the very poor and poorest SES groups ($p=0.034$).

Conclusion Many barriers limit the ability of women to utilize screening and treatment services for the diagnosis and treatment of breast cancer. Policy makers and programme managers should develop and implement interventions to address these barriers so that there is an increase of breast cancer screening and equitable access to treatment services.

Keywords: Inequities, barriers, utilization, screening and treatment services, breast cancer

PS 02/04

Education and post-natal health care utilization of young girls in Cameroon

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Background: Adequate use of postnatal care services can help to improve mother and infant health. However, in Cameroon, the proportion of women who have made the postnatal visits within 42 days as recommended by the World Health Organization (WHO) is low (42%). The objective of this work is to study the effect of education on young girls postnatal care (PNC) demand (15-24 years old) in Cameroon.

Methods: Data are from the DHS-MICS (2011), a national survey of 15,426 women aged between 15-49 years old, among which 6715 young girls. However, this study concerns only married young girls who had living childbirth during two years before survey. This cross-sectional survey was conducted by the National Statistics Institute (INS) of Cameroon. The dependent variable used in our analysis is PNC which was approximated by whether at the last birth, girl recourses in time to health care after delivery or not. Young girls educational attainment is used as independent variable. Household and other women's characteristics are used as control variables. The specification used in this study to achieve our objective is the logistic regression.

Results: The study revealed that the level of young girls PNC service utilization is 37.52%. Education of the young girls, at national level, is strongly and significantly associated with the postnatal health care demand. Indeed, girls with no education level are less likely to use PNC service than girls with secondary and more education level.

Discussion: This result is in agreement with the review of existing literature. The relationship remained significant even when taking into account the influence of other factors such as household wealth, parity, girls exposure to media...

Conclusion: Access to education for girls should be encouraged to Cameroon to reduce inequalities in maternal and infant health.

PS 02/05

Beyond User Fee Removal: Overcoming Persistent Barriers to Facility-Based Deliveries in Rural Zambia

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Aim: In the sub-Saharan Africa region, where almost 50% of approximately 350,000 maternal deaths occur annually, and the average maternal mortality rate (MMR) is 680 per 100,000 live births (Hogan *et al.*, 2010; World Health Organisation, 2010), there is a need to reduce maternal deaths. To reduce the MMR by 75% by 2015 (MDG5A), encouraging deliveries in a health facility and skilled birth assistance and is crucial (World Health Organisation, 2010; Campbell *et al.*, 2006), since facility-based deliveries and skilled assistance at birth are key factors in reducing deaths arising from complications in pregnancy. In an effort to increase accessibility to health services, most countries in sub-Saharan Africa, including Zambia, abolished or reduced user fees for health services, including delivery services (Wilkinson *et al.*, 2001; Nabyonga *et al.*, 2005; Masiye *et al.*, 2008; De Allegri *et al.*, 2011), or exempted certain groups from the payment requirements (Witter *et al.*, 2007; Penfold *et al.*, 2007).

Objectives: With respect to this research, the policy change in Zambia provides an excellent opportunity to evaluate the impact of user fee removal on maternal health services, particularly delivery services. The government of Zambia abolished user fees for health services in public health facilities in 54 rural districts in Zambia in April 2006. The policy was meant to improve access to health services, particularly for the poor, who mostly reside in rural areas. Prior to the policy change, preventative services, such as antenatal care, family planning and counselling, were exempt from payment. However, delivery services were not previously exempt from payment. Therefore, we analyse the effect of the abolition of user fees on the place of delivery in Zambia.

Method: To elicit an estimate of the causal relationship between the abolition of user fees and the place of delivery, we use a difference-in-differences approach exploiting a user fee policy reform in April 2006 in 54 rural districts in Zambia. In addition to the standard DD analysis, we apply recent advances in the estimation of conditional densities to elicit potential substitution effects across facility choices that might further explain the effectiveness of the policy in Zambia.

Key Findings: The findings suggest that the abolition of user fees had little, if any, impact on

the place of delivery. Although not significantly, the abolition of user fees leads to a reduction in home deliveries as well as deliveries in public health facilities but increases deliveries in private health facilities. Our finding of hardly any causal effect of the abolition of user fees on delivery place in a public health facility may seem at odds with most existing literature, but it does suggest that the removal of user fees might lead to a transfer of costs which may further deter the utilisation of delivery services. Therefore, abolishing user fees alone may not be sufficient to necessitate the required change and other efforts such as improving quality of services provided should continue.

Parallel session 2: Equity in health

PS 02/06

L’Absence De Mécanisme Explicite d’Allocation Des Ressources Dans Les Mécanismes d’Exemption, ou le Risque d’Accroître Les inéquités : Le Cas du Plan Sésame Pour Les Personnes Âgées Au Sénégal

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Introduction : À cause de contraintes structurelles, la plupart des politiques d’exemption en Afrique Sub-saharienne se dotent *de facto* de modalités dites passives d’allocation de ressources. Le Plan Sésame – mécanisme d’exemption adopté au Sénégal en 2006 ciblant les citoyens de plus de 60 ans – n’échappe pas à la règle : il se base sur le paiement à l’acte comme modalité d’achat de services, avec avance budgétaire aux hôpitaux régionaux et remboursement sous forme de médicaments pour les centres et cases de santé.

Méthodologie : Nous explorons l’effet de cette modalité passive d’achat de service sur l’ambition d’équité à l’accès aux soins du plan Sésame.

Notre analyse se base sur deux composantes de l’étude Health Inc, menée au Sénégal entre mai 2013 et juillet 2012:

- L’analyse des détenteurs d’enjeux, qui nous a permis de collecter de l’information sur le plan Sésame, notamment sur ses flux financiers ;
- Une enquête de ménage, menée auprès de 2933 ménages avec au moins une personne âgée, qui nous a permis d’analyser l’équité d’accès à la couverture du plan au sein cet échantillon.

Résultats : Notre analyse met en avant trois résultats importants :

- Entre 2006 et 2009, la région de Dakar qui abrite 18,65% des personnes âgées a concentré 69,67% des paiements effectués dans le cadre du plan Sésame, alors que Diourbel, qui abrite 10,91% des personnes âgées, n’en a reçues que 5,25%. Les régions médicales de Matam et Tambacounda ont également bénéficié de peu de ressources (respectivement 1,82% et 4,10%) ;
- Sur la même période, les hôpitaux ont capté une grande partie des budgets alloués pour le plan Sésame, ce qui favorise les personnes âgées vivant en milieu urbain au détriment de celles du milieu rural ;
- L’enquête transversale de ménages montre que le quartile de population le plus aisé a une probabilité significativement plus élevée d’accéder aux ressources du plan Sésame que le quartile le plus pauvre (odd ratio : 2,23 pvalue >0,01).

Conclusion : Dans le cadre du Plan Sésame, la modalité passive d’achat de services génère une dissymétrie dans l’allocation de ressources, au détriment des régions rurales et des soins primaires de santé. Cette dissymétrie explique en partie la distribution significativement inéquitable des ressources allouées au plan sésame au profit des groupes de revenus plus aisés. L’achat passif de services semble donc à la fois accroître les inégalités d’accès aux soins, mais

également entraver le processus de décentralisation sanitaire. Cet exemple montre l'importance de discuter la question de l'équité dans les modalités d'achat de service dès la phase de design d'une politique de financement. Plus de recherche est nécessaire sur cette question dans le contexte d'Afrique subsaharienne.

PS 02/07**Does drug subsidy lead to equity of access to care: A multi-level determinants of care utilization analysis in Dakar**

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Purpose: The purpose of the thesis is to analyze, in a context of reduced costs for households, the determinants of the demand for care and to analyze the impact of subsidy on equity of access to care, in case of fever in Dakar. In particular, we wonder whether the mechanisms of *subsidizing* treatment and prevention of malaria by Falcimon ® have removed financial barrier to modern health care use for children aged 2 to 10 years in case of febrile episode.

Methods: The econometric estimation is based on the theoretical model of Andersen (1995), which is a needs approach. In addition to individual characteristics, this model includes contextual characteristics (neighborhood) to explain the use of health services. The data are from a household survey conducted in 2008 in Dakar. During this survey, 50 districts were drawn and 2952 households comprising 28,698 individuals with 7,413 children aged 2 to 10 years were surveyed. In the study only households with at least one case of fever in children aged 2 to 10 years, the month preceding the survey (1,273 households) were selected. The multi-level Probit and multinomial probit models were used to estimate the demand for care.

Key results: The main results obtained from the model are firstly the high propensity of the practice of self-medication in Dakar households, including the poorest. On the other hand, when poor households reside in a neighborhood with *well-equipped* health infrastructure (public or private), their tendency to use a public health facility increases. Contrary to what is said in the literature, the practice of self-medication was associated with educated but also richer mothers with a higher probability to use self medication for their children for fever. This practice of self-medication was also revealed among poor mothers, in populated social setting. The economic logic of the practice of self-medication appears identical in both groups, in the sense that it follows a strategy of cost reduction. But for the poor, self-medication can reduce financial costs (direct), but for the rich it reduces the opportunity cost (such as waiting time and transport).

The results from both the bivariate and multivariate analyses also confirmed that access to health care in Dakar remains inequitable despite the policy of drug subsidy. We also note that a better allocation of collective resources benefits more of the poor and reduce their vulnerable situation.

Keywords: equity, poverty, access to care, Dakar, multi- levels.

PS 02/08

MALARIA TREATMENT: Inequities in payment coping mechanisms in Southeast Nigeria.

Onwujekwe .O, Etiaba. E, Chikezie. I, Uzochukwu B.S.C, Adjagba. A

Aims and Objectives : Given the enormous economic burden of malaria in Nigeria and in sub-Saharan Africa, it is important to determine how households that belong to different socio-economic group cope with payment for malaria treatment. Hence, this provides new information about the socio-economic differences in household coping mechanisms for expenditures on malaria treatment. It presents information about how households cope with treatment for malaria. It also explores how these mechanisms differ among various socio-economic groups.

Methods : The study was undertaken in two communities with high malaria incidence in Oji-River Local Government Area (LGA), Enugu State, Southeast Nigeria. A total of 200 exit interviews (using pre-tested questionnaires) were conducted with patients and their care givers after consultation and treatment for malaria. The expenditures to treat malaria that the consumers bore was computed and the methods that were used to cope with payments for the expenditures determined. The coping mechanisms were disaggregated by socio-economic status quintiles based on a socioeconomic index. In addition, a measure of the impact of treatment costs on the household was also subjectively ascertained from respondents by direct questioning and classified into Very Serious, Serious, Minor, Little and No Impact, on the households.

Key Findings : The mean total cost of malaria treatment was N5,527.85 (\$22.9 USD). It was found that use of household savings was the most common coping method (79.5%). It was followed by reduction of other household expenses (22.5%), which was more with the poorest SES. The difference in reduction in household expenses was statistically significant across the SES groups. Some households used more than one coping method but none reported using health insurance. The findings showed that payment for malaria treatment had “Very Serious” and “Serious Impact” on the livelihood of almost half (43%) of the respondents.

Conclusion : People use different coping mechanisms to take care of their malaria expenditures in the outside of pre- payment mechanisms. However, the poorest households more than other households had to forgo other basic household expenditures, which is indicative of the catastrophic nature of expenditures that are due to malaria. Universal Health Coverage is needed to decrease the economic burden of malaria on households.

Key words: malaria, coping, household, expenditures, payments, socio-economic status.

Parallel session 2: Community Based Health Insurance

PS 02/09

ADéFi Santé : modèle innovant de couplage « microassurance – microfinance » ADéFi – ACEP-Madagascar

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ADéFi, *Association de Développement et d'entraide Ftitsimbinana*, est une association malgache de microentrepreneurs. Elle gère un service de microassurance santé en partenariat avec l'institution de microfinance ACEP-Madagascar.

But: A Madagascar, 90% des travailleurs évoluent dans le secteur informel et sont généralement exclus de tout système de couverture santé. Le but du programme de microassurance d'ADéFi est d'offrir une couverture santé aux microentrepreneurs d'ACEP-Madagascar.

Objectifs Les objectifs sont d'apporter une protection financière en cas de maladie et d'améliorer l'accès à des soins de qualité des microentrepreneurs d'ACEP-Madagascar et leur famille.

Méthodes: L'originalité du programme de microassurance d'ADéFi tient au montage institutionnel et au mécanisme de financement pérenne qui en découle ; la viabilité sur le long terme est garantie par un recyclage des revenus de l'activité de microfinance.

Dans un premier temps (1995-2009), ADéFi a opéré en qualité d'institution de microfinance à destination des microentrepreneurs urbains. En 2009, ADéFi a créé une filiale (ACEP-Madagascar SA) et lui a transféré son activité de microfinance. ADéFi a décidé d'employer ses revenus de placements financiers dans ACEP à la couverture santé des emprunteurs et de leur famille et ainsi jouer pleinement son rôle social.

La synergie entre microfinance et microassurance a permis à ADéFi de toucher rapidement un grand nombre de microentrepreneurs et permet à ACEP de sécuriser les crédits et fidéliser la clientèle en offrant un service plus attractif qu'une simple assurance emprunteur.

ADéFi prend en charge 70% des soins ambulatoires et 90% des hospitalisations. Avec les trente-trois prestataires de soins conventionnés (publics, confessionnels, privés), ADéFi pratique le système du tiers payant c'est-à-dire que le bénéficiaire paie uniquement la part des dépenses à sa charge et ne doit pas avancer l'ensemble des frais.

Résultats clé: Grâce à ce montage, le programme de microassurance d'ADéFi, démarré en juin 2011, couvre les cinq villes principales et deux villes secondaires de Madagascar. Il compte 8.500 emprunteurs soit 30.000 bénéficiaires (emprunteurs et familles) en août 2013. En 2012, ADéFi a pris en charge 1.673 épisodes de maladie (soit 24.596\$). ADéFi prévoyant de couvrir 40.000 bénéficiaires fin 2013, le nombre de soins pris en charge sera significativement plus élevé. Compte tenu du coût limité du service (3\$ par bénéficiaire par an en 2012), obtenu grâce à une bonne maîtrise de la consommation médicale et une forte rigueur de gestion, ADéFi prévoit d'étendre rapidement le service de microassurance à d'autres populations défavorisées.

PS 02/10**Using Discrete Choice Experiment to Assess Community Preferences for Micro Health Insurance within the Predominantly Tax-funded Health Care System of Malawi**

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Aim/objective: To use a discrete choice experiment (DCE) to explore community preferences for the attribute-levels of a micro health insurance product, as a potential instrument to fill gaps in universal health coverage within the tax-funded health care context of Malawi.

Methods: Six attributes and attribute-levels for the DCE were derived from a rigorous qualitative study. These attributes and attribute-levels were: unit of enrollment (extended family, core nuclear family, individual); management structure (community committee, an external NGO, a local microfinance institution); health service benefit package (comprehensive: drugs, lab test/ x-ray, and surgical operations; medium: drugs, lab tests/x-rays; basic: drugs only); copayment levels (none, 25%, 50% of bill); transportation coverage (all transport cost, only during referral and emergencies, none); and monthly premium per person (100, 300, 500 Malawian Kwacha). Using prior parameter estimates from a pilot study, an unlabeled D-efficient DCE design with two choice alternatives and an opt-out was constructed using the Ngene software. Eighteen choice sets were generated and grouped into three blocks. The DCE was administered by trained interviewers with the aid of pictorial images to both household heads and their spouse(s) in a random sample of 504 households selected from a stratified sample frame, in two rural districts. The sample size was determined by the S-error estimates of the D-efficient design. For the analysis, all the attributes except premium level were effects coded using the last levels of each attribute as reference. Preferences for the attribute-levels were estimated using a nested logit model computed in STATA.

Key findings: A total of 814 respondents completed the DCE questionnaire; responses were missing for six choice sets, resulting in 14,634 observations. The following attribute-levels significantly influenced respondents choice behavior ($P < 0.05$). Full coverage of transport ($\beta = 0.4509$) and comprehensive health service benefit package ($\beta = 0.3723$) received the highest preference values followed by medium health service benefit package ($\beta = 0.2387$) and coverage of transport during emergencies and referral ($\beta = 0.2276$). A high preference weight was also given to the attribute-levels associated with unit of enrollment; core nuclear family ($\beta = 0.1438$) and extended family ($\beta = 0.1054$). The cost-related attributes such co-payment; no-copayment ($\beta = 0.1244$) and quarter co-payment ($\beta = 0.1019$) and premium ($\beta = -0.00055$) were given lower preference values. The lowest utility value was attached to Management by community committee ($\beta = -0.0511$).

Conclusion: Community residents attach high preferences to benefits associated with a MHI scheme including coverage of transport, and the requirement for enrollment and are even ready to trade-off cost in order to access such benefits.

PS 02/11**Increasing equity among community based health insurance members in Rwanda through a socioeconomic stratification process**

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AIM : Launched in 1999 in Rwanda, the community based health insurance (CBHI) scheme has reached nationwide coverage in 2004. The strong commitment of the Government of Rwanda (GoR), in collaboration with its partners, permitted to reach 91 percent of the population in 2010, starting from 7 percent in 2003. The utilization rate of health services also considerably increased, passing from 0.3 in 2003 to 0.9 in 2010.

However, all citizens were not equal before CBHI. Indeed, all CBHI members paid the same fees, regardless of their personal income; and the poorest citizens faced challenges for paying the premium, which was about USD 1.5 per person. It was therefore urgently needed to promote equity among CBHI members, and to guarantee access to health care for the most vulnerable persons.

OBJECTIVES To increase equity among CBHI affiliates, the GoR decided to introduce a stratification system based on the socioeconomic status of the population. The objective was also to increase protection for the most vulnerable citizens.

METHODS: The GoR developed a national database that stratifies Rwandan citizens by income. During the year 2010, data about all households in Rwanda were collected at the village level. The information was then entered into the database. This required training and to supervising data-entry staff and providing assistance to the staff managing the CBHI database.

KEY FINDINGS: To date, more than 10 million resident records, representing 96 percent of Rwanda's population, have been entered into the database. This database also helped identifying the most vulnerable of the population, which were about 25 percent of the population and whom contributions are now covered by the government and its partners. The remaining households were categorized in two groups which determine the premium per member of the household for the CBHI coverage. Over time, contributions from these higher-income groups are expected to generate increased revenue to support CBHI.

PS 02/12**Les fondements de la résilience et de la pérennité de la mutuelle de santé de Fandène : quels enseignements pour la mise en œuvre de la stratégie sénégalaise de couverture maladie universelle?**

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Résumé : Créée en 1989, la mutuelle du village Fandène est la plus ancienne mutuelle de santé (MS) communautaire du Sénégal. Elle a été confrontée plusieurs chocs endogènes et exogènes. Contrairement à d'autres MS, elle a su, jusque-là, faire face à l'adversité en continuant à couvrir

les dépenses de santé les plus susceptibles de faire basculer ses membres dans l'indigence. Ce qui en fait une mutuelle de référence et un modèle de pérennité et de résilience. Cette recherche vise à analyser les fondements économiques, sociaux et culturels de la résilience et de la pérennité de la MS ainsi que les leçons que l'on peut de son expérience en termes de bonnes pratiques.

Méthode: La recherche se base sur une étude de cas. La théorie du capital humain et l'approche des *capabilités* d'Amartya Sen constituent son cadre de référence.

La collecte des données qualitatives et quantitatives s'est déroulée en deux temps.

Dix entretiens et un focus group avec, respectivement, les personnes âgées et les responsables de la MS ont été réalisés entre juillet et août 2012.

Une deuxième a été effectuée entre juin et juillet 2013. Quinze entretiens individuels auprès des jeunes, femmes, et adultes du village, ont été réalisés chez les membres. Deux autres focus groups ont été organisés avec les jeunes et les femmes.

Les données quantitatives recueillies aussi en 2012 et 2013 portent sur l'évolution du nombre de membres, des cotisations, des réserves, des coûts de prise en charge (hospitalisation, analyses, chirurgies, radios) etc.

Résultats: Les résultats de la recherche montrent un niveau élevé d'appropriation de la mutuelle et d'ancrage dans les valeurs mutualistes de solidarité ainsi qu'une forte prise de conscience des avantages l'auto-prise en charge chez tous les enquêtés.

La résilience et la pérennité de la MS sont le résultat d'un concours de facteurs liés à la spécificité culturelle de la population cible, à l'histoire de la MS, à sa gouvernance, à la cohésion sociale et aux croyances en des valeurs communes, au déficit de confiance des membres quant à la continuité des politiques publiques et des interventions des bailleurs de fonds dans la prise en charge effectives des problèmes de santé des populations. Elles sont aussi liées aux relations privilégiées qu'elle entretient le prestataire de service conventionné et subséquemment la qualité des soins offerts aux membres.

Discussion: Nous explorons quels sont ses faiblesses du modèle de Fandène? Dans quelle mesure, il est reproductible ailleurs? Quelles leçons peut-on tirer de son expérience pour réaliser des avancées rapides dans la couverture sanitaire universelle en passant par les MS telle que le préconise la stratégie sénégalaise de la couverture maladie universelle.

Parallel session 2: Maternal fee exemptions in West Africa & Morocco (Organized Session)

PS 02/13

Maternal fee exemptions in West Africa & Morocco – what is their cost and what do we know about their effects and effectiveness? Evidence from four national evaluations

Presenting authors: chaired by Dr Sophie Witter, University of Aberdeen, email:

Co-presenters: Patrick Ilboudo, AfricSante, Burkina Faso; Mamadou Konate, Marikani, Mali; Patrick Makoutoude, CERRHUD, Benin; Chakib Boukhalifa, ENSP, Morocco

Aim and objectives National exemption policies for maternal health care have been proliferating, especially in Africa, in recent years. They offer potential to provide health coverage for a significant population group. However, studies which examine them in a holistic way, documenting their costs, their effectiveness, their equity implications and also their wider health systems effects are lacking. The aim of this panel is to present findings on all of these questions across four national policies focussing on obstetric and especially emergency obstetric care in Benin, Burkina Faso, Mali and Morocco. The research was carried out by the FEMHealth project.

Methods used Mixed research methods were used, including document reviews at national and international levels, key informant interviews at national and district levels, analysis of national survey and HMIS data, original surveys of patients and staff, costing studies, tracking of financing flows, in-depth interviews with women, observations in facilities, and register reviews to establish changes to quality of care and outcomes. Realist evaluation techniques were used to understand the drivers of better and worse performance across districts within each country.

Key findings Analysis of findings will be completed in autumn 2013, but some of the findings at present include:

- **Costs and sustainability:** A number of anomalies in the reimbursement of services emerge, with payments diverging from the production costs of services, thus causing perverse incentives. Policies are largely initiated and funded from national resources.
- **Equity:** The women who have benefited from these services are not representative of the population, but (with the exception of Morocco) are skewed towards better off households. This is consistent with the pattern of access to emergency obstetric care prior to the introduction of these policies but does signal the regressive nature of the policies in contexts where all households use public services.
- **Effects on staff:** Staff have seen an increase in workload over the period of introduction of the policies, however workloads remain well within expected norms. Attitudes are generally positive towards the policies, although there have been no accompanying measures to benefit staff.

Objectifs Depuis le début de la mise en œuvre de la politique de subvention des accouchements et des soins obstétricaux et néonataux d'urgence au Burkina Faso, trois évaluations externes portant sur différents aspects ont été réalisées : la première, à six mois après l'introduction de la politique, pour étudier la mise en place de la politique ; la seconde, en 2009, se basait essentiellement sur l'analyse de données secondaires documentaires ; et la troisième, survenue tout récemment, mais qui n'a couvert que seulement 2 districts, pour éclairer sur les conditions de mise en œuvre de la politique, les effets sur l'utilisation des services, et les stratégies d'adoption du personnel de santé et des patients. Aucune de ces évaluations ne s'était penchée à part entière sur les aspects relatifs aux coûts, à l'impact sur la qualité des soins, les indicateurs de santé et sur les systèmes de santé locaux.

Le projet FEMHealth visait donc à :

1. développer de nouvelles approches méthodologiques pour l'évaluation des interventions complexes ;
2. réaliser des évaluations détaillées de l'impact, du coût et de l'efficacité opérationnelle de la politique de subvention des accouchements et des SONU sur la santé des mères et des nouveau-nés et la qualité des soins ;
3. améliorer la dissémination des résultats de recherche au profit des décideurs et des autres acteurs.

Méthodes Six districts sanitaires (dont 4 avec hôpital de district et 2 avec hôpital régional) ont été sélectionnés après une classification hiérarchique de l'ensemble des districts du pays en se servant de critères suivants : la population desservie, le nombre de césariennes réalisées avant la mise en œuvre de la politique, l'accessibilité à une structure de santé de base, l'indice de pauvreté, la proportion des accouchements assistés et le taux de césariennes. Les données ont été collectées dans chaque district aux moyens d'outils quantitatifs et qualitatifs.

Les résultats: Un accroissement important des accouchements en institution (surtout chez les femmes pauvres et en milieu rural) de même qu'une augmentation du taux des césariennes. Toutefois, les montants supportés par les ménages sont encore élevés par rapport aux objectifs de la politique et cela semble avoir pour conséquence de maintenir une certaine barrière à l'accès aux soins plus qualifiés par les femmes issues des ménages pauvres.

La qualité des soins semblait varier d'un hôpital à un autre et n'augmentait pas avec le niveau de soins.

Les effets de la politique sur le système de santé local sont mitigés. Certes, il y a une augmentation de l'accès aux soins maternels rapportée dans les différents sites mais la disponibilité et la qualité des services pourrait être améliorée : d'une part, en tenant compte notamment des besoins exprimés en équipement et en moyens de transport pour les références ; d'autre part, en améliorant la rémunération du personnel et en ayant une vision et une culture managériale des hôpitaux soucieuse de l'intérêt public.

PS 02/15**Présentation 2. Evaluation de la politique de subvention des césariennes au Mali**

Mamadou Konate, Marikani, Mali

Objectifs Au Mali, plusieurs programmes de santé ont été mis en place dont le Programme de Développement Sanitaire et Social dans le but d'améliorer la santé maternelle et infantile. Malgré ces programmes, le pays connaît un ratio de mortalité maternelle et un taux de mortalité infantile élevés. Face à ces constats et dans le but d'atteindre les Objectifs du Millénaire pour le Développement au travers l'objectif 4 et 5, le gouvernement du Mali, a décidé le 23 juin 2005, l'institution de la prise en charge gratuite de la césarienne dans les établissements publics hospitaliers, les centres de santé de référence de cercle, des communes du District de Bamako et les établissements du service de santé des armées. Comme le Mali, plusieurs autres pays africains ont adopté une politique d'exemption des soins pour les accouchements et les soins obstétricaux d'urgence (SOU) dans le but d'améliorer les résultats de santé maternelle et néonatale. Cependant, les données probantes pour mesurer l'impact de ces politiques n'étaient pas disponibles ou bien développées. Aussi, les modèles d'évaluation existantes présentaient quelques limites. C'est dans ce cadre que s'inscrit le projet FEMHealth qui vise à évaluer l'impact de la suppression de paiement des frais des soins de santé maternelle en Afrique de l'Ouest (Bénin, Burkina Faso, Mali) et au Maroc.

Méthodes Au Mali, l'étude a concerné la gratuité de la césarienne et a été faite dans 8 centres de santé dont 4 hôpitaux et 4 centres de santé de référence.

Résultats Il ressort des résultats de l'étude que la politique reste toujours méconnue par certains bénéficiaires. Au niveau national, elle a améliorée l'accès aux soins obstétricaux. Le taux de césarienne et le taux d'accouchement assisté ont augmenté. Les plus riches profitent mieux la politique que les plus pauvres. Les plus pauvres vivent en général dans le milieu rural et le problème de déplacement du village au centre de santé communal se pose en raison du désenclavement. Les bénéficiaires continuent à payer certains montants malgré la gratuité de la césarienne. Malgré ce problème de mise en œuvre, la politique a réduit de manière considérable les charges financières des ménages. Les perceptions des bénéficiaires et des prestataires ont indiqué une amélioration de la qualité des soins suite à l'instauration de la politique. La durabilité de la politique est garantie grâce à l'engagement fort de l'Etat en matière de réduction des mortalités maternelle et néonatale. Les résultats finals de cette étude seront disponibles en début de 2014.

Introduction et objectifs En 2008, le Ministère de la santé du Maroc a mis en œuvre son plan d'accélération de la réduction de la mortalité maternelle (PRMM). Un des obstacles ressentis à l'accès aux services de maternité était le coût de l'accouchement. Le PRMM a pris en compte cet élément en rendant l'accouchement et la césarienne gratuits au niveau des hôpitaux publics en 2009. Cette politique permet à toute parturiente d'avoir accès aux soins gratuits, quel que soit son statut socioéconomique. Le paquet de soins est constitué de la gratuité des prestations de l'accouchement et de la césarienne, le bilan biologique standard, la prise en charge des complications obstétricales de la parturiente au cours de la grossesse, de l'accouchement et du postpartum, et la prise en charge du nouveau-né. Cette décision prise pour faciliter l'accès universel aux soins obstétricaux peut avoir des effets positifs et négatifs sur le système de santé local et il est nécessaire de les évaluer afin d'éventuellement adapter la politique.

L'objectif de la recherche FEMHealth est d'évaluer les effets de la politique de gratuité de la césarienne sur les résultats santé et sur la qualité des soins à travers quatre volets: la politique de santé, le financement des soins et l'économie de la santé ; les systèmes locaux de santé ; la qualité des soins et les indicateurs de santé à travers l'introduction d'outils innovateurs.

Méthodes C'est une recherche évaluative transversale, mélangeant des méthodes quantitative et qualitative. Elle couvre le niveau national pour l'analyse de la politique et du financement de la santé. Elle a été réalisée au niveau de six délégations sanitaires provinciale/préfectorales (DSP) avec leurs hôpitaux de référence sélectionnées sur base d'un certain nombre de critères pour les autres volets. La durée de l'étude a été de 3ans.

Résultats Les principaux résultats de l'étude ont montré que la gratuité de l'accouchement et de la césarienne a été mise en œuvre de manière effective et a probablement contribué au renforcement de l'utilisation des maternités hospitalières, en allégeant principalement la charge financière des parturientes et de leur entourage. Néanmoins, certains frais restent parfois à la charge des parturientes tels le coût de l'ordonnance à la sortie (44 \$), et ceux liés au transfert inter-structures et à partir du domicile (6-20 \$). Par ailleurs, les disparités d'accès aux soins parmi les catégories socio-économiques (les plus pauvres et les plus riches) n'ont pas été réduites par l'introduction de cette gratuité notamment en matière d'accès à la césarienne (40% des femmes les plus pauvres ont accouché dans un établissement de santé en 2010). A noter aussi que l'attitude des personnels de santé n'a pas été changée, malgré l'augmentation de la charge de travail, qui a été ressentie comme une diminution de la satisfaction au travail. Malgré une qualité de prise en charge technique probante, la qualité relationnelle reste déficiente.

La portée de cette évaluation reste circonscrite aux sites de l'étude et ses résultats restent non généralisables. Le cout efficacité de la gratuité est à démontrer. Le défi à relever est de mener d'autres études plus approfondies afin d'éclairer les décideurs sur la pérennité de cette politique dans un environnement qui tend à instaurer la couverture médicale universelle de la santé.

PS 02/17**Présentation 4. Trois années de mise en œuvre de la politique de gratuité de la césarienne dans cinq zones sanitaires au Bénin: résultats et leçons apprises**

Patrick Makoutoude, CERRHUD, Benin

Introduction Depuis avril 2009, le gouvernement du Bénin a lancé la politique de gratuité de la césarienne sur tout le territoire national. Après 3 années de mise en œuvre, la présente étude vise à décrire la politique telle qu'elle a été conçue, à en évaluer la mise en œuvre, les effets, à dégager les leçons et les défis à relever.

Méthodes Il s'agit d'une étude multicentrique évaluative et mixte, d'une durée de 36 mois, réalisée au niveau national pour les flux financiers et dans 5 zones sanitaires sélectionnées de manière raisonnée au Bénin.

Résultats La politique est régie par un décret qui précise les rubriques des coûts couverts. Elle cible toute la population sans distinction de nationalité et de niveau socio-économique. Elle est appliquée dans des hôpitaux publics et privés agréés. Elle est gérée par une agence nationale et financée entièrement sur le budget du ministère de la santé à raison de 150 € par césarienne. Il n'y a pas eu d'arriérés de paiements.

- La mise en œuvre est variable d'un site à l'autre mais le transfert de la patiente et la prise d'un abord veineux avant le transfert, ne sont pas mis en œuvre telle que prévus par la politique et on note encore des coûts formels et informels élevés à la charge des malades.
- La politique bénéficie plus aux riches qu'aux pauvres.
- La politique a contribué à une augmentation du taux de césarienne au niveau national, passée de 3,7% en 2009 à 6,4% en 2012.
- En termes de qualité de soins, on note encore sur des sites des délais très élevés entre la décision et la réalisation de la césarienne. On observe aussi une grande variabilité des scores d'omission d'un site à l'autre avec, une meilleure qualité des soins dans les structures qui appliquent bien la politique. Par rapport à la mère, les nouveau-nés reçoivent des soins d'une moindre qualité.
- Le coût moyen de production de la césarienne variait entre 60 € et 120 € avant la mise en œuvre de la politique et le tarif appliqué préalablement variant entre 86 € et 177 €. Le forfait de 150 € est suffisant pour couvrir l'ensemble des coûts de production.
- La charge de travail perçue par les prestataires a augmenté après la politique. Ce qui justifie les demandes de motivations financières supplémentaires auxquelles les managers répondent de manière variable allant de l'octroi de 0 à 4 salaires supplémentaires.

Conclusion Pour améliorer la mise en œuvre, il est urgent d'opérationnaliser les rubriques comme le transfert et la prise d'une veine avant le transfert et de promouvoir des guides de mise en œuvre précisant clairement les rubriques de coût incluses dans la politique à diffuser à l'attention des usagers mais aussi des prestataires et des managers des structures. L'amélioration de la qualité des soins ainsi que l'organisation de la transition entre la politique de gratuité et le Régime d'Assurance Maladie Universelle représentent encore des défis à relever.

Parallel session 3: Contracting out and private sector

PS 03/01

Use of multiple providers for antenatal care services in south-eastern Nigeria: Implications for improving maternal health

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Introduction: Antenatal care (ANC) is essential for early identification and management of obstetric complications and infections while also promoting delivery by skilled attendants. According to World Health Organisation, receiving ANC at least four times increases the likelihood of receiving effective maternal health interventions by pregnant women. However, use of multiple providers for ANC may reduce the likelihood of attaining the required number of visits at any of the facilities and the likelihood that a woman's history is well known to the provider.

This study explored the use of multiple providers for ANC and to provide information that could help in the improved provision of quality ANC services at health facilities.

Methods: The study was conducted in Enugu state, south-east Nigeria. It adopted a cross-sectional design. A pre-tested interviewer-administered questionnaire was used to elicit information from 1307 women who had live births in the one-year period preceding the study. 481 antenatal care attendees from 34 facilities were also interviewed. Data was analysed with SPSS and STATA soft wares

Results: From household survey, the primary providers of ANC were private hospitals for both urban (48.1%) and rural (51.3%) respondents. 43% of respondents from household and 47% of those from exit surveys ($p < 0.001$) received ANC from another provider. The secondary provider of choice was still private hospitals in both (38% in household and 50% in exit surveys). Similar reason was given for dual ANC registration which was to have a facility close to home in the case that labor starts at odd hours (54% for household) except for rural respondents (40%) from exit survey where it was due to perceived better quality necessary in the case of emergencies.

Conclusion: The use of multiple providers for ANC services is high. This could result to women delivering at facilities where their history is not well known, pre-disposing them to complications and possibly death. The demand for ANC was such that both urban and rural respondents preferred private hospitals. The fact that ANC services are subsidized at public hospitals did not seem to drive registrations at these facilities. Avenues to properly channel ANC services to preferred providers should be explored.

PS 03/02**The cost-effectiveness of contracting out maternal and child health care services to private-not-for profit health care providers in Malawi**

Elvis Gama, Liverpool School of Tropical Medicine and Institute for International health and Development

Background: High maternal and child mortality rates are among the major challenges in Malawi, and create a substantial economic burden to individuals, their families and the health system. To address this challenge, the government embarked on a contracting out mechanism with private health care providers, in order to improve access to and utilisation of maternal and child health services.

Objective: Using health technology assessment tools, the article objectives is to explores the cost - effectiveness of contracting out private-not-for- profit health care providers versus standard provision by public facilities

Methods: The study population included health care facilities, health managers, health workers and patients. The main outcome measures were a combined rate of maternal and child mortality and process indicators extracted from the guidelines. The study used utilisation data, invoices and time spent negotiating contracts. Labour and overheads costs were from the study clinics, and public facility and procedure costs were from the local public facilities. We evaluated cost per year of life saved (YSL), including patient and caregiver costs with median of 11 months and maximum of 30 months. For analysis, descriptive as well as regression techniques were used. Cost effectiveness and cost utility analysis were performed according to the intention to treat principle and from a societal perspective. Cost effectiveness ratios were calculated using bootstrapping techniques.

Key findings: The findings suggests that contracting out of health care provision to private health care providers is not cost-effective, this is partly due to the agency problems which generate high transaction costs; weak capacity of government agencies to enforce contracts and the nature and capacity of private health care providers engaged. Contracting out maternal and child health care services may be cost effective after controlling for huge transaction costs, addressing some principle agent challenges and putting in place functional institutions to govern the contracts.

PS 03/03**Should private health providers be used to enhance equity in health service utilisation in Uganda?**

Stephen Lagony, HealthNet Consult; Charlotte Zikusooka, HealthNet Consult; Brendan Kwesiga, HealthNet Consult; Grace Kabaniha, HealthNet Consult

Research objective: Developing countries face challenges with regards to attaining equity which is a core principle of a universal health system. While the private sector providers would serve as potential partners in ensuring equity in the health sector, this will depend on the distribution pattern of use of their services among the poor. This study assesses the distribution pattern of use of private health service providers in Uganda.

Methods: This study uses the Uganda national household survey 2009/10 (UNHS IV) data. The survey includes variables on the use of health services when individuals in households incur illness and also captures household's consumption expenditure which is used to estimate household socio-economic status. Incidence analysis methods were used to assess the distribution of use of private health sector services in Uganda by the individuals in the households (across different socio-economic groups). Concentration indices and concentration curves were generated to assess which socio-economic groups benefit from private for profit and private not-for-profit /non-government organizations (NGO) health sector services. Analysis is disaggregated by region and location (urban or rural).

Findings: For the country wide analysis, the use of NGO health units and also the use drug shops and pharmacies was mainly used by the poor and the pattern is the same in both rural and urban areas while the use of private clinics and NGO hospitals was found to be among the rich. However, whereas NGO health units were found to be mainly used by the poor in urban areas, they were found to be used by mainly the rich in the rural areas.

Across the regions, all private sector providers were mainly used by the rich in the Western region while in the Central region, all private services except NGO hospitals were all mainly used by the poor. The pattern across Eastern and Northern Uganda is similar with private clinics and NGO hospitals being mainly used by the rich while NGO health units and the drug shops and pharmacies are mainly used by the poor.

Conclusion: In order to ensure equity in health care utilization in Uganda, there is need for the government to partner with and support private sector providers in areas where the use of their services is mainly among the poor as an approach way of enhancing equity.

PS 03/04

Contracting of Health Care: Process and Effects in Sierra Leone

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Aim and objectives: The overall *aim* is to assess the effectiveness of internal contracting of health services in Sierra Leone in supporting the Free Health Care Initiative (FHCI) and the wider move towards Universal Health Coverage

Specific objectives are to:

- understand the change process of contracting
- analyse how implementation has worked in practice
- identify the implications of contracting on health worker incentives and performance and the wider health system

Methods: Document review of key developments (completed):

- the decentralisation of health service responsibilities to District Health Management Teams (DHMTs)
- the introduction of an internal contracting system in 2010, to government contractors within the public health care system

- the parallel introduction of a Performance Based Financing (PBF) scheme by which Peripheral Health Units (PHUs) receive funding based on six key interventions (family planning, antenatal care, deliveries, postnatal care, immunisation of children under 1, outpatient visits of children under 5) with adjustments for quality factors; the resultant PBF funds can be divided into incentives for PHU health workers (up to 60% of funds) and 'investment' funding (the remainder)
 1. Key informant interviews (to be conducted in late 2013/early 2014): 23 interviews, at national level and in four districts across the country
 2. Interviews with health care providers and health facility managers (late 2013/early 2014): 24 interviews in the same four study districts
 3. Analysis of secondary data on the six key indicators included in the PBF scheme and utilisation of other health services and by other users not covered by the FHCI (late 2013/early 2014)

Key findings: The research work will be completed in January 2014, therefore we can only anticipate the key findings but we will be exploring issues around:

- The key drivers for the introduction of contracting in Sierra Leone
- The degree of national ownership of the contracting regime
 - The main barriers and facilitators to the successful implementation of contracting and the PBF scheme, including:
 - Local engagement and participation
 - Health worker involvement
 - Managerial capacity
 - Accountability and monitoring systems
 - Sustainability and affordability
 - The impact of the PBF system on the performance of PHUs in increasing coverage, especially among the poor

Parallel session 3: Human resources for health 1

PS 03/05

An assessment of the motivational value of rewards among health professionals in Malawi's Ministry of Health

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Aim: The aim of the study was to assess the motivational value of rewards among health professionals in the Malawi's Ministry of Health (MoH).

Objectives: To review the existing literature on rewards and motivation for health professionals in the public health sector; investigate the perceptions of a sample of health professionals towards the efficiency and motivational value of rewards available in the Malawi's MoH; substantiate the alleged reward-related problems faced by health professionals in the Malawi's MoH; suggest prescriptions for overcoming reward-related challenges faced by health professionals in the Malawi's MoH; determine how well the sample data fits a hypothesized model through the use of the Structural Equation Modelling (SEM) technique; and suggest a model that will help to bridge the gaps in the existing theories and models of rewards and motivation for health professionals.

Methods: Through a systematic sampling method, 571 health professionals were sampled for the study. Data were collected through the use of a self-administered questionnaire which was composed based on the data collected from literature review, focus group discussions and interviews.

Key Findings: The findings of the study revealed that the Malawi's MoH is failing to attract, motivate and retain adequate health professionals largely due to the prevalence of reward-related challenges.

While the statistical testing of the hypothesized model proved a lack of fit between the variables, the statistical testing of the re-specified model suggests that there is a positive relationship between financial rewards and reward-related problems being faced by health professionals in the Malawi's MoH. Through the SEM exercise, an inverse (negative) relationship between financial and non-financial rewards was scientifically deduced and graphically demonstrated.

Both the re-specified and graphical models symbolize a pragmatic departure from the theoretical model whose authors (Franco, Bennett, Kanfer & Stubblebine, 2004) are largely inclined to the use of non-financial rewards and suggest that financial rewards should be used with caution. These findings also reject the Herzberg's two factor theory (Herzberg, 1960) which claims that financial rewards (salaries) are not a motivator for workers. The major recommendation of the study is that the Franco *et al.*'s (2004) model should be adopted and adapted with the view that the motivational value of both financial and non-financial rewards varies from individual to individual due to individual differences and prevailing factors/forces in the work environment and wider society in which the MoH operates.

“We are intimidated”: justice and frontline health worker motivation in maternal and neonatal health care services provision in Ghana*Matilda Aberese-Ako, GHANA HEALTH SERVICE*

Background, aim and objectives Identifying the right mix of interventions to improve maternal and neonatal health service delivery is one of the challenges that Sub-Saharan Africa including Ghana faces. To meet set targets for Millennium Development Goals 4 (child health) and 5 (maternal health), Ghana instituted policy interventions (including fee-free ante natal, delivery and post-natal health care services for all mothers and under five year olds) aimed at improving access to health care. However, research findings suggest Ghana might not achieve the national target of reducing maternal mortality by three fourths by 2015, because of the continued existence of low frontline health worker motivation and negative attitudes in the provision of maternal and neonatal health care (Ansong-Tornui et al., 2007). Therefore if Ghana is to achieve the set targets and progress beyond 2015, there is need to understand and address health worker motivation. This paper explores factors influencing frontline health worker motivation and describes how this affects their attitudes in the provision of maternal and neonatal health care services and their policy implications.

Method This qualitative study used ethnographic methods including participant observation, conversation, in-depth interviews and case studies of frontline health workers and health managers between February-November 2012 and July-August 2013, in two district hospitals in Ghana. Ethical approval was obtained from University of Wageningen, Netherlands and Ghana Health Service ethics review boards. Consent was obtained from study participants. The study adopted a grounded theory approach. Qualitative analysis software Nvivo 8 was used and main themes identified in the analysis form the basis for interpreting and reporting findings.

Findings Workers’ perceptions of justice and fairness influences worker motivation and attitudes in the provision of quality health care. Key areas that health workers perceived lack of fairness included national policy directives and organisational management factors. However, mediating factors which influence how workers process policy and organisational management factors that influence their motivation and attitudes include worker’s personal conviction of how health service should be provided and patient and community factors. Consequently, to improve health worker motivation and attitudes in order to ensure quality health service provision in Ghana by 2015 and beyond, policy makers and organisation managers need to recognise health worker motivation as critical and commit time and effort to incorporating interventions that will facilitate communication and improve management-frontline health worker relations.

PS 03/07**Examining Quality of Worklife, Work Attitudes and Retention of Tertiary Health Workers in Enugu State, Nigeria**

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Aim: The aim was to provide evidence on the relationship between employees' quality of worklife (QWL), work attitudes and their intention to leave the hospital that can be used to improve health worker retention in an era of universal health coverage.

Objectives: The study assessed health workers' perception of their QWL and work attitudes; examined the relationship between QWL and intention to leave; and determined the mediating role of work attitudes in the link between QWL and intention to leave.

Methods: The study site was the Enugu State University of Science & Technology Teaching Hospital, Enugu, Nigeria. Data on quality of worklife, work attitudes (job satisfaction, organizational commitment and job involvement), intention to leave hospital and socio-demographic characteristics of health workers were collected from 270 health workers using multi-stage sampling technique. Mean scores for employees' quality of worklife and work attitudes were calculated. Analysis of variance (ANOVA) was used to test for statistical differences in mean scores. Pearson correlation was used to test for association between employees' quality of work life, its dimensions and work attitudes. Regression was used to establish the relationship between employees' quality of worklife, work attitudes and their intention to leave the hospital. The level of significance was set at $p < 0.05$.

Key Findings The mean level of QWL was 5.23 (0.90). The mean level of QWL dimensions were 4.67 (1.47), 4.34 (1.17), 5.96 (0.79) and 5.53 (0.99) for work-family balance, work organization, work context and work relevance respectively. The mean levels of job satisfaction, job involvement and organizational commitment were 4.79 (1.98), 6.25 (1.08) and 3.18 (2.03) correspondingly. Quality of worklife and its dimensions positively correlated with job satisfaction, job involvement and organizational commitment ($\rho < 0.01$). Gender and cadre significantly predicted QWL ($\rho < 0.05$). The direct relationship between QWL and intention to leave the hospital was not significant ($\beta = -0.150$, $\rho > 0.05$). Employee QWL significantly predicted job satisfaction ($\beta = 0.506$, $\rho < 0.01$), job involvement ($\beta = 0.352$, $\rho < 0.01$) and organizational commitment ($\beta = 0.378$, $\rho < 0.01$). The effect of employees' QWL on retention was mediated through job satisfaction and organizational commitment. Job satisfaction ($\beta = -0.253$, $\rho < 0.01$) and organizational commitment ($\beta = -0.230$, $\rho < 0.01$) were inversely and significantly related to intention to leave the hospital.

Conclusions: Enhancing employees' QWL facilitates retention of health workers through improved job satisfaction and organizational commitment.

Ghana's National Health Insurance Scheme: The Role of Decentralized Administration in Contributing to Inequalities in Enrollment

Aim and Objectives The passage of the National Health Insurance Act in Ghana in 2003 and its subsequent implementation in 2005 was with the underlying goal of ensuring universal health for all Ghanaians. Eight years after implementation, current enrollment figures for the National Health Insurance Scheme (NHIS) stands at 34 percent, according to the chief executive of the NHIS governing body. The NHIS has also been declared as 'unfair and inefficient enrolling twice as many rich people as poor people (64 percent vs. 29 percent). These inequities in enrollment could be partly accounted for by the decentralized nature of administering the NHIS. This study explores how the decentralized administration of the NHIS has contributed to the inequalities in enrollment in the scheme.

Methods Used This study reviews publications on the implementation and evaluation of the NHIS since 2005. Articles included were those published in peer-review journals, reports published by government agencies and international organizations and articles published in print and online newspapers based in Ghana.

Key Findings Ghana's NHIS is administered through mutual health insurance schemes established throughout Ghana. There are currently 145 district mutual, private commercial or private mutual health insurance schemes in Ghana. The National Health Insurance Authority (NHIA), the central authority of the NHIS established regional health offices in each of the 10 administrative regions of Ghana to supervise and monitor the operations of mutual health insurance schemes and their accredited service providers.

The schemes are autonomous entities that are eligible to receive public resources from the central NHIA. However, there are no clear lines of accountability for how they use public resources. The creation of the regional offices also add an additional layer of bureaucracy and a disconnect between the goals of the NHIA and the schemes. This gap between the NHIA and the schemes has contributed to widespread misappropriation of funds, fraudulent activities such as collusion between scheme officials and providers to bill NHIS for fraudulent charges, lack of motivation and career progression for scheme staff and generally understaffed schemes.

Whereas some schemes and regions have successfully overcome issues to enroll participants, others struggle with enrolling locals into the NHIS. Findings from this study points to the need for greater accountability at the scheme level. Specifically, enforcement of enrollment targets through financial incentives.

Parallel session 3: Health and institutional development

PS 03/09

Institutions and Structural Quality of Care in the Ghanaian Health System

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Background / Objectives

Access to adequate healthcare is a requirement for the achievement of universal health coverage. Improvement in structural quality of care then is inevitable for universal health coverage. Structural quality in the provision of healthcare refers to the availability of physical and human resources. The undersupply of such resources in health facilities leads to understaffing, outpatient and inpatient overcrowding, and undersupply of tools needed for the provision of adequate healthcare. The provision of these resources is very much correlated with institutional factors specifically governance and agent incentives. The aim of this study is to find the effect of institutional factors on structural quality in public health facilities in the Ghanaian health system.

Methods / Design

Survey data on sixty two public health facilities across three regions in Ghana were used for the study. Principal component analysis was used to create three indices for structural quality: overcrowding index, personnel index, and equipment index. Three regressions were run for the quality indices on institutional factors.

Results / Findings

The results showed that regional hospitals were the most overcrowded and had the worst personnel shortage, but had the best performing equipment. Internal governance was found to be more important in reducing overcrowding than external governance. The opposite was the case for the equipment index. Personnel shortage was mild in facilities with opportunity for professional development.

Conclusions / Implications

The study concludes that improving one type of quality alone can worsen other types of quality. Good coordination of the facility administration with the workers as well as with the

government is necessary to improve quality. Overcrowding can be reduced by simply moving some workers to some departments during certain period of the day (e.g., the outpatient department).

PS 03/10**Complex interplay of institutional arrangement, international and local contextual factors; rise and fall of programmes and policies for maternal and new-born health in Ghana**

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Aim and objectives of the paper Stakeholders are involved in the complex process of policy making. Their action or inaction is greatly influenced by sets of factors, as they undertake this political as well technical venture. The aim is to understand maternal and new-born policies and programme formulation processes at national level; by exploring stakeholder's interactions and interdependence, influences of institutional arrangement and contextual factors.

Methods Thirty (30) stakeholders were interviewed. Additionally, data was collected through document reviews and participant observation and documentation of policy making processes at national level. Data were analysed quantitatively for themes, commonalities and contrasts; and validated using triangulation of research strategies, tools and data sources

Key findings: In the era of Millennium Development Goals (MDGs), maternal and new-born policies and programmes have gained extra political attention and sectorial priority with financial and technical resources from national and international sources. At National level, from 2002 to 2012, thirty (30) different programmes and policies have been identified. Seven categories of approaches of policy formulation were identified as varying stakeholders interacted and exchanged resources for ten years. Within the institutional arrangement of policy dialogue among stakeholders, the initial scope of the policy or programme issue/problem/agenda;

1. widens over time. Example, User fee exemptions policy.
2. narrows over time. Example, Health promotion.
3. is curtailed and never re-emerges over time. Example, System for rapid response to obstetric and gynaecological emergencies.
4. is curtailed and re-emerges over time. Example, Cancer screening and control.
5. is introduced midway 2002 to 2012 over time. Example, Maternal referral system.
6. diffuse out of a broad agenda. Example, Provision of obstetric care. (through- training more health professionals, increase in training institutions, or purchase of obstetric equipment)
7. floated around for a period before it became policy. Example, provision of free family planning.

Stakeholders interact, exchange resources as they dialogue on pertinent maternal issues at national level within subnational, national and international context. Issues discussed (or not) contribute in part to the approaches identified. Stakeholder's framing of the issues, financial commitment, implementation challenges, institutional arrangement and politics are some of the contributing variables of the identified approaches. The Millennium Development Goals era has offered Ghana a rare opportunity, with emerging array of policies and political attention for maternal and new-born care. For us in Africa and other developing countries, the momentum needs to be maintained and escalated to even higher heights.

PS 03/11**Interface between local health systems and vertical programs: Why opportunities are missed for strengthening local health systems in sub-Saharan Africa?**

Basile Keugoung, Ministry of Public Health; Richard Fotsing, Ministry of Public Health; Bart Criel, 2. Institute of Tropical Medicine, Antwerp

Aim. In recent years, there has been a significant increase of Global Health Initiatives and health financing for low income countries. Despite these investments, health systems in sub-Saharan Africa remain weak and are unable to deliver quality effective interventions for improving health outcomes. In sub-Saharan Africa, the Millennium Development Goals will not be met by almost all countries by 2015. Therefore, analyzing why this situation has happened could help to improve health outcomes in the post-2015 period.

Objectives. The objective of this study is to analyze why opportunities for strengthening local health systems are being missed by both vertical programs and health system managers.

Methods. Data were collected using semi-structured interviews of managers of district hospitals, district medical officers and managers of vertical programs at the regional and central levels of the health system in Cameroon.

Key findings. The factors why opportunities are missed are related to all levels of the health system. There are simple factors such as the lack of incentives for developing innovative strategies, the scarcity and the earmarking of resources allocated by programs to local health systems, the low maintenance of equipment, and the focus mainly on the specific health care delivery. Other factors are systemic and complex and impair the whole health care delivery system. Among these factors, the low capacity of local health system managers in the management of health districts, the poor quality of the planification, implementation, monitoring, evaluation and decision-making processes of both recipient health systems and vertical programs' managers, and the weak leadership of managers at the regional and the district levels. Most of the programs interventions consisted of health system support rather than health system strengthening. This support was even insufficient for achieving the vertical program specific objectives. At the regional and central levels, programs' managers did not recognize that there were missed opportunities.

Therefore, we call all health system and programs managers to include health system strengthening in their agenda, and to develop and implement strategies and interventions for achieving this goal. This will help to proactively overcome barriers that are currently limiting health system managers to seize opportunities for strengthening health systems in sub-Saharan Africa.

Parallel session 3: Economic evaluation

PS 03/12

Economic cost of community based management of acute malnutrition (cmam) in ghana: a case study of agona west municipality of Ghana

Abdul-Malik Abdul-Latif, School of Public health, University of Ghana; Justice Nonvignon, Department of Health Policy, Planning and Management, School of Public Health, University of Ghana ABSTRACT

Background: The community based management of acute malnutrition (CMAM) is a community-led public health intervention model that was introduced in Ghana in 2008 to manage cases of severe acute malnutrition (SAM) at the community level. The objective of the study was to estimate the economic cost of the CMAM programme in the Agona West municipality of Ghana. Specifically, it sought to estimate the unit cost of treating a SAM case using the CMAM protocol.

Methods: This study was a retrospective cross sectional study that employed a cost analysis design to estimate the economic cost of CMAM from the societal perspective. Socio-demographic characteristics and household cost data of caregivers were obtained using a semi-structured questionnaire. Institutional cost data was also obtained from document reviews and the use of semi-structured questionnaires with subsequent discussions with key personnel of the Food and Nutrition Technical Assistance (FANTA), UNICEF and the Ghana Health Service (GHS). One-way and multi-way sensitivity analysis was conducted to test how sensitive the cost estimates are to certain variations in some cost profiles.

Results: The average household income and household costs (economic) of CMAM were estimated as GH¢244.00 and GH¢3,582.00 respectively, with about 31% of households falling in the lowest wealth quintile. About 79% of this household cost was attributed to direct cost while the remaining 21% made up indirect cost. Institutional economic cost of CMAM was estimated as GH¢49,068.06 (96% recurrent and 4% capital), with refresher training constituting majority of the cost (36%). The constituents of the total economic cost of the CMAM programme, estimated as GH¢52,650.06 were institutional cost (93%) and household costs (7%). Therefore, the economic cost of treating one SAM case using the CMAM protocol was estimated as **GH¢1,316.25 (US\$700.13)**. Results on the intangible cost of CMAM indicated that about 75.9% of mothers strongly agreed that they and their children were stigmatised and suffered emotionally due to SAM. The overall cost estimates of CMAM were not significantly sensitive to certain variations in some key cost data.

Conclusion: Although the CMAM programme has proven to be an effective tool for the management of SAM, its associated costs are quite enormous when coverage levels are high yet small number of cases are detected and treated. Therefore, it is prudent to implement several cost saving strategies such as a reduction in the number of days spent on trainings in order to reduce these costs.

PS 03/13**Accessibilité économique des médicaments hypoglycémifiants, hypocholestérolémiants et antihypertenseurs en Côte d'Ivoire**

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But: Améliorer la prévention des maladies cardio-vasculaires qui progressent rapidement et l'OMS prévoit que, d'ici à 2030, elles seront, avec les autres maladies non transmissibles (cancers, affections respiratoires chroniques et diabète) une cause de décès plus courante que les maladies transmissibles, maternelles, périnatales et nutritionnelles. Aussi, à l'instar des mesures hygiéno-diététiques, l'accès aux médicaments antihypertenseurs, hypoglycémifiants et hypocholestérolémiants a-t-il été identifié comme prioritaire pour réduire le fardeau de morbidité et mortalité des maladies cardiovasculaires.

Objectif : Mesurer l'accessibilité des populations en Côte d'Ivoire à ces médicaments.

Méthodes: Les médicaments disponibles pendant l'année 2012 auprès des grossistes-répartiteurs privés et public et au premier trimestre 2013 dans des officines privées de pharmacie ont été identifiés par leur nom commercial puis classés par leur dénomination commune internationale (DCI). Le coût mensuel moyen du traitement en FCFA a été estimé à partir de la posologie journalière moyenne prescrite et du prix public du médicament. La variabilité des coûts a été examinée pour les DCI et à l'intérieur de chaque classe pharmacothérapeutique.

Résultats: Les antihypertenseurs, et les hypocholestérolémiants n'étaient disponibles que dans le secteur privé ; parmi les hypoglycémifiants, l'insuline, la glimépiride et la metformine étaient aussi disponibles dans le secteur public. Le coût du traitement variait de 1662 à 33421 avec une médiane de 8439 pour les antihypertenseurs, de 1197 à 16205 avec une médiane de 7656 pour les hypoglycémifiants, de 6112 à 32589 avec une médiane de 8309 pour les hypocholestérolémiants. La variabilité des coûts indique une réduction d'accessibilité aux innovations thérapeutiques. Nous montrons que l'urgence de la prévention des maladies cardio-vasculaires, y compris par le traitement des facteurs de risque majeurs que sont l'hypertension artérielle, l'hyperglycémie et l'hypercholestérolémie, commande une politique vigoureuse d'accès à ces médicaments.

PS 03/14**Analyse des coûts et financement des soins de santé primaires dans la zone goavienne en Haïti**

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BUT: La présente étude a pour but d'estimer le coût de production des soins de santé primaire au premier échelon, notamment pour les services destinés aux enfants âgés de moins de cinq ans et aux femmes en âge de reproduction (FE, PF), dans la zone goavienne (Haïti).

METHODE: Deux types d'enquêtes ont été réalisés: quantitatives et qualitatives. En plus des enquêtes, nous avons procédé à des observations dans les 11 établissements (institutions) sanitaires. L'estimation des coûts a pris en compte tous les apports même ceux faisant l'objet

d'un don car nous nous intéressons à la viabilité à long terme du fonctionnement des dispensaires (Creese & Parker, 1995). Les grilles proposées ont permis d'identifier les ressources (i) utilisées pour la production du service ou fonction (j) destiné à l'ensemble de la population cible.

RESULTATS: L'analyse comparative des données de production de services entre les structures de santé incluses dans la présente étude a permis de noter que les structures de santé qui pratiquent la gratuité totale arrivent à réaliser des économies d'échelle tant en ce qui concerne les soins curatifs que préventifs et promotionnels pour les femmes enceintes et les enfants âgés de moins de cinq ans. L'exemption du paiement des soins pratiqué par ces structures de santé tout en attirant les populations a également permis de rehausser le niveau d'utilisation services de prévention.

Le deuxième niveau d'analyse relatif aux sources de financement de la production des services de santé primaires a permis de mettre en lumière la forte dépendance du système de santé local goavien vis-à-vis du financement des ONG. Il apparait en effet que plus de la moitié des deux postes les plus importants de production des services, notamment le salaire du personnel et les médicaments et consommables sont financés pour plus de la moitié par les ONG. Le MSPP ne finance que 14% des coûts de personnel et 32% des coûts liés aux médicaments.

L'augmentation du support du gouvernement haïtien dans le financement des soins de santé primaires et même pour la mise en œuvre d'une politique de gratuité de ces soins pour les femmes enceintes et les enfants âgés de moins de cinq ans reste réalisable. Les simulations proposées dans le cadre de cette étude pour la mise en œuvre d'une exemption du paiement des soins au bénéfice des femmes enceintes et des enfants âgés de moins cinq ans ont effet permis de noter qu'il suffirait au gouvernement haïtien soit d'augmenter le budget de la santé d'un point (de 4% à 5%), soit de mettre à disposition du MSPP 1,87% de l'aide extérieure.

Parallel session 4: Universal Health Coverage and vulnerable populations

PS 04/1

‘Pursuing universal health coverage with difficulties?’: factors influencing the decision to disenroll from health insurance among urban slum dwellers in Ghana.

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Background: Since the inception of Ghana’s National Health Insurance Scheme (NHIS), estimates suggest that coverage rate represent 66% of the population. In real terms however, active membership is extrapolated to be 33%. The discrepancy between active and inactive membership is attributed to the presence of high disenrollment rate, especially among individuals outside the formal sector, that tend to defeat efforts at reaching universal access to health services. However, factors influencing the decision to opt out of health insurance cover by the informal sector is poorly explored since the scheme’s introduction in 2003. Therefore, this study sought to examine the reasons underlying disenrollment of health insurance among urban slum dwellers in Accra, Ghana.

Methods: Systematic and cluster sampling strategies were employed to select 600 participants who dropped out of the National Health Insurance Scheme six months prior to the study. Descriptive statistics and multinomial logistic regression model were computed to account for sample characteristics and reasons associated with the decision to disenroll.

Results: A larger number of the respondents disenrolled from the scheme in 2011 and 2012 (28.3% and 34.8% respectively). 73% of the respondents indicated their intention to renew membership in the future. Result of the multinomial regression model show that low-income earners and all respondents within the different sub-groups (age, sex, education, occupation type, marital status, home ownership and place of registration) greatly reported high cost of premium and poor service quality as reasons for disenrollment. Compared to the aged and literate groups, the decision to disenroll was highly linked to low occurrence of illness episodes by the young age groups (Odds ratio [OR] = 8.26) and respondents without formal education (OR = 6.23). All respondents within the sub-groups of age, education and income indicated nominal benefits of the scheme as a reason for disenrollment.

Conclusion: Interventions targeted at removing all bottlenecks to health insurance enrollment is salient to maximizing the size of the insurance pool. In particular, strengthening service quality, and extending the premium exemption to cover low-income families within slum communities is a valuable strategy towards increasing sustainability of the scheme and achieving universal health coverage.

Keywords: health insurance, disenrollment, scheme, Ghana

Aim Sustainable Development Goals (SDGs) are announced to replace the MDGs after 2015. Already, WHO, the World Bank and a growing number of other international agencies and governments have given their support to one SDG for health: Universal Health Coverage (UHC). In parallel, a New Deal for Engagement in Fragile States (Busan Declaration, December 2011) is being brokered. This paper aims to link both developments and provides more insights into the pathways to UHC in fragile states.

Objectives The paper answers the following research questions:

- Which instruments, measures or programs (demand and supply) are applied to improve UHC in fragile states?
- Can we identify which instruments, measures or programs contributed the most to increasing coverage during the last 10 years?
- Is there any evidence that moving towards UHC also influences state building and resilience of societies? How can this influence be described?
- How do policymakers make choices regarding the use of instruments? What makes them prioritize health and UHC in the first place?
- What are the criteria, milestones or contextual changes which trigger the introduction or enable the use of a new instrument?
- Can a typical description of a stepwise approach to UHC be made? Which instruments are to be used at what point in time?
- How should International Non-Governmental Organisations position themselves in the UHC discussion in fragile states?

Methods A review of international literature was conducted, followed by case studies in Burundi, Rwanda, Zimbabwe and Afghanistan as in part fragile states, in part states in transition. The cases involve interviews with key informants (policy-makers, health and finance experts, practitioners and community stakeholders) and used semi-structured interview methods.

Key Findings The study clearly shows the importance of heterogeneity in approaches. While the gradual development towards an effectively organized, centrally governed system with large-scale pooled funding has had demonstrated success in some middle-income countries in advancing towards UHC, immediate progress in fragile states may require different measures. Externally paid 'free' health care and contracting-out to international NGO's may result in some rapid short term gains, but the establishment of a functional supply side is often a pressing concern in fragile states. Contracting-in and the inclusion of local non-profit private providers in a results-based manner are viable options. We discuss these options and provide suggestions for how to strengthen the causal evidence base in this area.

PS 04/3**La couverture sanitaire universelle dans un contexte dominé par le secteur informel et rural: la “souscription-obligatoire-indirecte” pourrait-elle être une solution?**

Pascal Ndiaye, Justin Tine, Farba Lamine Sall

L'accès aux soins de santé au Sénégal a subi de constantes mutations au cours des trente dernières années. La souscription, introduite au début des années 70, était alors totalement gratuite car fortement soutenue par de nouveaux enjeux à l'échelle mondiale et la nouvelle tendance de bailleurs à investir dans des secteurs non productifs. Le processus de décentralisation enclenché à la même période cherchait à transférer la gestion de la santé d'un niveau étatique à un niveau local. Ces événements marquants ont eu lieu alors que le monde rural (90% de la population) faisait face à une période de famine. L'état réintroduisit des mesures d'exonération pour les soins de santé en ciblant plus particulièrement certains groupes sociaux ou certaines maladies. Des mécanismes formels organisés par l'État couvrent les employés du secteur public à travers la caisse de sécurité sociale et l'Institut de pension de retraite. Le secteur privé a organisé des systèmes de couverture sanitaire dénommés «Institutions de Prévoyance Maladie (IPM) ». L'Assurance Sanitaire Communautaire (Community Health Insurance - CHI) avait comme ambition primaire d'assurer une couverture médicale à cette grande majorité des exclus. Malgré toutes ces initiatives et décrets politiques, la proportion de la population exclue de toute forme de couverture reste très élevée (80% de la population sénégalaise, appartenant principalement au secteur informel ou au monde rural).

Actuellement, comme dans de nombreux pays africains, le gouvernement sénégalais est en train d'étudier les voies et moyens pour une couverture sanitaire universelle. Cette politique requiert un mécanisme inclusif, et un partage des risques et la collecte des contributions.

L'État a-t-il la capacité de réglementer un mécanisme si complexe de protection sanitaire? De prélever des taxes dans le secteur informel et de rendre les contributions obligatoires en zone rurale? L'objectif de ce document est d'explorer les démarches et stratégies usuelles pour atteindre le secteur informel et rural? Il expose et analyse une stratégie de «Souscription-Obligatoire-Indirecte». Le principe est de collecter les contributions des personnes aux revenus incertains à partir des souscriptions obligatoires ou autres activités qui nécessitent une cotisation (assurance véhicule, bons de nourriture, licence de commerce,...).

Nous avons basé notre analyse sur un cadre conceptuel en utilisant également l'approche «en entonnoir» dont l'objectif est d'appliquer la «Souscription-Obligatoire-Indirecte» à tous les groupes structurés du secteur informel et qui se détachent de la masse et donc qui peuvent être plus facilement atteints. Nous avons utilisé quatre acteurs ou secteurs quantifiables et identifiables tels que le transport, l'agriculture [chaîne de l'oignon], le commerce et la pêche) pour calculer le montant potentiel qui peut être collecté, sur la base de la population de chaque secteur. Nos résultats révèlent que ce système de collecte peut augmenter sensiblement la masse de fonds. Nous fournissons la preuve que 60% de cette population cible pourrait être enrôlée dans ce système de contribution. Cela implique une collaboration étroite avec les institutions pour une communication plus étendue.

PS 04/4**Financing universal coverage: Income potential and sustainability of informal sector activities in Kenya**

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Background: The challenge for universal coverage in countries where the majority of the population works in the informal sector is to find an appropriate mix of financing mechanism. While the formal sector has considerable financial risk protection from various sources, the informal sector mainly relies on inadequate tax funding and out-of-pocket payments to access health services, and is therefore more exposed to catastrophic and impoverishing health costs. Designing an effective health insurance mechanism targeting the informal sector needs to first understand the sector in terms of its various economic activities, their sustainability and vulnerability, and the demographic characteristics of people engaged in informal economic activities.

Objectives: The study aims at informing national and international policy debates on alternative mechanisms to provide financial risk protection for the informal sector.

Methods: Data collection involved document reviews, mapping informal sector activities, focus group discussions, in-depth interviews at community and policy levels, informal sector survey, and case studies. Constant comparison analysis was used to analyze qualitative data while quantitative data were analysed using Stata 11. An enterprise was regarded as sustainable when it had lasted for at least five years at the time of the study.

Results: More males (66%) than females (34%) were engaged in the informal sector (urban=72%, rural=50%); 69% were aged between 25 and 50 years. Most have primary or secondary education (rural=84%, urban=82%).

Food vending (23%) and cloth and beauty (19%) were the most dominant industries, especially among women in the urban area. Urban informal economic activities had more reliable income: 61% of workers either earned weekly (24%) or monthly (37%) while 43% earned monthly in rural site. Urban enterprises were less sustainable: only 43% had lasted at least five years compared to 58% in rural. Important predictors of sustainable enterprises were: age- OR=3.6; p=0.01 for urban; number of employees- OR=0.4, p=0.02 urban and OR=1.8, p=0.5 rural; own account worker- OR=0.4, p=0.03 urban and OR=1.6, p=0.4 rural; registration status- OR=1.1; p=0.06 urban and OR=5.6, p=0.02 rural.

Conclusion: High numbers of food-vendors in the urban area signal widespread poverty in the sector generally, and among women in particular. Informal sector is highly diversified, youthful and averagely predictable incomes. Long-term predictability and sustainability of income in the informal sector could be important in sustaining universal coverage. The urban informal economy is less sustainable and therefore more vulnerable than the rural informal economy which is mainly agricultural.

Parallel session 4: Health financing assessments 1

PS 04/5

THE BURDEN OF HEALTH FINANCING IN POST CONFLICT N. UGANDA

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At the height of the violent conflict in Northern Uganda it has been estimated that 1.8 million people were internally displaced in camps and protected villages. This constituted nearly the whole population. This number of internally displaced persons (IDPs) was estimated to have risen from about 200,000 in 1996 and to have reduced to about 30,000 by 2012. During the period of displacement, user fees were abolished from public health facilities which will not at the time have directly affected IDPs. Other policies, some specific to the North, will also have affected access and health expenditure burden over the period.

Aim To understand the combined impacts of health financing policies and post conflict resettlement on the pattern of the health financing burden.

Objectives

The objectives are to compare household health expenditures:

- (1) in the conflict affected and non-conflict affected areas;
- (2) before and after the user fee abolition;
- (3) as other policies were introduced in the conflict affected areas;
- (4) as the conflict affected population returned to their homes.

Methods The analytic data set is obtained from the Uganda National Household Survey (UNHS) in 1992-93, 1999-00, 2002-03, 2005-06 and 2009-10. The difference-in-differences method is employed to identify the impact of changes in health financing by comparing the conflict affected and non-conflict affected regions before and after policy changes, and by comparing those who were and were not internally displaced at each date and place. The quantile regressions are also used to estimate the effect of policy changes in different income quantiles in the conflicted regions and the non-conflicted regions separately.

Expected key findings Analysis of findings will be completed at the end of 2013. We expect an increase in the health expenditure burden associated with return home from camps and protected villages. It is also expected that the benefits from abolition of user fees are greater in lower income quantiles in the conflict affected districts than in the non-conflict affected districts.

PS 04/6**Stratégies de financement de la couverture maladie universelle : cas des financements innovants***ADOMBI Ulrich-Anthelme*¹**N'GOU Delphin, Etudiants en Economie de la santé au Centre Africain de Gestion (CESAG)*

De la 58ème assemblée mondiale de la santé encourageant le développement des systèmes de financement au *rapport sur la santé dans le monde* en 2010 ayant pour thème « financement des systèmes de santé, le chemin vers une couverture universelle », l'atteinte de la couverture universelle était claire tous les états membres de l'Organisation Mondiale de la Santé. Cette couverture est aujourd'hui l'aspiration la plus largement partagée pour but d'offrir une prestation de services de santé et une protection contre le risque financier à toute la population.

L'objet de cet article est de proposer une orientation vers les financements innovants comme voie de financement pérenne pour la mise en œuvre de la couverture maladie universelle dans les pays africains. Il s'agit d'identifier de nouvelles sources de financement de la santé en fonction de l'orientation économique du pays et de montrer sa fiabilité.

Une revue systématique de la littérature a été faite ; elle s'est axée sur les articles et documents d'institutions relatifs à la couverture universelle et à son financement dans plusieurs pays (les pays à revenu faible et intermédiaire).

Les résultats montrent que les approches innovantes utilisées au niveau locale (Ghana, Chili... utilisation de la TVA et taxe sur les profits pour le Gabon et le Pakistan) ont montré leur efficacité mais restent limitées par leur trop forte liaison à l'activité économique ; des initiatives propres à chaque pays, en fonction de ses spécificités doivent être explorées: l'exemple des billets d'avions au Sénégal (avec 100FCFA/billet, on peut avoir au minimum plus de 42 millions FCFA)

PS 04/7**Benefit Incidence Analysis: Who is benefiting the most from spending on health care services in Uganda?***Christabell Abewe, Paul Kizza, Brendan Kwesiga, Charlotte M Zikusooka*

Aim and objective: A health system with universal access system is defined as system where access to health care is according to need rather than ability to pay. While many health systems desire to attain universal access, there is not enough evidence showing progress towards universal access. This report assesses the distribution of benefits of health service utilisation according to socio-economic status and according to need in Uganda's health system. This benefit incidence analysis includes both the private and public sector health service providers.

Methods: Data from the 2005/6 and 2008/9 Uganda household expenditure surveys were used for analysis. The data contained health care utilisation by individuals within households for the

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different levels of care that include Hospitals and Health Centres that are comprised of Health Centre IV, III and HC II. Individuals within households were grouped into socio-economic quintiles based on reported annual expenditures. In order to assess the distribution of health service utilisation and benefits, we considered public hospitals and private facilities. We obtained the utilisation rates of these services and multiplied them by the unit cost of providing them at each level to obtain the monetary benefits. The distribution of these benefits was assessed across the five quintiles (poorest to richest) by comparing the proportion of benefits enjoyed by each quintile. Such distribution is pro-poor (pro-rich) when the poor (rich) are benefiting more than the non-poor (poor).

Key Findings: The results show that health care benefits from hospitals in both in public and non-government (private not for profit facilities) are pro-rich implying that they benefit mainly the rich socio-economic groups. Similarly, private clinics were found to be pro-rich. On the other hand, lower health units particularly in the public sector were found to benefit mainly the poor households. Services of community health workers, drug shops/pharmacies and use of traditional healers were mainly used by the poor. Comparison of benefits and need shows that the poor got smaller share of benefits compared to their need while the rich had a much higher share of benefits compared to their need. The pattern of results is similar across both 2005/6 and 2009/10 although the distribution of benefits is shown to be more pro-rich in 2009/10.

Conclusions: BIA results show that health care service utilisation in Uganda is inequitable. Clearly benefits are not proportionately distributed according to need. These results indicate a need for improved resource allocation, as well as a need for health financing reforms that would enhance increased utilisation of public and private health facilities by the low-income groups of the population.

PS 04/8

L'allocation des ressources financières aux interventions dites à gain rapide ou à haut impact : cas du Burkina Faso

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Afin de contribuer à l'atteinte des Objectifs du millénaire pour le développement (OMD) liés à la santé, le Ministère de la santé du Burkina Faso a défini et adopté une liste d'interventions essentielles de santé appelées interventions à gain rapide (IGR) ou à haut impact. La mise en œuvre de ces interventions a permis d'engranger des résultats notables sur les principales causes de morbidité et de mortalité spécifiques. Au regard de l'importance des résultats engrangés, une attention particulière est portée sur l'allocation des ressources financières et ses critères. Aussi notre étude s'est intéressée aux critères d'allocation des ressources financières et l'évolution de ces allocations.

Méthode Il s'agit d'une étude de cas permettant de documenter les pratiques d'allocation des ressources financières. En fonction des indicateurs traceurs des IGR, les régions ont été classées selon leur performance (bonne et faible). Cela a permis de sélectionner deux régions sanitaires comme sites d'enquêtes. Sur la même base, à l'intérieur de chaque région, deux districts sanitaires ont été retenus au sein desquels six centres de santé primaire ont été sélectionnés. Des entretiens individuels semi-structurés et des focus group

ont été réalisés à l'aide de guides d'entretien élaborés et adressés à des acteurs intervenants dans les structures identifiées. En plus de ces acteurs, des informateurs clé au niveau central ont été interviewés. Des données secondaires ont été collectées pour analyser l'évolution de l'allocation financière aux IGR de 2009 à 2011. Cette analyse s'est faite sur l'échantillon des districts sanitaires sélectionnés.

Résultats Le processus d'allocation des ressources financières aux IGR est intégré au processus de planification des activités générales des services de santé. Aucun critère d'allocation des ressources financières aux IGR n'a été identifié sur l'ensemble des structures enquêtées. Par contre, la proportion des IGR dans la planification des activités constitue le principal critère actuel de validation des plans d'actions. L'allocation des ressources intra IGR se fait sur la base des directives de planification des activités provenant du niveau central. En moyenne sur la période de 2009 à 2011, la part des IGR représente 22% des ressources financières globales allouées. Cette allocation a une tendance à la hausse. Le taux moyen d'absorption des montants alloués sur la période est de 96%. L'analyse de l'allocation intra IGR montre que les allocations sont concentrées sur la vaccination et la prise en charge des urgences obstétricales et néonatales.

Conclusion Il est important de définir des critères d'allocation des ressources pour fournir aux décideurs des éléments de réponses pour une meilleure allocation des ressources financières en faveur des IGR dont l'intérêt a été prouvé.

Parallel session 4: Maternal and child health care

PS 04/9

Towards achieving MDGs 4 and 5 in Zimbabwe: how satisfied are the clients with the maternal and child health services?

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Background: Timely management of maternal and child illnesses and health conditions is inevitable to improve the maternal and child health status and related millennium developed goals (MDG). In Zimbabwe, the maternal deaths had increased from 450 to 960 per 100,000 during 1990-2010, unlike the rest of sub-Saharan Africa. As per the existing evidence, the utilization of MCH services is limited leading to poor MCH status, and poor client satisfaction is one of its major attributes. In this context, this study brings in evidence base on client satisfaction of MCH services and suggests improvements to the utilization in this regard.

Objective: The study assessed the level of client satisfaction on key maternal and child healthcare services. It also examined the determinants of client satisfaction on such services.

Methods: It was a cross-sectional country-wide health facility (n=309) survey, selected through a multi-stage stratified sampling. Exit interviews were conducted among women (n=1864) accessing ante natal care and care givers of children (n=1865) accessing care from the health facilities. We designed an instrument consisting of accessibility and convenience, cleanliness, provider's attitude and waiting time to assess the client satisfaction. Satisfaction scores were calculated by weighting various aspects of satisfaction.

Results: Overall satisfaction was the highest for clients accessing care from private health facilities. The most common dissatisfaction for the majority was on accessibility and convenience to the health centers (24.5%), followed by cleanliness (19%) and waiting time (14%). Pregnant women (p<0.05) and child health clients from the highest wealth quintile were most likely to be satisfied with the accessibility and convenience of the services. Clients living away from the health facilities had lower satisfaction scores (p<0.001) for accessibility/convenience and waiting time. Clients with higher educational profiles were reported to be more satisfied with the accessibility and convenience than lower educational levels.

Conclusions: For those who accessed care, the client satisfaction appeared to be fair on maternal and child health services. However, distance factor plays a major role in building client satisfaction, and clients with lower socio-economic status face this barrier the most. This situation necessitates proper availability of MCH services at convenient locations and incorporating transportation arrangements as part of health care system strengthening initiatives.

PS 04/10**Effects of a sexual and reproductive health intervention on adolescent service usage in northern Ghana: results of a community-randomised trial***Gifty Apiung Aninanya^{*}, Cornelius Debpuur, Abraham Hodgson, Natasha Howard*

Encouraging adolescent sexual and reproductive health (ASRH) service usage is a public health challenge in most African countries. Many governments have pursued strategies to address the specific sexual and reproductive health needs of adolescents since the 1994 International Conference on Population and Development placed ASRH on the global policy agenda. Adolescent morbidity and mortality are high in many African countries and yet they rarely use SRH services.

The primary objective was to assess if a community ASRH intervention was associated with increased adolescent usage of services for pregnancy and STI diagnosis and treatment. The secondary objective was to determine the association between intervention exposure and adolescents' reported satisfaction with health services.

Twenty-six communities were randomly allocated to the ASRH intervention consisting of a school-based curriculum, out-of-school youth activities, and health workers' outreaches, (n=13), or comparison consisting of youth-friendly health service provision only (n=13). The main outcome measure was usage of services for pregnancy or sexually-transmitted infections (STIs) and HIV in the past year. Service usage data was collected at baseline and three years after intervention start from 2,664 adolescents aged 15-17 years in the trial cohort. Data was entered, cleaned and checked for inconsistencies and missing values using Microsoft FoxPro 6.0 and analyzed using Stata® 10.0. Participant responses were used to calculate proportions reporting health service usage in intervention and comparison communities. Adjusted odds ratios of adolescent service usage by intervention exposure were calculated using multivariate logistic regression. Covariates were assessed for association with exposure and outcome variables and maintained in regression models if significant at the $p \leq 0.05$ level.

SRH service usage increased among intervention adolescents for three of the four SRH services assessed, most noticeably STI services. Reported usage of STI services increased from 4.7% to 16.6% among adolescents in intervention communities, versus 8.0% to 7.8% among comparison adolescents. Adolescent usage of CT services increased from 3.7% to 13% versus 7.8% to 11.5% among intervention and comparison adolescents respectively. Adolescent usage of antenatal services also increased from a lower baseline frequency (i.e. from 2.8% to 12.4% versus 6.6% to 8.3% among intervention and comparison adolescents respectively). Adolescent usage of delivery services increased from 3.1% to 15.3% versus 7.4% to 8.8% among intervention and comparison adolescents respectively.

PS 04/11**Cause-specific neonatal mortality analysis in Ghana: A case study of eight hospitals in northern region**

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Aim and objectives Over a million African babies are estimated to die in the first four weeks of life. The African region has the highest rates of neonatal mortality in the world, and has shown the slowest progress so far in reducing neonatal deaths. This picture is not different from that of Ghana. In Ghana, neonatal deaths account for about 40 percent of under-five mortality. In northern Ghana, 13% of neonatal deaths occur in hospitals. Addressing neonatal deaths is a key to Ghana's efforts at achieving Millennium Development Goals four to reducing child mortality. There abound hospital-based data on neonatal mortality in northern Ghana, which has not been analyzed. To help reduce the high number of babies who die before reaching 28 days of life in Ghana, this study analyzed hospital-based data on neonatal deaths in eight hospitals in northern region of Ghana to understand when and why newborns die to identify areas of prevention and intervention.

Methods Eight hospitals were selected out of 25 hospitals in the northern region. The selections of these hospitals were based on zones, rural and urban factors. Data were analyzed using SPSS version 16.0. The analysis was based on 877 aggregate neonatal deaths from January, 2010 to January, 2013.

Findings Of the 877 neonatal deaths from the data analyzed for the period, prematurity constituted 264 (30%), birth asphyxia 246 (28%), sepsis 195(22%), neonatal jaundice 34 (4%), Respiratory Tract Infection 6 (1%) and others 132 (15%). Majority 707 (80%) of the neonatal deaths occurred in the first week. For the deaths which occurred within the first week, 405 (46%) deaths occurred within the first two days and 302 (34%) within 3-7 days of life. The minority 170 (19%) occurred within 8-28days. Further analysis of the neonatal deaths showed that 82 (9%) were referral cases from either home or other health facilities. Sixty two (7%) neonates died in less than 24hours on arrival. Two neonates either died at the OPD or were brought in dead.

Conclusions Leading single causes of death were prematurity, asphyxia and sepsis. To improve child survival, policies need to be directed at making obstetric and newborn care timely available. Regular training in resuscitation skills, maternal and newborn care support, early identification and management of emergencies, and adherence to postnatal care protocol would improve child survival.

PS 04/12**Determinants of comprehensive maternal health care seeking and of institutional delivery care and postpartum care 'dropouts' in three regions of Tanzania**

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Background: While there has been substantial progress in increasing antenatal care (ANC) coverage in developing countries, there is typically a drop in coverage of skilled care at delivery and an even greater drop in health care coverage for the postnatal care (PNC). Many studies have examined the determinants of demand for Maternal Health Care (MHC) services in developing countries, but there is currently little evidence on the characteristics of those who receive comprehensive MHC and those who 'drop-out' after ANC and fail to seek skilled delivery and/or PNC.

Objective: To examine the determinants of women receiving comprehensive MHC and of those who drop-out of institutional delivery care and PNC.

Methods: A total 2,866 women who gave birth in last 12 months were interviewed in three regions of Tanzania, as part of an evaluation of a "pay-for-performance pilot" study. The study collected women and household demographic and socioeconomic data, also data related to MHC use. Three logistic models were developed to examine the determinants of women receiving "comprehensive MHC" defined as women seeking ANC (at least once), institutional delivery and PNC (within two months after birth); "institutional delivery care dropout" defined as women seeking ANC but not institutional delivery care; and, "postpartum care dropout" defined as women seeking ANC but not postpartum care after delivery.

Results: The coverage for ANC, institutional delivery care and PNC were 98%, 86% and 26% respectively. Only 21% reported seeking comprehensive MHC. The percentages of women 'dropping out' of institutional delivery and PNC were 14% and 73% respectively. With minimal variations, the most significant determinants of both MHC use and dropouts were: maternal education, wealth status, occupation, parity, age and number of ANC visits. Women who were older, wealthier and had attended school were significantly more likely to have sought comprehensive MHC, whilst women who are farmers with higher parity were less likely to do so. Women who were older and had attended school were also significantly less likely to drop-out of both institutional delivery care and PNC. While, women with higher parity, wealthier and those who had at least four ANC visits were significantly less likely to drop-out of institutional delivery care.

Conclusion: Given the high ANC coverage, comprehensive MHC coverage was low due to high delivery and PNC dropout rates. Promoting women's education, encouraging at least four ANC visits and addressing economic constraints would contribute to increase coverage of comprehensive MHC in developing countries.

Parallel session 4: Evaluating PHC performance

PS 04/13

Investigating the sources of income of health workers: evidence from Sierra Leone

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Aims and Objectives: Human resources represent an essential component for the well functioning of health systems and are recognized to be a key element for the achievement of Universal Health Care. In recent years, there has been an increased attention to the determinants of health workers (HWs) motivation, and in particular the role of financial incentives. Some countries have embarked on reforms to increase salary levels and revise incentive packages. Schemes such as rural area allowances and performance-based financing, which often include individual bonuses for HWs, are now implemented in numerous sub-Saharan countries. At the same time, other remunerations from external sources, such as salary supplementations and per diems from donors and NGOs, are thought to account for an important part of HWs income, although little is known beyond anecdotal evidence. Finally, other income-generating activities (such as, private practice, informal fees, and non-health related labour activities) are widespread. In this context, there are growing concerns that such “complex remuneration” creates a multifaceted set of incentives whose effects on HWs’ performance is unclear. As the attention to devising more effective incentive packages increases, it is critical to understand better the full set of incentives that HWs face in their daily life.

Methods: Taking the case of Sierra Leone, where recent reforms have re-shaped the financial incentives of HWs, this research seeks to fill this gap. It applies a combination of methods to explore the remuneration structure of public sector, frontline health workers. Cross-sectional survey data are coupled with data collected through innovative methodologies, such as indirect questioning (using randomized response techniques) and a longitudinal survey.

Key Results: While this work is still in progress, initial results focusing on cadres of HWs working in primary health facilities, and in particular Community Health Officers (CHOs) and Maternal and Child Health (MCH) Aides, indicate that salary often accounts for less than 60% of the total monthly income. However, in the cross-sectional survey, amounts for sources that are sensitive or illegal remain underestimated and it is difficult to collect reliable estimates of income that is not paid regularly every month. This work shows that the use of different methods can allow researchers to overcome the potential issues of each of the individual methodologies by limiting reticence and improving accuracy for more sensitive questions (indirect questioning), capturing the variability of HWs income over time and avoiding recall bias (longitudinal survey).

PS 04/14**What affects patient outcomes? A cross-country analysis of facility ART performance in sub-Saharan Africa**

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Aim As of 2011, there were an estimated 34 million people living with HIV worldwide. In low- and middle-income countries, where the burden of HIV is highest, there has been a protracted delay in getting medications to those who need it, with current estimates suggesting that only about half of those infected with the virus are on antiretroviral therapy (ART). This still represents a tremendous increase from a decade ago, largely due to increased monetary and political commitment.

Objectives There continues to be much debate on how best to deliver ART care. In this study we seek to answer this question from the perspective of the facility, examining facility-level determinants of patient outcome (retention and response to therapy) for HIV infected patients on ART.

Methods We examined a nationally representative sample of 45-50 ART facilities in each of three countries in sub-Saharan Africa: Kenya, Uganda and Zambia. Facility-level information was collected through an extensive facility survey that included information on finances, management, medical consumables, equipment, capacity, services, drugs, and outputs. Patient-level information was collected from a random sample of ART patient charts (approximately 250 charts per facility). All adult patients (defined as 15 or 18 and older depending on the country) who had been on ART between 6 and 60 months at the time of data collection, regardless of outcome, were eligible for inclusion. Descriptive statistics looking at patient-level trends at ART initiation over time, as well as logistic regression and survival analyses to assess for facility-level effects on outcome, were performed.

Key Findings Our initial findings suggest that patient outcomes are largely driven by patient-level characteristics at the time of ART initiation. Initial CD4 count (>350 vs. <200), body mass index (BMI) (>18.5 vs. <16.5) and WHO clinical staging (stage I vs. III/ IV) were all predictive of 12- and 24-month retention. Women and older patients were also more likely to have been retained in care, but they were noted to have higher CD4 counts and improved WHO clinical staging at initiation. Conversely, we found no consistent 12- or 24-month retention trend with regard to facility-level ART program characteristics such as facility type (hospital v. health clinic), location (urban v. rural), management (private v. public), donor/funder, years facility has been in operation, leadership (physician v. nurse), or existence of outreach programs. Further analysis will explore interactions of these characteristics, and other functional forms. If these preliminary findings are verified, they would highlight the critical need to expand ART programs to initiate patients early in the disease process, and suggest that ART care could potentially be carried out safely and effectively at smaller facilities with less overhead cost and less specialized personnel. This information will be critically important as scale-up of ART continues in sub-Saharan Africa in the setting of limited highly trained health care personnel and increased fiscal constraints.

Use of the Contingent Valuation Method in sub-Saharan Africa: A Review and Classification of Healthcare Studies

Anne Kangethe, At the time this study was conducted Dr Kangethe was a PhD student at the University of Georgia; Duska Franic, The University of Georgia College of Pharmacy

Objective: CVM has been used predominantly in environmental and transport economics and more recently in healthcare, firstly, in Western countries and now increasingly, in developing countries. The objective of this study is firstly, to review general characteristics of CVM healthcare studies including publication trends and conditions/programs; and secondly, to review, classify and provide a critical appraisal of CVM healthcare studies conducted in sub-Saharan Africa.

Method: Empirical CVM African healthcare studies, willingness to pay (WTP) and willingness to accept (WTA), were identified using a comprehensive literature search in EconoLit, Web of Science, Medline, PubMed and Google Scholar, including the grey literature from 1984 to 2012. Studies were initially classified by evaluating trends over time (i.e. journal type retrieved, funding source, content area and intervention type). Secondary assessment of the studies was based on the conceptual framework for evaluation of contingent valuation of healthcare programs (5 Items) (O'Brien and Gafni 1996).

Results: Sixty-six CVM studies were evaluated with over 86% published after 2000 Majority of papers focused on communicable diseases (67%), followed by community health insurance (23%) studies. All studies used the WTP method with one using WTP and WTA. Majority of studies were published in non-African journals (89%) and funded by non-profit international organizations (77%). Seventeen percent of studies were designed to compare different WTP elicitation methods. Predominant interventions evaluated were access to healthcare (36%), insecticide treated bed nets (26%) and pharmaceuticals (24%). Construct validation of CVM methods (e.g., association between income and WTP) was performed in 74% of the studies. Over 90% of studies included the general population, ex-ante-insurance based approach, and private goods market, with WTP elicited using face-to-face interviews. Elicitation techniques were dominated by bidding game (47%), followed by dichotomous choice (41%), open-ended (18%), structured haggling (6%), payment card (5%), and stochastic payment card (3%).

Key Findings: Healthcare CVM studies in sub-Saharan Africa are limited but increasing over time. Appraisal of these studies was complicated by lack of transparency observed in reporting of the methods. The studies focused almost solely on communicable diseases such as malaria and access to healthcare. The predominance of the bidding game elicitation technique in evaluated studies may be a reflection of the actual African market conditions. There is continuing debate as to which elicitation method should be used in the African context. CVM studies may start to encompass the government as opposed to private markets as Africa moves towards universal healthcare coverage.

Parallel session 5: MDGs and health financing

PS 05/01

Millennium development goals on health and Abuja declaration: performance assessment of sub-Saharan African countries

Jacob Navignon, Department of Economics, University of Ibadan

Sub-Saharan African (SSA) countries remain the worst performers in terms of population health status. The health related MDGs and the Abuja declaration were two major policies adopted to ameliorate the health situation on the continent and to encourage universal health coverage (UHC). The Abuja declaration requires African governments to commit a minimum of 15% of total government expenditure to the health sector. While these policies may be instrumental to improving health systems in the region, governments commitment have been mixed. The objectives of the current study were to assess the performance of SSA countries in achieving the targets of these policies and to examine the prospects of achieving UHC across these countries.

Methods The study employed country specific data from the World Bank World Development Indicators between 1990 and 2011 for 48 countries. Trend and pattern analysis were used to show the performance of countries in achieving these targets. Graphs and cross tabulations were also used in the analysis. Health expenditure as percent of total government expenditure was computed for each country.

Results The results showed that, in terms of maternal mortality, only Equatorial Guinea had achieved the MDG target of a two-thirds reduction between 1990 and 2015 as at the year 2010 with about 25% deviation beyond the target. Similarly, only Liberia had achieved the MDG target on under five mortality as at the year 2011. No country in SSA had achieved the MDG target on infant mortality as at the year 2011. The results also showed that in 2011, exactly 10 years after the Abuja declaration, only six (6) countries had attained the target of committing 15% of government expenditure to the health sector. These countries are Rwanda (23.8%), Liberia (18.9%), Malawi (18.5%), Madagascar (15.3%), Togo (15.4%) and Zambia (16.0%). A trend analysis indicates inconsistent performance across countries in achieving the target of the Abuja declaration.

Conclusion The findings suggest that improving health status in SSA requires more action as most countries are still far from achieving their targets. The commitment of governments is still critical in achieving improved population health status through universal health coverage. Further, while governments commitment of resources to the health sector is important, there is need to ensure that these resources are used efficiently. There is therefore the need for post MDG health policies to consider and encourage the role of governments in improving the health sector as a whole.

PS 05/02**Mapping the patchwork of health financing schemes in 12 African countries (session or individual presentation)**

Allison Gamble Kelley, consultant, Institute of Tropical Medicine, Antwerp, Belgium and Senior facilitator for the HHA Financial access to health services Community of Practice, Bruno Meessen, Félicien Hounye, Moha Mahaman, Mamadou Samba, Philémon Mbessan, Maurice Yé, Serge Mayaka, Adama Faye, Isidore Sieleunou, Adam Zakillatou, Adama Samaké, Salomon Garba Tchang, Longin Gashubije

Aim: Attaining universal health coverage (UHC) is a process through which individual countries progressively piece together different health financing schemes (HFS) to broaden and deepen coverage. These HFS are numerous and varied, sometimes difficult to define or identify, with many uncoordinated actors involved in their design and implementation. HFS often have different funding sources, target groups, eligibility requirements, and governance. In most countries, no one has a complete picture, making it impossible to harmonize HFS in an efficient, equitable and concerted way.

Objectives: The primary objective of the research is to create a broad, comparative description of the HFS patchwork across a number of francophone African countries. This “mapping” sketches the complexity of HFS within each country, but also suggests recurrent patterns across countries that can be categorized as favourable or not to moving toward UHC, and recommendations for moving forward.

Methods: Since 2010 and 2011 respectively, the Performance Based Financing and Financial Access to Health Services communities of practice (PBF CoP and FAHS CoP, now 1000+ and 500+ members), launched under HHA, provide a structured, collaborative environment for knowledge sharing among experts and stakeholders across Africa and beyond. With the Institute of Tropical Medicine in Antwerp and the French Muskoka fund, CoP facilitators initiated a collaborative research project to investigate and map this HFS fragmentation. The research topic was selected from a series of subjects related to health financing and UHC through a survey of CoP members. Muskoka targets 10 francophone African countries: Mali, Senegal, Togo, Burkina Faso, Senegal, Chad, Democratic Republic of the Congo, Congo-Brazzaville, and Niger. Through a CoP recruitment process, principal researchers for each country were identified. Two additional countries, Cameroon and Burundi, secured funding from Cordaid to participate. The research process, including the development of research tools, data collection, and analysis, uses a participatory and collaborative approach involving the lead investigators and all principal researchers.

Mapping HFS in the 12 countries is the first phase of research, which will be completed by March 2014. During a second phase in 2014 in-depth case studies will be carried out in 1 + countries to better identify and quantify the effects of overlapping HFS on efficiency and equity of health financing, and to provide recommendations for greater synergy among HFS to move toward achieving UHC.

Findings: We will present early findings of the HFS mapping in 12 countries, and share lessons on facilitating this large collaborative project.

Aim Thirteen years after Millennium Development Goals (MDGs), and almost two years to the end of the set date (2015), there is great concern that most of the Sub-Saharan African countries may not achieve the MDGs at the close of the time. One of these goals is to reduce under five mortality by 75% by 2015. However, the believe among policy makers and researchers is that, one means of achieving the targets is to increase health expenditure, especially public health expenditure since it provides a direct means for government to influence health through the provision of health care facilities, personnel, and the appropriate policy and regulatory environment. Research has however produced mixed evidence on the effect of expenditure on health. This study therefore investigates the effect of per capita health financing on child health in Sub Saharan Africa using data from the world development indicators.

Objective To investigate the effect of per capita health care financing on child health using under five mortality as a proxy for child health while controlling for other known factors that can also affect the child's health in Saharan African (SSA) countries. The other factors include rates of immunization, education, income, urbanization, disease prevalence, and environmental factors using a panel data framework and the Grossman Health Production function.

Results The results indicate that health care financing has a very significant effect on child health measured by under five mortality. Further decomposing financing into public and private shows that public health provides a significant effect whereas private is not. Also, factors such as, income, environment and nutrition have a significant effect on child health in sub Saharan Africa. Income, preventive health care use, clean environment and proper nutrition reduce under-five mortality rates, whereas disease prevalence increases it.

Parallel session 5: Performance-Based-Financing evaluation

PS 05/04

A quasi-experimental impact of the Performance-Based-Financing in the use and quality of health care services in an urban area: the case of the Littoral region of Cameroon

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The Performance-based financing (PBF) has attracted considerable in low-income countries as a means to increase productivity and quality of health-care providers. The objective of this paper is to present the impact of a PBF pilot project on the quality of health-care and on health-care utilization in the Littoral of Cameroon and cross-check the results with various quasi-experimental impact evaluation methods.

The Littoral region of Cameroon is the most developed one of Cameroon and hosts its economic capital city, Douala. We exploited data from 2011 (baseline) and 2013 household and health facility surveys conducted in the frame of the project impact evaluation in the region. Three quasi-experimental impact evaluation methods were applied: Kernel propensity score matching, simple difference in difference (diff-in-diff) and diff-in-diff combined with Kernel matching method.

The results have shown that according to the three methods used, the PBF had a positive and very significant impact on the bulk of essential aspects of the quality of care, like in Burundi. Nevertheless a positive impact was missed on drug and supply availability. No strong significant impact was either found on any human resource availability. The evaluation has also shown a negative impact on the compliance to the protocol for simple and complicated malaria cases.

There was a very significant impact on curative services utilization. The impact on child immunization was mitigated across the methods. Across the methods, the evaluation was very consistent about a positive and very significant impact on the use of contraception and on the avoidance of unwanted pregnancies. The impact on all other specific maternal services investigated was much mitigated across the methods. The initial high level of achievement on these specific maternal services could explain that mitigation.

The absence of positive impact on drug and supply security stock availability and on protocol compliance on malaria put side-by-side with the sharp impact on curative services utilization suggests that an increasing demand pressure might explain the failure of health facilities benefitting the PBF project to well handling their stocks and to spending less time with each patient than they should. In Rwanda a similar caveat was found on the interpretation of the PBF impact results.

A scaling up of the project in the Littoral could limit the perverse effect emanating from the small size of the pilot project in a high potential (urban) demand setting; while keeping at a good level of the positive benefits of the approach.

PS 05/05**Analyses des tensions et des controverses autour de l'implémentation du financement basé sur la performance dans un district sanitaire : cas du système de santé complexe de la RD Congo**

Serge Mayaka, ECOLE DE SANTE PUBLIQUE DE KINSHASA; Bruno Meessen, INSTITUT DE MEDECINE TROPICALE; Jean Macq, UNIVERSITÉ CATHOLIQUE DE LOUVAIN

BUT La reprise du contrôle des débats autour du FBP et le retour à des fondements plus importants, à des arguments plus techniques; à la recherche des consensus basés sur des faits et de propositions pouvant contribuer à la redynamisation du district sanitaire.

OBJECTIFS

- Etablir des conditions permettant une analyse réflexive autour du FBP et de sa capacité à renforcer les performances du district sanitaire.
- Analyser les arguments de ceux qui sont en faveur ou opposés à cette stratégie ou qui s'interrogent sur l'opportunité de son recours
- Différencier les arguments en faveur ou en défaveur du PBF selon qu'ils sont basés sur des faits ou sur des valeurs
- Démontrer qu'une synthèse est possible, malgré les nœuds problématiques, avec une meilleure structuration des arguments des uns et des autres

METHODOLOGIE

Etude exploratoire, comportant des interviews d'experts retenus (cadres du ministère de la santé, bailleurs, scientifiques, autorités politico-administratives, prestataires et consultants) selon un choix raisonné avec au minimum 20 partisans et 20 opposants du FBP; jusqu'à la saturation des données.

La collecte des données a été réalisée avec un questionnaire élaboré à partir du cadre d'analyse proposé par Norman Daniels (OMS, 2000). Il a été administré aux personnes critiques vis-à-vis du FBP, qui ont avancé tous leurs arguments en défaveur du FBP.

Une synthèse des arguments recueillis a été réalisée et a ensuite été présentée à tous les partisans du FBP. Ils devaient donner leurs appréciations sur les propos provenant du premier groupe interrogé.

La transcription des interviews devait veiller que les idées fournies reposent sur des informations compréhensibles et d'interprétations claires. Le traitement et l'analyse de ces données qualitatives, a nécessité l'usage du logiciel N-Vivo.

RESULTATS

Nos interviews ont fait ressortir les points sujets à des controverses ou à des consensus entre les deux camps. Des divergences persistent autour des questions telles que: l'effet d'entraînement des prestations non subventionnées, le manque d'objectivité dans l'évaluation de la qualité des soins, le caractère dés-incitatif de la prime de performance avec le temps, le postulat erroné de l'échec de « l'approche input » alors que des pré-requis sont indispensables, l'incapacité du PBF à garantir seul une meilleure accessibilité financière aux soins, etc.

Nous avons pu éclairer notre lecture des arguments avancés par les uns et par les autres; et dégager ce qui relève de l'évidence scientifique, de l'expérience professionnelle personnelle ou de l'opinion.

PS 05/06**Early evidence from results-based financing in rural Zimbabwe: Lessons learnt and the way forward**

Jaap Koot, Independent Researcher; Ronald Mutasa, World Bank; Nyasha Masuka, MOHCW Zimbabwe; Portia Manangazira, MOHCW Zimbabwe; Frank van de Looij, Cordaid

Aim This paper discusses the implementation of results-based financing (RBF) in rural district healthcare in Zimbabwe. The actual results of RBF are analysed and lessons for future introduction and management of RBF programs are drawn.

Objectives Specific objectives of the paper are:

1. Description of the development of quantity and quality indicators in the program
2. Assessment of the effects of the program
3. Description of elements that contributed to the effectiveness of the program
4. Identification of lessons for future programs

Methods The RBF pilot in Zimbabwe is being implemented in 18 districts. Selection of the districts was based on socio-economic, geographic and health utilization characteristics. From each rural province, two matched pairs (one high performer and the other low performer) of districts were selected. One district from each pair was assigned to the intervention, while the other became the comparison district.

To review the program, three RBF districts were randomly selected along with their matched comparison districts. The study used data on utilisation, document review and semi structured interviews with key informants.

Key Findings A difference-in-difference trend analysis of intervention and control districts shows an improvement in service utilisation in RBF districts, most clearly in relation to ANC, deliveries and MCH-related referrals. Moreover, the project has succeeded in the removal of patient fees for MCH services and compensating health institutions for foregone income. Data reliability improved and the RBF approach revitalized Zimbabwe's existing decentralized primary health care system.

In addition, some of the elements contributing to the project results are described. These include direct payments to facilities, independent decision making on the use of funding in facilities (within the boundaries of the agreed operational plans), independent verification and the establishment of Results Based Management in government functions prior to program.

Communities are more engaged, not only through Health Centre Committees, who are involved in creating the operational plans, but also through verification by Community Based Organisations, which gives them a voice. Community involvement has an impact on the attitudes of health workers, making them more service-oriented.

Quality assessment by decentralized MOHCW structures has improved. However, a shift needs to be made from conditions for providing good services, to assessment of the quality of services at outcome level. Other challenges for further learning up to the mid-term period include more efficient verification, mechanisms, enhanced monitoring and a sustainable separation of functions.

PS 05/07**Performance Based Health Financing and Health System Challenges: An assessment of the design, implementation, and outcomes in Katsina State, Nigeria.**

Hyacinth Ichoku, Department of Economics, University of Nigeria, Nsukka

There has been a remarkable growth in international literature on the influence of performance based incentives otherwise referred to as the payment for performance in the last couple of years.

The literature has generally concentrated on the performance of health workers. This is quite understandable given the huge human resource gaps in the health sector of most developing countries. Furthermore, given the dominant role of the public sector in the provision of basic health services and the further fact that the public sector in most of these countries is characterized by perverse incentives, weak supervision and monitoring, the tendency for health workers to shirk responsibilities and be less committed to achieving the goals of the sector this preponderant attention becomes understandable. Under these conditions, the conventional methods of remuneration of health workers based on guaranteed monthly salaries fail to deliver effective services in the quantity and quality required to meet the needs of the population.

Development partners and multilateral donor partners including the World Bank, Department for International Development (DFID), among others have supported efforts to improve the productivity of workers through performance based incentives. The emphasis on value for money (vfm) approach to development projects has given further impetus to experimental and semi-experimental operations research on ways to improve productivity in the sector. For example, the

The debate has generally centered on the effectiveness or otherwise of such incentives in promoting productivity in the health sector. While some have argued that PBF leads to achievement of cost and quality goals in the health sector, others are less sanguine on the use of pay for performance in enhancing the productivity of health workforce.

The objective of this study is to share experience of the design and implementation of PBF in Katsina State Nigeria and to show that the effectiveness of PBF depends not only on the design and effective implementation of the scheme but more importantly on the strength of the health system ab initio. In some cases health worker motivation may not be the most binding constraint of the health system and may not remove those other constraints. The results from implementing in Katsina state of Nigeria shows that PBF can only supplement and not substitute for effective and functioning health system. Thus the implementation of the PBF needs to be preceded by a health system reform to address those constraints that may be de-motivating to the health workforce. Where these reforms are not undertaken, it might as well be better to stick to the conventional methods of remuneration.

Parallel session 5: Exclusion from social health protection (Organized session)

PS 05/08

Organized session: Assessing exclusion from social health protection

Divya Parmar, London School of Economics and Political Science

In 2008, the third and last overarching recommendation of the Commission on Social Determinants of Health (CSDH) was “to measure and understand the problem and assess the impact of action”, including what was termed “health equity intervention research”. The 2011 World Conference on Social Determinants of Health reiterated the CSDH’s recommendations and made a plea for “research on the relationships between social determinants and health equity outcomes with a particular focus on evaluation of effectiveness of interventions”. The CSDH’s Social Exclusion Knowledge Network (SEKN) advocated using the concept of social exclusion as a particular and unique framework for understanding the social determinants of persisting health inequities. The SEKN defined social exclusion as “dynamic, multidimensional processes driven by unequal power relationships interacting across four main dimensions – *economic, political, social and cultural: SPEC* – and at different levels including individual, household, group, community, country and global levels.

In 2011, researchers from six institutes in five countries engaged in *Health Inc*, a three-year collaborative project, got together to explore how social exclusion impedes access despite health financing reforms, and how social health protection (SHP) can become more inclusive. Our initial hypothesis was that despite their contextual manifestation, social exclusionary processes exist worldwide, and some of these exclusionary patterns are universal. We studied, amongst other, two large-scale national health-financing schemes in West African: Plan Sesame (free health care for the elderly) in Senegal, and the National Health Insurance Scheme (NHIS) in Ghana.

We conducted extensive literature review on the four SPEC dimensions that allowed us to deepen the SEKN’s conceptual framework. Next, to operationalize the framework we developed what we refer to as the *SPEC-by-step tool*, grafting the *SPEC* lens onto a *step-by-step* deconstruction of the health-financing schemes under study (Presentation 1). We then adapted the *SPEC-by-step tool* to country-specific contexts and according to the specific characteristics of the SHP scheme, to study social exclusion in Plan Sesame in Senegal (Presentation 2) and NHIS in Ghana (Presentation 3). Lastly, we conducted a comparative study. We selected one of the most vulnerable and least studied group, elders, and compared social exclusion in the enrolment step of the *SPEC-by-step tool* across Plan Sesame and NHIS (Presentation 4).

Presentations:

1. SPEC-by-step: the development of a tool for assessing exclusion from social health protection
2. Impact of Plan Sesame on equity in access to health care for elders in Senegal: who is excluded from coverage and why?
3. Who is excluded in Ghana’s National Health Insurance Scheme and why?
4. Enrolment of elders in social health protection programs – does social exclusion play a part?

PS 05/09**Presentation 1: SPEC-by-step: the development of a tool for assessing exclusion from social health protection**

Werner Soors, Tanya Sheshradi, Fahdi Dkhimi, Harshad Thakur, Felix Ankomah Asante, Daniel Arhinful, Alfred Ndiaye, Philipa Mladovsky, Bart Criel

Aim With the SPEC-by-step tool, the Health Inc research project ('Financing healthcare for inclusion', FP7 261440) aims at widening the evidence base on the determinants of health inequities, an essential step towards the realization of universal health coverage.

Objectives To provide a necessary complement to existing health equity monitoring, based on disaggregation of health indicators, by (1) making use of the unique framework of social exclusion for understanding the persistence of health inequities; and (2) structuring the analysis of social exclusion within social health protection in a way that is relevant, adaptable and applicable in any context where universal health coverage is a policy goal.

Methods Social health protection – ideally resulting in effective access to affordable quality healthcare and financial protection – is a prerequisite for universal health coverage. Yet social exclusion might prevent social health protection from being universal. The Health Inc project adopted the definition and the dimensions of social exclusion as given by the WHO's Social Exclusion Knowledge Network (SEKN). Social exclusion is defined as a range of "dynamic, multi-dimensional processes driven by unequal power relationships interacting across four main dimensions – economic, political, social and cultural – and at different levels including individual, household, group, community, country and global levels".

The Health Inc project – exploring the interface between social health protection and social exclusion in two African countries and two Indian states – operationalized the SEKN framework by grafting a SPEC (social, political, economic and cultural) lens onto a step-by-step deconstruction of a generic health financing scheme: the SPEC-by-step tool. In each step, answers are sought to the questions *who is excluded* (who is targeted but not reached, reached but not registered, registered but doesn't become a card holder, a card holder but doesn't approach health services, approached health services but unable to make due use of them) and *how and why people are excluded* (by systematically investigating the SPEC dimensions).

Key findings Adaptation of the generic SPEC-by-step tool to content and context of social health protection schemes in Ghana, Senegal, Karnataka and Maharashtra has allowed the Health Inc research to reveal patterns of social exclusion related to design flaws and implementation bottlenecks in the schemes under study. This people-centred approach – complementary to resource-based health financing assessment and results-based health equity monitoring – enables the use of both quantitative and qualitative data, including the knowledge of the beneficiaries, and provides specific recommendations that are useful for policymakers and programme implementers.

Key words

Universal health coverage; Social health protection; Social exclusion

PS 05/10**Presentation 2: Impact of Plan Sesame on equity in access to health care for elders in Senegal: who is excluded from coverage and why?**

Fahdi Dkhimi, Maymouna Ba, Philipa Mladovsky, Alfred Inis Ndiaye

Aim In 2006 an exemption scheme, Plan Sesame, was launched in Senegal to enhance equity and improve access to healthcare for elders (above 60 years). To date, little research has been conducted on this initiative. The limited evidence available suggests that, despite user-fee removal, the effects of Plan Sésame on equity are ambiguous and many targeted elders do not activate their entitlements to coverage. In this study, we hypothesize that exclusionary processes across multiple dimensions – social, political, economic and cultural (SPEC) – systematically impede access to Plan Sesame for vulnerable elders and cause inequalities in access to and utilization of the Plan.

Objective To determine whether social exclusion can explain why some elders are not activating their entitlement to access and use Plan Sesame.

Methodology This study applied mixed methods. A household survey was conducted on a representative sample of 2,933 households across four regions of Senegal, alongside 60 in-depth interviews and 25 focus group discussions. We adapted the Health Inc SPEC-by-step methodology to Plan Sésame to analyse the following steps: possessing an ID card (required for accessing Plan sesame); knowing about the scheme; utilizing health services and receiving the exemption. We first conducted logistic regression analyses to compare elders excluded to those included at each step. We then investigated the processes that generate these inequalities through analysis of in-depth interviews conducted with elders selected in the survey sample and other key stakeholders involved in the policy design and implementation.

Key findings Results from the household survey indicate that only 10.4% of sampled elders were covered by Plan Sesame. Being male, household head, having some education, belonging to majority ethnicity, to an association and living in urban areas increased the odds of utilizing the scheme. Economically vulnerable elders living in the poorest households and elders vulnerable to political exclusion, reflected by lower political and civic participation, living in unsafe neighbourhoods and having limited access to media, also had lower odds of accessing Plan Sesame.

Qualitative interviews identified several causes impeding Plan Sesame from enhancing equity. First, high unemployment rates prevent younger generations from bearing increasing responsibility towards elders in a context of profound mutations of the traditional care system. Second, the absence of management structures, lack of harmonization with other exemption schemes, lack of integration with other financing schemes, lack of an equitable resource allocation mechanism across the country were identified as key bottlenecks preventing a successful and equitable implementation of Plan Sesame.

Keywords Social exclusion, elders, Plan Sesame, exemption

PS 05/11**Presentation 3: Who is excluded in Ghana's National Health Insurance Scheme and why?**

Felix A. Asante; Daniel K. Arhinful; Ama P. Fenny; Anthony Kusi, Gemma Williams, Divya Parmar

Aim The National Health Insurance Scheme (NHIS) was launched in Ghana in 2003 to improve access to healthcare. However, NHIS has continuously suffered from low enrolment rates. Previous studies have repeatedly highlighted premium costs as a major barrier to enrolment. Yet, despite introducing premium exemptions for pregnant women, older people, children and indigents, the majority of Ghanaians are still not enrolling. In this study we explore whether social exclusion can explain the limited success of NHIS in improving access to healthcare in Ghana. This is the first study that has tried to explore the social, political, economic and cultural (SPEC) dimensions of social exclusion in the context of NHIS.

Objectives To determine whether social exclusion can explain why Ghanaians are not enrolling (or re-enrolling) in NHIS, and why those that do enrol are not accessing healthcare services.

Methods This study applied mixed methods. We developed a SPEC-by-step framework to capture social exclusion in NHIS. A household survey (4050 households and 16200 individuals), key informant interviews and focus group discussions were conducted in 2012 to collect information on SPEC dimension, demographic indicators, health status and healthcare utilization. While the household survey identified households and individuals who are excluded from NHIS at each step – from enrolling to accessing healthcare, the qualitative data explored why individuals were not enrolling and accessing healthcare, specifically investigating whether social exclusion was associated with their enrolment status and healthcare seeking behaviours.

Key findings Only 54 percent of sampled individuals were found to be active NHIS members i.e. registered and enrolled during 2012, while 27% had never registered, 15% had not renewed their membership and 4% were registered but had not received their membership cards. Within the SPEC framework, economic and social dimensions were major determinants of enrolment. Enrolment was higher in wealthier districts and among richer households. Also members were more likely to live near or in the district capital with better access to transport and educational and healthcare services. The never insured had a negative perception of NHIS and felt that health insurance was meant for the poor and sick, suggesting the concept of risk sharing was not properly understood or accepted. They also highlighted physical inaccessibility to health facilities and NHIS registration centres as reasons for not enrolling. Weakening of the extended family system, preference for traditional care, reliance on self-medication and low levels of solidarity were associated with lower enrolment.

Keywords Social exclusion, Ghana, Health insurance, Universal health coverage

PS 05/12**Presentation 4: Enrolment of elders in social health protection programs – does social exclusion play a part?**

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Aim: Africa is rapidly aging, with population over 60 increasing from 50.5 million in 2007 to estimated 64.5 million by 2015, an annual growth rate of above 3 per cent, greater than that for the general population. This is creating new challenges for the health system, which increasingly needs to respond to not only preventing and treating high rates of communicable diseases, but also rising rates of chronic illness. Universal health coverage requires that countries not only focus on women and children as typically done, but also extend social health protection (SHP) to elders as a priority. Most African countries have no SHP for elders. Two exceptions include Senegal's Plan Sesame for elders, a publically funded user fee exemption that includes free essential medications and Ghana's comprehensive National Health Insurance Scheme (NHIS) where elders are exempted from paying premiums. However, evidence on whether these SHP programs are benefitting elders is lacking. We fill this gap in evidence. Rather than investigating only financial determinants to enrolment as commonly studies, we also investigate whether social exclusion determine the uptake of SHP for elders in Ghana and Senegal. To the best of our knowledge, this is the first study that investigates the role of social exclusion in SHP uptake among elders.

Objective: To determine whether social exclusion is associated with enrolment status of elders by comparing Plan Sesame in Senegal and exemptions for elders in NHIS in Ghana.

Methods: We developed a SPEC framework to identify variables that measure the sociocultural, economic and political dimensions of social exclusion. Information on these dimensions along with the uptake and use of SHP schemes was collected by two cross-sections household surveys in 2012 in Ghana and Senegal. A series of regressions were conducted to determine whether vulnerability to social exclusion is associated with lower enrolment rates and compare these results across NHIS and Plan Sesame.

Key findings: We found that sociocultural, political and economic dimensions are all significantly related to enrolment in Plan Sesame, indicating that individuals at risk of social exclusion are less likely to enrol in the scheme. Results from Ghana suggest that individuals at risk of social exclusion in the political domain are less likely to enrol in NHIS, although the economic and sociocultural indices are not significant. These results confirm our initial hypothesis and highlight that access to social health protection schemes are restricted by social exclusion.

Keywords: Universal health coverage; elders; social exclusion; social health protection

Parallel session 6: African health expenditures: latest resource tracking results (expenditure on diseases; expenditure on HRH; external funding) (OS)

PS 06/01

Dépenses de santé en Afrique: derniers résultats du suivi des ressources (dépenses sur les maladies, les dépenses sur les RHS; financement externe)

Description de la session générale :

Dix-huit (18) pays africains travaillent actuellement sur les comptes de la santé, ou ils sont sur le point de produire les comptes de la santé, conformément à la méthodologie révisée et promue internationalement.

Cet accord avec les efforts visant le suivi des dépenses liées à la santé maternelle et infantile (à l'initiative de cet accord) ou le suivi des dépenses sur le VIH, la tuberculose et le paludisme (le nouveau modèle de financement par le Fonds mondial), ce qui conduit à une nouvelle série de résultats de dépenses de santé, avec beaucoup plus de détails sur la répartition des fonds entre les maladies ou à travers des facteurs utilisés.

Une série de documents est proposée pour présenter l'information la plus récente sur les dépenses de santé dans la région.

Les titres des communications présentées :

1. Les dépenses par maladie et par âge : Qu'en est-il des derniers comptes de la santé ?
Une comparaison entre pays
2. COMBIEN LES PAYS consacrent à leurs ressources humaines en santé ?
3. AIDE AU DÉVELOPPEMENT DE LA SANTÉ EN AFRIQUE : Tenous nous un langage de vérité?

PS 06/02

A cross country comparison of health expenditure by disease and by age: Results from the latest health accounts data

Health accounts team in WHO World Health Organization

Aim & Objectives: The recent influx of demand for programme-specific health expenditure data combined with the 2011 revision of the health accounts methodology led to a large production of new data on health expenditure, including a full disease distribution of expenditure.

WHO has trained and collaborated with many of the ministries of health teams and is presenting a comparison of results across countries that will highlight both funding trends in the region as well as interesting differences between countries that point to likely differences in policies.

Some methodological information will also be provided.

Methods: WHO currently works with 18 African countries that are producing their first SHA 2011 health accounts. All 18 countries are implementing the System of Health Accounts 2011 using a new tool recently developed to support more solid, timely, and frequent production of data. These countries are also the first to implement a method measuring expenditure by disease and programme whereby total expenditure on health is distributed across diseases by function, provider, and financing.

Key findings: While most countries are still in the process of finishing their health accounts, early results already show some interesting facts, in particular highlighting which diseases remain mainly funded and paid by households; or how expenditures are distributed between prevention, care, and pharmaceuticals for each disease. These results contribute to the monitoring and designing of health care policies, in particular in relation to issues of sustainability, equity of allocation of government funding, and financial access to care.

PS 06/03

Development assistance for health in Africa: are we telling the right story?

World Health Organization

Aim & Objectives: To describe the different types of data sets on aid flows, what they capture and what types of questions they answer, and to explore the extent of variations in levels and trends between these data sets at the regional and country levels.

Methods: Data for the WHO data base are derived from official country documents and published annually after country revue. For the other data sources compared in the paper, data were extracted from the publicly available websites. Data covered all aid flows specified for Sub-Saharan African countries (including aid for the region as a whole or for groups of countries in the region), for health and population/reproductive health, from all donors.

Key findings: The variation in levels and trends in development assistance for health across the six data sets compared in this paper was substantial, with greater variation at country than regional level. This is partly because the different aggregates of development assistance for health have different meanings, and partly because of incomplete reporting.

It is important to know what the different aggregates of development assistance for health reported in the different databases mean before deciding which to use to answer a particular policy question. Using the wrong source can lead to erroneous conclusions.

PS 06/04

How much do countries spend on their health workers?

Aim & Objectives: Remunerations are one of the main cost components of health services. Hence it is key information for planning recurrent spending and retention policies on human resources for health (HRH). We provide a comprehensive overview of available data on remunerations for WHO Member States.

Methods: The data on remuneration is presented for salaried and non-salaried health workforce with a specific breakdown of government remuneration payments from 2000 & 2010.

Key Findings: On average, HRH remunerations is about one third of total health expenditure (THE) and shows faster growth compared to Gross Domestic Product (GDP). The increase in remunerations of HRH is larger than that for total economy workers but not as large as the increase of THE and General Government Health Expenditure (GGHE) in GDP.

Remunerations in health are decreasing relative to GGHE and THE.

Monitoring retention policies can be informed by comparison of remunerations involving health and total economy workers, domestic and international. Measurement of remuneration in private practice appears to be feasible but requires further collaboration with national statisticians.

Parallel session 6: Community participation

PS 06/05

Affordability and perceptions of the quality of public care as determinants of health insurance coverage in South Africa: implications for National Health Insurance (NHI)

Anja Smith and Prof Ronelle burger, Department of Economics, Stellenbosch University

Aim Against the backdrop of the proposed National Health Insurance (NHI) and the move to universal health coverage in South Africa, this paper examines the factors associated with selection into health insurance membership. We explore the role of affordability and perceptions of the quality of public care amongst other considerations motivating individuals to insure themselves against catastrophic health expenditure through private health insurance.

Medical schemes are the main form of private health insurance in South Africa. The transition into post-apartheid South Africa created the expectation that medical scheme membership would expand commensurate with the new economic opportunities open to all races. However, during the period 2002 to 2012 medical scheme membership experienced limited growth. Despite some growth in membership due to roll-out of the Government Employees Medical Scheme (GEMS) to previously uncovered employees and the extension of health insurance in the private sector to black employees who entered the labour market, total growth in scheme membership has been smaller than anticipated.

Objectives A better understanding of the factors that determine the demand for medical schemes is relevant not only for private health insurance, but also policy as it could provide insight into the preferences and willingness to pay of a segment of the population that is crucial to the success of the NHI funding model. This is important in ensuring a sustainable funding model that is able to improve health outcomes.

Method This paper explores the relationship between health insurance membership and socio-economic, demographic, health risk and quality of care variables. It does so by drawing on empirical analysis of a number of household surveys. The Labour Force Surveys (2000-2011), the General Household Surveys (2002-2011) and the Income and Expenditure Survey (2010/2011).

Key findings We find that participation in the formal labour market is the most important correlate of health insurance coverage. Post-high school education also shows a large positive association with health insurance membership in both the labour market and broader household context. There is a large association between public sector employment or being employed in a position associated with union membership. Both income and position in an asset and services index is positively associated with health insurance membership, while there is a positive association between health insurance cover and disease or illness and injury. By combining administrative data with household surveys data, we are able to explore how perceptions of the quality of public health services correlate with medical scheme membership.

Key words: health insurance, National Health Insurance

PS 06/06**The impact of stakeholder values and power relations on community-based health insurance coverage: evidence from three Senegalese case studies**

Philipa Mladovsky, London School of Economics and Political Science; Pascal Ndiaye, Institute of Tropical Medicine, Antwerp; Alfred Ndiaye, 3. Le Centre de Recherches sur les Politiques sociales (CREPOS); Bart Criel, 2. Institute of Tropical Medicine, Antwerp

Aim: Continued low rates of enrolment in community based health insurance (CBHI) suggest that in many countries strategies proposed for scaling up have not been successfully implemented. This study aims to investigate whether a lack of systematic incorporation of social and political context into CBHI policy can help explain the lack of enrolment (population coverage) and limited benefit package (scope of coverage). The focus is on Senegal, where the government views CBHI as a key mechanism for achieving universal coverage. However, despite a rapid increase in number of schemes, coverage in Senegal remains low.

Objectives: The study's objective is to test the hypothesis that values and power relations inherent in social networks of CBHI stakeholders can explain levels of CBHI coverage.

Methods: Three case studies constituting Senegalese CBHI schemes were selected using specific criteria and studied. Stakeholders were identified using purposive snowball sampling. Transcripts of qualitative interviews with 64 CBHI stakeholders were analysed in Nvivo using inductive coding.

Key findings: The five most important and interlinked themes pertaining to social values and power relations were voluntarism, trust, solidarity, political engagement and social movements. The analysis raises a number of previously overlooked policy and implementation challenges. The first is the need to remunerate CBHI scheme staff while retaining the benefits of voluntarism. Voluntarism was viewed as a mechanism for fighting poverty, increasing solidarity and promoting trust and was a motivational factor among CBHI staff. The second is developing a strategic approach to building trust in CBHI, for example by integrating CBHI schemes into community associations and engaging health service providers with the values underpinning CBHI. Third is the challenge of subsidising premiums for the poor whilst protecting schemes from local political power struggles. Finally, there was a need to support schemes in federating with other CBHI schemes and other types of NGOs in order to facilitate collection of premiums and improve contracting health service providers, governance, training and technical assistance. Systematically addressing all these challenges would represent a fundamental reform of the current CBHI model promoted in Senegal and in Africa more widely. From a methodological perspective, the results suggest that in the field of health financing, studying values and power relations among stakeholders in multiple case studies can be an important complement to health systems and health economics analysis.

PS 06/07**Expérience de paiement au forfait et de gestion locale de l'exemption du paiement des soins des enfants dans le Sahel (Burkina Faso)**

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But. Depuis 2008, la Direction régionale de la santé du Sahel et l'ONG Help subventionnent le paiement des soins des enfants dans deux districts. Ils remboursent mensuellement et au réel les dépenses des produits et des services délivrés « gratuitement » par les centres de santé (CSPS).

Objectif. Depuis août 2011, elles expérimentent le remboursement au forfait afin d'évaluer les effets sur les coûts et la charge administrative du changement de mode de remboursement. L'approche choisie est la recherche action (RA). Les coûts étudiés sont les coûts moyens mensuels (CMM) de prise en charge des enfants par épisode de maladie. Le montant forfaitaire fixé est 1'300 F CFA.

Méthodes. Il s'agit d'une étude quasi-expérimentale (avant/après et avec/sans) utilisant des données mixtes et répétant deux fois la même intervention avec deux groupes de CSPS différents. L'intervention 1 s'est déroulée dans 6 CSPS sur les 13 du district de Sebba. L'intervention 2 a débuté 11 mois après dans les 7 autres CSPS du district et comprend, en plus, un transfert de la gestion de la subvention de l'ONG à l'équipe cadre du district (ECD) de Sebba. La charge administrative concerne le coût des supports, le stockage et la charge de travail perçue par les agents de santé. Les méthodes utilisées sont le calcul des coûts et de l'espace économisés, les études de cas, les entrevues et les travaux de groupe.

Résultats clés. Les résultats de la première phase de l'intervention 2 terminée en juin 2012 sont encore intérimaires. Pour l'intervention 1, après 11 mois de forfait (août 2011/juin 2012), le CMM des 6 CSPS est de 1'224 F CFA, mais il est très variable selon les mois et les CSPS [1'092 F - 1'430 F CFA]. Selon les agents de santé, la disponibilité des intrants médicaux et des agents prescripteurs expliquent cette hétérogénéité. L'analyse visuelle de la série chronologique (janvier 2009/juin 2012) des CMM ne montre pas d'effet du changement de mode de remboursement. Le passage au remboursement au forfait a permis une économie de 1'040'160 francs CFA sur l'achat des ordonnanciers, une diminution importante des besoins d'archivage (946 ordonnanciers en moins) et de la charge de travail des agents de santé (plus d'ordonnancier spécifique et de calculs du coût par molécule pour 50'000 consultations en 11 mois).

Si avant la RA, la majorité des intervenants étaient réfractaires au paiement forfaitaire, après 24 mois, ils en sont devenus de fervents ambassadeurs.

Parallel session 6: Non Communicable diseases

PS 06/08

Net Social Benefit of a Diabetes Prevention Program in Rural Kenya

Anne Kangethe, At the time this study was conducted Dr Kangethe was a PhD student at the University of Georgia; Duska Franic, The University of Georgia College of Pharmacy

Objectives: In Kenya, diabetes prevalence is comparable to Western countries. Type 2 diabetes in sub-Saharan Africa is on the rise and is attributed to lifestyle changes, and therefore, is considered a fundamentally preventable disease. In sub-Saharan countries, the emphasis must be on prevention because the Western model of emphasizing treatment is unaffordable. The aim of this study is to conduct a cost-benefit analysis (CBA) of a diabetes prevention program in rural Kenya.

Methods: Willingness to pay (WTP), a non-market valuation technique was used to assess the benefits of the program in monetary units. Convenience sample of adult residents from a rural county in Kenya (Kiambu) were randomized to one of two WTP techniques, payment card (PC) and structured haggling (SH, Onwujekwe 2004). Program benefits, WTP data, were collected via individual structured face-to-face interviews in the community. Program costs were estimated based on World Health Organization program cost estimation guidelines for low income countries in Africa, input from Kenyan diabetes educators, and the literature. This study assumed the societal perspective and therefore, both those with and without diabetes were eligible to participate. Net social benefit (NSB), comparing the program costs to benefits, was estimated assuming a 5 year project life, 3% discount rate and a stand-alone facility.

Results: WTP data was collected from 398 rural residents (52% male, 65% married, 16% owned a vehicle). Estimated annual mean WTP for all respondents (PC and SH groups) was KSh585.83 (SEM=20.98) (2011US\$1=Ksh85.37). Estimated program benefits, mean WTP, was KSh2,811,984/year, assuming 4800 participants/year. Estimated mean program cost was Ksh8,069,694. Annual program costs exceeded benefits resulting in a negative NSB. The 5-year program resulted in an NSB of KSh-24,078,736. One-way sensitivity analysis (varying the discount rate 0-5%, and participants $\pm 20\%$) resulted in a negative NSB. While a two-way sensitivity analyses (reducing cost of the program consistent with a shared-facility and viable increase in participants by 4.8-25.6% resulted in a positive NSB.

Key Findings: Based on WTP (benefit) data, residents valued the diabetes prevention program in rural Kenya. However, from a societal perspective, the costs for implementing the program outweighed the benefits assuming a stand-alone facility. Study results show that the diabetes prevention program showed an overall benefit if a shared facility was used, for example, incorporating the diabetes prevention program into other currently available disease prevention programs as part of a larger disease prevention initiative, similar to Canadian Mobile Diabetes Screening Initiative (Ralph-Campbell et al, 2011).

PS 06/09**Tobacco Taxation in Select African Countries: An Extended Cost Effectiveness Analysis**

Stephane Verguet, University of Washington

Aim Tobacco taxation is a policy instrument with the potential to shape the health and financial outcomes of millions. The aim of this analysis is to quantify the potential health and financial benefits of tobacco taxation in select African countries.

Objective The public health benefits of tobacco taxation are widely known. However, some are concerned that increased tobacco taxation can have negative financial implications for the poor. The objective of this paper is to quantify the potential health and financial (population and government revenue) implications of increased tobacco taxation in select African countries.

Methods We use extended cost effectiveness analysis to quantify the health and financial implications of tobacco taxation by wealth quintile. We examine the number of deaths averted, private expenditures averted and the government revenue implications of tobacco taxation.

Key Findings Our analysis shows that increased tobacco taxation leads to substantial health benefits. These benefits are greatest among the poor. Tobacco related expenditures generally fall across all income quintiles. This implies that the poor can benefit the most from increases in tobacco taxation while increasing government revenue.

PS 06/10**Salt Reduction in South Africa: an Extended Cost Effectiveness Analysis**

David Watkins, University of Washington; Zachary Olson, University of Washington; Stephane Verguet, University of Washington; Dean Jamison, University of Washington; Rachel Nugent, University of Washington

AIM: The burden of hypertension and its fatal complications is rising dramatically in developing regions. The World Health Organization has identified salt reduction policies as a “best buy” for lowering population blood pressure and averting deaths from cardiovascular disease. In 2011, the South African Ministry of Health proposed bold, comprehensive salt reduction legislation that would lower local salt intake from current levels of 8-10 grams per day to less than 5 grams per day. We aim to estimate the health, financial, and equity impacts of such a policy.

OBJECTIVE: To apply a novel method called “extended-cost-effectiveness analysis” (ECEA) to estimate the effects of comprehensive salt reduction policy on health and financial risk protection by income group.

METHODS: We estimated the costs and health outcomes associated with reduced salt intake using a hypothetical cohort of 1 million South Africans from a nationally-representative survey that included household income and blood pressure data. We derived salt intake levels from South African dietary surveys, and modeled the reductions in incident and fatal cases of

cardiovascular disease (CVD) by socio-economic quintile using published epidemiologic and Global Burden of Disease estimates. We estimated costs of treating typical cases of stroke and heart attack from empirical data. An expenditure threshold was then used to estimate the number of catastrophic expenditures averted. All health and outcome metrics are presented by socio-economic quintile.

KEY FINDINGS: Policies aimed at lowering sodium intake to 5 grams per day resulted in 269 fewer CVD annual deaths, with relatively more health gains in the middle income quintiles. Households averted US \$161,955 in health expenditures. Using South Africa's definition of catastrophic health expenditure (healthcare costs greater than 10 percent of annual income), 77 cases of catastrophic expenditure were averted, with most of the financial risk protection afforded to the higher earners. On the other hand, public health care costs averted would be much larger (US \$870,849) by eliminating the need for subsidies targeted to the poor. The results were sensitive to the medication prices, advanced cardiovascular procedures and the progressive fee structure of the South African public sector.

Compared to current diet and blood pressure patterns, a comprehensive dietary salt reduction program in South Africa could avert several thousand deaths across the population from cardiovascular disease and save several million dollars each year. Future work will estimate additional reductions in chronic renal disease and hypertensive heart.

PS 06/11

Réduction du taux de létalité liée aux morsures de serpents par la subvention du sérum antivenimeux : cas du Centre Hospitalier Régional de Gaoua (Burkina Faso)

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Introduction Les envenimations par morsure de serpent constituent un véritable problème de santé publique dans la région du Sud-Ouest du Burkina Faso. C'est une région boisée de plus en plus dense au fur à mesure que l'on descend vers le sud. Cette végétation abrite de nombreuses espèces de serpents. Cependant, on dispose de peu de donnée sur les envenimations. DRABO et coll en 1994 notaient 70 cas d'hospitalisation pour morsures de serpent en une année dans le service de médecine interne de l'hôpital Yalgado, BADIÉL, IDO en 2010 notait un taux de mortalité de 2,8% sur 179 cas au Centre Hospitalier Régional de Gaoua. Le Centre Hospitalier Régional (CHR) de Gaoua a enregistré en 2010, 169 cas d'envenimation par morsure de serpent et en 2011, 323 cas avec un taux d'admission respectivement de 2,68 % et 5,30%. Le taux de létalité reste élevé, il était de 8,28% en 2010 et de 9,95% en 2011. Bien qu'il n'existe pas de statistique discriminatoire sur la typologie des serpents en cause, on estime que les vipéridés sont le plus souvent incriminés.

Les retards liés à la prise en charge et certaines pratiques traditionnelles sont à l'origine des complications hémorragiques, cardiologiques et neurologiques qui occasionnent les décès. Le 1^{er} retard c'est-à-dire la décision de fréquenter une formation sanitaire peut s'expliquer par le coût très élevé de la prise en charge. A titre illustratif, le prix coûtant d'accès au sérum anti venimeux (SAV) est de 99 000 FCFA pour une population à plus de 43,69% vivant en

² Directeur général du Centre hospitalier régional de Gaoua

dessous du seuil de pauvreté. Afin d'améliorer l'accessibilité financière des populations aux SAV, le Centre hospitalier régional de Gaoua a décidé de le subventionner au quart tout en développant des stratégies pour rendre cette mesure pérenne.

Méthode Il s'agit d'une étude de cas permettant de documenter les effets de la subvention du SAV sur le taux de létalité liée à l'envenimation par morsure de serpents.

Résultats La subvention du SAV a permis de réduire considérablement le taux de létalité lié aux morsures de serpents au sein du CHR de Gaoua.

Conclusion La subvention du SAV au CHR de Gaoua a certes permis de réduire le taux de létalité mais le développement de certaines stratégies comme la mutualisation de ce risque à tout patient bénéficiant de produits de santé a permis d'assurer sa soutenabilité financière.

PS 06/12

Déterminants des dépenses de santé à Pikine : impact des maladies chroniques

Moussa DIENG CERDI, Université d'Auvergne

Intérêt : Déjà très éprouvées par les dépenses de santé liées aux maladies infectieuses, les populations africaines doivent faire face de plus en plus au lourd fardeau des maladies chroniques. Au Sénégal, les maladies chroniques sont devenues un vrai problème de santé publique et elles représentent une part très importante des dépenses de santé des ménages. Les résultats de l'EDS-MICS³ (2010-2011) ont montré que la proportion de personnes déclarant une maladie chronique est relativement élevée : 18,6 des femmes et 8,5 % des hommes.

Objectifs : L'étude se propose d'étudier les déterminants des dépenses de santé dans un environnement urbain en mettant l'accent sur les maladies chroniques. Les objectifs sont d'une part d'analyser les facteurs qui influencent les dépenses de santé des ménages en fonction du type de maladie, des périodes de l'année, des groupes de population et d'autre part d'évaluer l'impact des dépenses de santé liées aux maladies chroniques sur les dépenses de santé des ménages.

Méthodes et résultats préliminaires L'étude est basée sur un suivi d'un échantillon de 449 ménages issus de huit quartiers de Pikine (banlieue de Dakar). Un suivi trimestriel a été mis en place entre décembre 2010 et novembre 2011 pour recenser tous les épisodes morbides et les accouchements, survenus dans le ménage durant cette période.

Le modèle est estimé par la méthode en deux étapes de Heckman⁴, en corrigeant l'hétéroscédasticité des résidus estimés dans la deuxième équation. Pour l'estimation du modèle, les quatre passages sont traités ensemble, en pooling.

La population d'étude est composée de 5520 individus. Les maladies chroniques déclarées à Pikine concernent environ 6% des individus (316 personnes).

³ Agence Nationale de la Statistique et de la Démographie (ANSD) [Sénégal], (2012), *Enquête Démographique et de Santé à Indicateurs Multiples au Sénégal (EDS-MICS)*

⁴ HECKMAN J., « Sample selection bias as a specification error », *Econometrica*, 47, 153-161, 1979

La population déclare dans 53,67% des cas suivre un traitement régulier pour le traitement de la maladie. Pour ceux qui ne suivent pas de traitement régulier, 15 % déclarent que c'est lié à des problèmes financiers, 32% à une faible gravité de la maladie, 4% à l'inefficacité de tout traitement. .En comparaison avec les dépenses liées aux épisodes aigus, les dépenses pour les maladies chroniques sont beaucoup plus importantes. L'estimation du modèle d'Heckman est en cours.

Parallel session 7: Universal Health Coverage experiences

PS 07/1

Universal Health Coverage and the Post-2015 Health Agenda: Issues of Sustainable Health Financing and Consumer Choice of Provider in Sub-Saharan African Countries

Saheed Olayiwola, University of Lagos

Aim Universal Health Care (UHC) is essential to sustainable and inclusive development because it mobilizes all viable sources of funding within a coordinated framework. The World Health Organization argued that UHC ensured that people have access to the needed health services in sufficient quality and ensured that the use of these services does not expose the user to financial hardship. The Post-2015 health agenda aimed to mitigate catastrophic health-care expenditure and ensures that financing options are developed within the macroeconomic, socio-cultural and political context of each country. To this end the development of health system financed by general taxation revenues and/or health insurance contributions that pool risks was suggested. These health financing mechanisms as argued separate utilization from direct payment and can ensure access to health care, even for the most vulnerable groups. However, each of this financing option has their limitations. For example, health financing via general taxation may not be sustainable in low income developing countries as a result of a limited tax base and the impact of adverse selection and moral hazard on costs and health insurance contributions may lead to the discontinuation of voluntary health insurance.

Another issue is the right of consumer to select the provider of medical care they need under the chosen financing mechanism. The choice of provider is expressly guaranteed by legal and ethical considerations but a financing option which failed to guarantee consumer sovereignty on the choice of provider may limit the capacity of the consumer to exercise this right without coercion or interference. This study aimed to examine the feasibility of general tax and insurance financed health system in Sub-Saharan African countries.

OBJECTIVE The study examines the feasibility of general tax and insurance financed health system in ensuring access to sexual and reproductive health and reduce the level of out-of-pocket expenditures for all population groups with unhindered consumer sovereignty on the choice of health care provider in Sub-Saharan African Countries.

METHODOLOGY The study employed a comparative analysis of the performance of tax financed and insurance financed health system in Sub-Saharan African countries, Asia, Europe and United States of America to determine which is more suitable for the Sub-Saharan African countries.

KEY FINDING The key finding is that insurance financed health system with adequate government regulation and support will ensure more access to sexual and reproductive health and better guarantee consumer sovereignty in choosing provider irrespective of individuals' social-economic strata.

Assessing Ghana's NHIS after 10 years

Eugenia Amporfufu, Department of Economics, Kwame Nkrumah University of Science and Technology; Chris Atim, World Bank; Meschac Attinwasonou, Institut de Recherche pour le Développement

Background: The law establishing the National Health Insurance Scheme (NHIS) in Ghana was passed in 2003 (Act 650). It specifically created an innovative, special VAT levy as the principal means for financing the scheme. This was a bold and ambitious piece of legislation, with the aim of moving Ghana rapidly towards universal health coverage, in a context where no other country at Ghana's level of income had ever achieved or even made substantial progress towards this goal. Since then, Ghana's NHIS has been studied and written about and even become a 'mecca' for other African countries seeking to make progress in this direction. Ten years after the law was passed, it is appropriate to ask some questions about the progress made by the NHIS. This study seeks to assess the financial performance and sustainability of the NHIS after 10 years, while also exploring some other related questions.

Objective: The objective of the study is to examine the NHIS' performance and the sustainability of its financing model 10 years after Act 650, and to look at how those dimensions may have impacted related questions such as equity and provider behavior (in terms of provider response to the incentives of the NHIS financing environment).

Methods: The study methodology includes a review of primary data collected on the NHIS (eg household surveys conducted since it was established), scheme records, key informant interviews and some modeling. Primary data sources include the DHS and Ghana Living Standards Surveys. Additional sources are the national health accounts. The study models revenue and expenditure as well as other parameters of the scheme's sustainability.

Findings: The study is ongoing but preliminary findings show that:

- Judged only through the currently available NHIS revenue sources and expenditure profile, there are grounds to question the sustainability on the NHIS
- However, the NHIS is now recognized a vital national social gain that all the main political parties have committed to supporting; leading to a search for additional financing sources; arguably therefore, the problem of the NHIS is not one of short term bankruptcy as much as it is a medium to longer term contingent liability on future Ghana Government resources
- The current NHIS design greatly favored providers in terms of the opportunities for gaming and weak controls, while the equity impact has also been mixed.

Background: Nigeria undertook a major step towards achieving universal health coverage (UHC) in 1999 with the promulgation of a National Health Insurance Decree by the federal government of Nigeria, which legally established the National Health Insurance Scheme (NHIS). This paper examines why and how the national health insurance reform targeting UHC developed over time.

Methods: Data were collected through review of relevant documents and 35 in-depth interviews. Using a stakeholder analysis approach, the main phases of the policy development process were identified, likewise the roles played by various actors involved given the prevailing context, and how, leveraging their interests and influences, they shaped the policy process and outcome.

Results: The need for a policy solution to dwindling public financial resources for health stirred political interest in establishing a NHIS. The availability of private sector options for implementing the NHIS given the poor confidence of stakeholders in the public health systems, led to the consensus amongst stakeholders to use health maintenance organisations (HMOs) as the main operators of the scheme. The dependence of policy bureaucrats on these HMOs for technical aspects of the policy facilitated their integration in favourable ways into policy and implementation guidelines for the programme. However, it also resulted in significant opposition from state governments, whose initial operational role was taken over by HMOs. Despite the unresolved conflicts, stakeholders were mobilised, the main programme of the NHIS was launched, and implementation commenced because of the strong interest and influence of the Minister of Health and the President at the time. Subsequently though, the NHIS gradually sought to establish itself as the prime driver of the process following the reduced interest of the Minister (and Ministry) of Health, but with difficulties in galvanising the required critical support from stakeholders (mainly States and labour unions) for coverage expansion.

Conclusion: The study showed that health-financing reforms are not straightforward, rational processes. Actors involved play roles that drive or derail such reforms given their interests and the prevailing context, and leverage the power at their disposal to influence the process. Policy-makers involved in UHC-related reforms need to carefully manage stakeholder interests while developing such reforms, to enhance attainment of required objectives.

PS 07/3

Mobile Money as a Vehicle for Moving Health Systems Towards Universal Health Coverage: An Analysis of Selected Case Studies

Abeba Taddese, Results for Development; Sherri Haas, Abt Associates; Pamela Riley, Abt Associates; Marilyn Heymann, Results for Development

Aim: To highlight the potential that mobile money offers to expand health care access to poor and vulnerable populations.

Objective: We catalog and analyze mobile money applications in health in the context of the building blocks of a health system, and focus our research on innovations and opportunities for integrating mobile money into broader health sector objectives.

Methodology: We performed a literature search, including gray literature, to explore the role of mobile money in strengthening health systems with a specific focus on health financing, human resources for health, and service delivery. We examine and document the use of mobile money for vouchers, pre-paid savings accounts, health insurance, care costs such as emergency transportation and human resources for health. We review evidence from Kenya, Tanzania, Madagascar, Ghana and the Philippines. Our research highlights linkages between mobile money applications and universal health coverage goals of improving accessibility, quality and affordability of health services for poor and vulnerable populations.

Findings: Our findings confirm that mobile money presents an opportunity to complement and enhance efforts to reduce financial barriers and expand access to health services for the poor, helping countries move towards universal coverage. Findings also point to gaps in the evidence base on mobile money in health. We identify impact, and operational and cost analyses as emerging priority areas for the research agenda on mobile money in health.

Parallel session 7: Health insurance: country experiences

PS 07/4

Analyse de l'offre de soins dans le cadre de la mise en œuvre de l'Assurance Maladie Obligatoire (AMO) au Mali

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Aim: En vue d'améliorer l'accès aux soins dans le cadre de l'atteinte des OMD et dans le souci d'assurer une équité d'accès à tous, le gouvernement du Mali a entrepris des réformes visant à répondre de façon complète et efficace en matière de protection sociale aux besoins de sa population par la mise en place à travers la Loi N°09-015/P-RM du 26 juin 2009, d'un régime d'assurance maladie obligatoire (AMO) pour les salariés et les retraités des secteurs public et privé.

Objectives: L'étude a pour objectifs d'apprécier la capacité de l'offre de soins à répondre aux besoins des patients dans le cadre de la mise en œuvre de l'AMO, notamment en termes d'établissements sanitaires, de personnels qualifiés et de leur répartition sur le territoire national.

Methods: Elle repose sur une recherche documentaire : les rapports d'études techniques de faisabilité de l'AMO, le rapport d'évaluation du Programme Décennal de Développement Sanitaire et Social et les données secondaires des statistiques de la carte sanitaire.

Key Findings: Il ressort de cette étude que cette réforme couvre 1 945 753 habitants soit 18% de la population. En ce qui concerne les infrastructures, les ratios sont loin d'être satisfaisant. Le Mali dispose d'un hôpital pour 1 117 803 (OMS, 1 pour 150 000), 1 centre de santé pour 219 633 hts (OMS, 1 pour 50 000) et un poste de santé pour 13050 hts (OMS, 1poste de santé pour 10 000 hts). Au sujet des ressources humaines, on observe que le ratio médecin/habitant est largement en deçà de celle admis par l'OMS, 1 médecin pour 14511 et 1 sage femme pour 21 526. On note également une répartition inégalitaire à travers le pays. La disponibilité des médicaments souffre des ruptures fréquentes (19,5%) et 52% des structures pharmaceutiques sont concentrés dans la seule capitale (Bamako). Il faut souligner que les éléments cités plus haut impactent la qualité de service aux usagers.

Conclusion : Malgré les efforts consentis par le Mali, l'offre de soins actuelle mérite d'être améliorée pour rendre l'AMO plus efficace

PS 07/5**Multi-level stakeholder perceptions of poverty identification criteria for a pro-poor health Insurance scheme in Tanzania**

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Aim and objectives: In Tanzania vulnerable groups, notably pregnant women and children often pay for services despite the existence of exemption policies. The Tanzanian National health Insurance Fund has initiated a program for distributing insurance cards to poor pregnant women to empower them to overcome financial barriers in accessing maternal and newborn health services. Poverty identification criteria were selected to identify pregnant women who qualify, including housing materials, water sources, cooking fuel, toilet facilities, distance, income, meals per day and the number of dependents including those with disabilities.

Methods: As part of an independent process evaluation, the acceptability of the selected criteria was assessed at baseline. Two districts were purposively selected, for intervention (Mbarali) and control (Kilolo). Qualitative tools were developed to explore perceptions and reactions to the program. National poverty criteria were utilized to identify three of the poorest villages in each district. In-depth interviews were conducted with 38 respondents across multiple levels consisting of community leaders, health facility staff, district health managers, national NHIF managers. Six focus group discussions were also conducted with community members. Data were analysed using framework analysis followed by thematic and content analysis on acceptability of each criterion.

Key Findings: Perceptions of each of the criteria will be reviewed across the different stakeholder levels to show the variation in understanding and acceptability among different stakeholders. Generally, national managers justified the criteria noting the relevance of each to poverty. Community respondents perceived some of the criteria as appropriate and others not. District managers felt that some of the criteria could create biases; such as a family might have few children but still be very poor. Some respondents at district and facility levels expressed that certain criteria capture factors more related to structural constraints rather than individuals. For instance, they noted that the criterion of distance to the facility relates more to government decisions regarding placement of facilities and that access to water is dependent on village government decisions. A number of district and community leaders indicated, some criteria are more about knowledge levels than poverty, some felt that failure to construct a latrine related more to knowledge than resource availability.

In order to ensure local relevance, developed poverty targeting criteria may require more localized adaptations based on input from community stakeholders, particularly local implementers and potential beneficiaries. These groups will be crucial to successful program implementation as subjective understanding of the criteria may result in wide variations in their application.

PS 07/6**Preferences to social health insurance among formal sector employees: a discrete choice experiment**

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Aim and objectives This study seeks to measure preferences for social health insurance among potential enrollees.

Methods: A discrete choice experiment was conducted among formal sector employees in Addis Ababa. Participants of the study were asked to make choice between sequences of hypothetical social health insurance scenarios described by eight attributes.

Keys findings: The results of the study show that the greatest value was attached to benefit packages of health insurance respectively followed by health care providers and coverage of drug. The least valued attribute was type of enrolment. Respondents were willing to pay almost 4% of their monthly salary for health insurance with comprehensive coverage of health care services. However, they would trade-off their preference of comprehensive benefit packages for lower monthly contribution or full coverage of drugs or for services of both public and private health care providers. Respondents who had never married and women were willing to pay consistently more of their monthly salary for the attributes compared to their counterparts. This provides evidence of need and income effect in determining the demand for health insurance; never married normally have more disposable income compared to married and women need more health care than men. Similarly, disaggregation of respondents in to three wealth classes (lower class, middle class, and upper class) shows that upper class respondents were willing to pay about 5% of their monthly salary for benefit package without exclusions. However, lower class respondents were willing to pay about 4% of their monthly salary while middle class respondents were willing to pay 2.81% of their monthly salary. For services provided by both public and private providers, the middle and upper class respondents were willing to pay 3.03% and 2.17% of their monthly salary. This implies that even though respondents with more wealth (upper class) are willing to pay more for some of the attributes, respondents from lower level are also willing to pay proportionally more of their monthly salary for other attributes, showing tendency of risk aversion among the relatively poor. Lower weight was attached to full coverage of outpatient services and laboratory tests, both in overall analysis and subgroup analysis. Hence, effective copayments may be applied for these services.

Parallel session 7: Governance and accountability

PS 07/7

Actors, framing, context and decisions to provide user fee exemption for maternal and neonatal care, in Ghana

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Aim and objective: Decision making occurs at all levels and extends throughout the policy cycle. The aim is to understand the “how” and “why” of decisions to provide user fee exemptions for maternal and new-born care in Ghana; by exploring the actors involved, their framing of the issues and the influence of contextual factors.

Methods: Fifty-two (52) in-depth interviews were held with twenty-seven (27) key informants. Additionally data was collected through document reviews and participant observation and documentation of policy making processes at national level. Data were analysed qualitatively for themes, commonalities and contrasts; and validated using triangulation of research strategies, tools and data sources.

Key findings: Decision making, including agenda setting is path dependent and occurs within the parameters of past policies and choices as well as inherited institutional arrangement. When issues arise, problems are being formed and policy options set out. The issues are set in a frame of policies, programmes and decisions of the past. Decision points with varying scope of exemption for maternal and new born were set in:

1. 1969-antenatal[some facilities], deliveries, under 18 in government health facilities
2. 1971-antenatal, deliveries, under 18 in government health facilities
3. 1983-antenatal , postnatal, child welfare clinic in government facilities
4. 1985- antenatal , postnatal, child welfare clinic in government facilities
5. 1997-antenatal, postnatal, under five in government facilities
6. 2003- antenatal, deliveries, postnatal in 4 regions[northern, upper west, upper east, central] in all health facilities
7. 2005-antenatal,deliveries, postnatal national in all health facilities
8. 2008-free maternal care under National Health Insurance Scheme in all accredited facilities.

Actors framing was influenced by contextual situation, as well as the actor’s interest, implementation modalities of already existing exemptions and available demographic evidence. Contextual factors identified include historical, political, economic and international agendas. Actors predominately involved were; public officers, services providers, developmental partners, politicians and civil society organizations.

Scientific evidence clearly played a role in agenda setting and decision making in all the cases, however it was not a linear or “single variable” effect. The decision making process occurred in the light of multiplicity of “evidence”; where considerations of context including history and societal values; who the actors are and how they frame the issues are also a form of “evidence” factored into decision making.

PS 07/8**A stakeholder analysis of the capitation policy under Ghana's National Health Insurance Scheme**

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Background: As part of measures to contain escalating costs of services under Ghana's National Health Insurance Scheme (NHIS), the National Health Insurance Authority (NHIA) initiated pilot implementation of a capitation (per capita) payment policy in the Ashanti Region in January 2012 as a provider payment mechanism. The aim of the study was to undertake a stakeholder analysis of the pilot to investigate stakeholders' position, power and interest during the piloting of the policy.

Methods: The study was an across-sectional qualitative study. Data were collected between May and July 2013 using an interview guide for regional level actors in the Ashanti Region and a Focus Group Discussion guide for clients. Data analysis was done manually using thematic analysis.

Results: One of the key findings of this study was that though stakeholders were generally aware of the capitation policy and its pilot implementation there were lots of misinterpretations of some parts of the policy especially at the pre-implementation phase which led to opposition from some primary stakeholders like the clients, private facility managers and staff of the DMHIS. However, their position changed during the implementation and post-implementation phases as a result of better understanding. The NHIA and the Parliamentary Select Committee for Health were the main proponents of the capitation policy and possess high power. The private facility managers on the other hand were identified as the main opponents of the policy and possess high power. The study revealed that stakeholder's position varied across each phase.

Conclusion: The general position of stakeholders (both primary and secondary) was that capitation payment system is a good idea. However, a critical attention must be given to the contentious aspects of the policy in order to facilitate effective scaling-up implementation.

PS 07/9**Examining the effects of political decentralisation in Kenya, on governance and accountability structures and practices for sub-national level health sector operational planning and budgeting**

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Aim: Decentralization of government systems involves the transfer of power and authority in public planning, management and decision making from a central or national level to sub-national levels.

Recently, Kenya through a nationwide public referendum passed a new constitution. A key

feature in the proposed laws is the devolution of the government functions from national level to 47 'semi-autonomous' counties. The county governments have autonomy and discretion for priority setting; power to allocate resources received from the national level; and power to levy local-level taxes and to undertake other forms of local resource mobilization to boost service provision.

This study aims to describe and analyze the effects of this new and massive political decentralization in Kenya on operational planning in the health sector at the sub-national level in Kenya. By undertaking this study, we hope to contribute to the broader decentralisation literature; with a specific contribution on health sector decentralisation during times of broader political change within government

Objectives: To describe and analyze the goals and intended strategies of political decentralization for health sector operational planning and budgeting. To describe and analyze stakeholder expectations and experiences of political decentralization for health sector operational planning and budgeting. To draw on the empirical data and literature on good governance and accountability to identify strategies for enhancing achievement of decentralisation goals within the health sector

Methods: We used a case study design; with the inquiry being guided by a conceptual framework which draws on decentralisation and policy analysis theoretical frameworks. Two sub-counties were selected as study cases. Data is being collected through document reviews, key informant interviews and participant observation of the operational planning process. Health workforce and health commodities were selected as tracers for tracking the planning process. A thematic framework approach shall be used for analysis.

Key findings: Results will be presented illustrating how health workforce distribution and management; and health commodities supply and management, in each of the sub-counties has been affected by the political decentralisation in Kenya.

PS 07/10

The challenge of bridging the gap between researchers and policy makers: Experiences of getting research into policy and practice in Nigeria.

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Background: The goal of GRIPP is to ensure knowledge translation, knowledge transfer, knowledge exchange, research utilization, implementation, diffusion, and dissemination. The integration of research findings into policy and communicating research findings to Nigerian policymakers is a key challenge.

Aim: This study aims to provide new knowledge on the methods that have been utilized by the Health Policy Research Group (HPRG) which have been successful in bridging this gap.

Objectives: To explore the methods used by the HPRG in GRIPP, its features and challenges. It also looks at the research attributes that enhance GRIPP and the contextual enabling and

constraining factors.

Methods: A case study approach was used to analyse the various stages and experiences from selected studies and projects conducted by the HPRG. Six research studies and two projects were purposively selected to demonstrate the different methods the HPRG has utilised to influence GRIPP in Nigeria. The methods of GRIPP analysed were 1) Dissemination of Research findings, 2) Involving stakeholders in designing objectives of a research and throughout the research period. 3) Facilitating policymaker-researcher engagement and translating research findings into policy and practice. 4) Policy and decision makers seeking evidence from researchers. It paid particular attention to the role of actors/stakeholders and this was elicited using In-depth Interviews.

Key Findings: All respondents agreed on the importance of dissemination irrespective of the methods used. A bigger factor was the active engagement of key stakeholders and policy makers during dissemination and the involvement of policy and decision makers during research-priority setting and through the research process which positively influenced GRIPP. Respondents uniformly agreed that research findings need to be timely. Limited resources, lack of research funding and resistance to change were some of the constraining factors to GRIPP.

Conclusion: Knowledge to action in form of research to policy is not a linear process but rather a complex relationship with the actors' role being the most influential. These actors' roles and power also vary under different political contexts.

The experience of the HPRG in GRIPP could be summarised in a form of model of the different strategies it has employed in using their research findings and projects to impact policy and perhaps tested in other contexts both within and outside Nigeria.

Parallel session 7: Studies on HIV, Malaria, TB

PS 07/11

Providing ART efficiently: Determinants of facility performance in Uganda

Jane Achan, Makerere University, Infectious Diseases Research Collaboration; Anne Gasasira, Institute for Health Metrics and Evaluation; Gloria Ikilezi, Makerere University, Infectious Diseases Research Collaboration; Samuel Masters, University of North Carolina; Allen Roberts, Institute for Health Metrics and Evaluation; Kelsey Moore, Institute for Health Metrics and Evaluation; Annie Haakenstad, Institute for Health Metrics and Evaluation; Herbert Duber, Institute for Health Metrics and Evaluation; Michael Hanlon, Institute for Health Metrics and Evaluation; Emmanuela Gakidou, Institute for Health Metrics and Evaluation

Aim Recent evidence suggests a reversal of trend in decreasing HIV prevalence in Uganda despite efforts by the Ugandan Government and international donors to control the epidemic. One potential way to help alleviate this burden is to increase antiretroviral therapy (ART) for those currently not receiving care, as well as to improve ARV availability to minimize treatment interruption due to drug stockouts.

Objectives Since the mid-2000s there has been a surge of funding for ARV therapy in Uganda, however, little work has been done to understand what delivery mode is the most effective. We use patient charts extracted from health facilities across Uganda to assess the effectiveness of various service delivery methods and patient outcomes.

Methods The data for this study was collected throughout 2012 using a structured questionnaire in health facilities offering ART in Uganda by the Institute for Health Metrics and Evaluation (IHME) in collaboration with the Infectious Diseases Research Collaboration (IDRC). Data was collected in 56 geographically-representative hospitals (55%), health centers (40%) and clinics (5%) nationwide. The questionnaire used was designed to replicate the standard paper based record system for HIV/AIDS care in Uganda. The survey captured demographic and health status information from patient charts. Viral load samples were also taken for a random subset of patients in 15 facilities. In total, chart data were captured for over 10,000 patients and viral load measurements were taken for over 3,000 patients. These patient data were paired with health facility data, including data on expenditures, personnel, management structure and HIV/AIDS services. Patient exit interviews regarding satisfaction with HIV/AIDS care were conducted for up to 60 individuals at each facility.

Key Findings Preliminary analysis of these data suggests that certain facility characteristics, including urban/rural status, personnel, and patient volume, are associated with patient outcomes. Rural status and the number of nurses at the health facility are also associated with reduced odds of patient attrition (27% for rural and 9% per nurse). However, volume is associated with significantly increased odds of attrition, 4% per thousand additional patients. These findings have significant policy implications. As Uganda ramps up investment in ART it should do so in a manner than provides the best possible outcomes at the lowest possible cost.

PS 07/12**Availability of essential therapies for HIV treatment in health facilities in Kenya and Uganda: a multi-country survey**

Gloria Ikilezi, Makerere University, Infectious Diseases Research Collaboration; Anne Gasasira, Institute for Health Metrics and Evaluation; Thomas Odeny, Institute for Health Metrics and Evaluation; Samuel Masters, University of North Carolina; Brendan Decenso, Institute for Health Metrics and Evaluation; Emily Dansereau, Institute for Health Metrics and Evaluation; Annie Haakenstad, Institute for Health Metrics and Evaluation; Kelsey Moore, Institute for Health Metrics and Evaluation; Michael Hanlon, Institute for Health Metrics and Evaluation; Herbert Duber, Institute for Health Metrics and Evaluation; Jane Achan, Makerere University, Infectious Diseases Research Collaboration; Emmanuela Gakidou, Institute for Health Metrics and Evaluation

Aim Antiretroviral therapy (ART) coverage for HIV treatment has rapidly expanded in sub-Saharan Africa. As patients continue to be enrolled into treatment programs, it is critical to ensure uninterrupted supply of antiretrovirals (ARVs) and other medicines needed for overall HIV care.

Objectives We utilized data from a multi-country health facility survey to determine the availability of essential therapies for HIV care in Kenya and Uganda.

Methods We assessed the availability of ARVs, cotrimoxazole and anti-tuberculosis medicines at nationally representative samples of health-facilities with ART programs. Medicines were reported as in-stock if they were observed by study personnel. We classified the following therapies as essential for HIV care: cotrimoxazole; first-line ART (ARVs included in at least one nationally recommended first-line regimen); second-line ART (Lopinavir/Retonavir-containing regimens) and anti-tuberculosis therapy (medicines included in nationally recommended first-line anti-TB regimens). We used multivariable logistic regression to identify health-facility factors associated with availability of essential therapies for HIV including facility-type (hospital vs. health-center), location (rural vs. urban), ownership (government vs. private), drug delivery system (push vs. pull) and buffer stock policy. Adjusted p-values from a preliminary analysis are presented.

Key Findings Data are from 214 health-facilities (106 in Kenya and 108 in Uganda). First-line ART was in-stock at over 90% of health-facilities in both countries while 58% in Kenya and 56% in Uganda had second-line ART. Over 95% of facilities had cotrimoxazole while 77% in Kenya and 80% in Uganda had anti-TB therapy. All essential therapies were in-stock at 46% of Kenyan and 56% of Ugandan health facilities ($p=0.173$). In Kenya, government-owned facilities were more likely to have all therapies in-stock (OR: 3.37, $p=0.024$). In Uganda, health-facilities which kept buffer stocks (OR: 5.28, $p<0.001$) and urban facilities (OR:1.63, $p=0.03$) were more likely to have all therapies in-stock. Cotrimoxazole and first-line ART were widely available across ART-care programs in both countries, however it is of concern that less than 50% of sampled facilities had all essential therapies for HIV care. As the epidemic matures, countries should expand the capacity to provide second-line ART.

PS 07/13**Implementation of a TB Reach project in Cote d'Ivoire**

Yvan Agbassi, ACONDA-VS; Siaka Toure, ACONDA-VS

Aim: Increase the number of TB cases (smear-positive pulmonary tuberculosis (PTB+)) detected within the general population and PLWHA in Abidjan and in the west side of CI from 2689 (baseline) to 3339 PTB+ (650 additional cases)

Objectives:

- Screening systematically walk-in patients (WP) and PLWHA in health centers
- Seeking actively TB cases in the environment of all PTB+
- Organizing community monitoring

Methods: 36 community counselors (CC) and 34 health workers have been trained to fill a TB screening form. On the sites, CC organize communication training sessions to encourage behavioral change. CC administer the form to walk-in patients and population living with HIV/AIDS and health workers are more keen to screen HIV patients for TB. In addition, CC deliver the screening form to the accompanying persons. After screening, CC and health workers refer suspect patients for TB testing. CC also conduct home-based visits to administer the screening form to at least 10 persons in the environment of each PTB+ case. Subsequently, they refer suspect patients to health centers for TB testing. They also stay in touch with the suspect persons in the community. Funds are provided to allow indigent patients from the community to visit health centers for TB testing. Coaching, monitoring and evaluation missions are organized jointly by an Ivorian NGO (ACONDA) and the national tuberculosis program (NTP) on intervention sites to coordinate activities.

Key results: From April 24th to June 30th, 18454 persons have been screened among the general population and PLWHA by CC. 363 persons have been tested for TB. 145 persons were diagnosed PTB+. In CI, the treatment is initiated for all cases from the detection day. Thanks to this project, the increased detection of co-infected HIV/TB patients should allow a better orientation of their treatment. The faster PTB+ detection should help reduce the delay in the TB treatment; knowing that a high delay in treatment is linked to a high mortality among co-infected HIV/TB patients.

PS 07/14**Does free distribution of long lasting insecticidal bed nets among pregnant women improve possession and usage? : Findings from cross sectional survey from 19 local government areas in Anambra state, South East Nigeria**

Jane Enemuoh, Health Policy Research Group; Obinna Onwujekwe, University of Nigeria; Benjamin Uzochukwu, University of Nigeria; Joseph Oranuba, Ministry of Health Awka; Amobi Llika, Department of Community Medicine, Nnamdi Azikiwe University, Nnewi, Anambra State, Nigeria

Aim The aim of the study was to examine the impact of free distribution of LLIN to its possession and use among pregnant women in Anambra state, Nigeria.

Objectives The objectives of this study were to examine the coverage of LLIN distribution among pregnant women, to assess the level of use of LLIN at least a night before the survey and to examine episodes of malaria among pregnant women in the past one month.

Method A Lot quality assurance sampling (LQAS) method was used. 19 villages were selected randomly sampled from each of the 21 LGAs at first. Secondly, from each village, six households that had a pregnant woman and/or a child under-five years were included in the study only once. A pre-tested interviewer administered questionnaire was used to elicit information from the respondents. Data was collected on socio-demographic characteristics of the head of the households or the care giver if the head of the house hold is not available, the gestational periods of the pregnant women interviewed, episodes of malaria in the past one month and

Key Findings 2401 households were surveyed for data collection and relevant information were collected from 898 pregnant women with mean gestational age of 2.1 (SD 2.9), and 2399 households with children under five years. 1932 (80.5%) of the households had at least one LLIN representing >80% coverage in LLIN distribution in the case of pregnant women and children under 5 five years. Only 248 (27.6%) of all the pregnant women and 486 (20.35) of all households with children under five years surveyed had one or more episode of malaria in the past one month. Use of LLIN 24 hours before the survey among pregnant women was very low 107 (8.6%), although 1244 (64.4%) of all households had used an LLIN. The low usage is reflected in the seasonal variation, dry season a hot humid climate in the tropics in which Nigeria is part of and the study was taken at that season.

Conclusion and recommendation The programme has made headway to achieving LLIN coverage especially among pregnant women. However, challenges still remains regarding improving LLIN use for prevention and control of malaria if distribution is inconsistent. There's need to back up free distribution with strategies or policies that will ensure that stock-outs of LLIN are communicated and replenished timely to maintain high coverage over time as well as to sustain success already attained.

Parallel session 8: Early Lessons from Design, Implementation and Evaluation of Results-Based Financing Projects in the Health Sector (OS)

PS 08/1

Organized Session: Early Lessons from Design, Implementation, and Evaluation of Results-Based Financing Projects in the Health Sector

Session Lead: Rifat Hasan

Results-Based Financing (RBF) is a health system approach for improving health outcomes. An alternative to input-based financing, RBF is a package of interventions – including contracting of priority services, increased autonomy of health facilities and verification of results – that can bring about systemic changes. Various RBF approaches are being piloted globally, and many are being evaluated. The majority of these evaluations are impact evaluations (IEs) aiming to estimate the causal impact of the programs on maternal and child health indicators.

However, it is increasingly evident that while it is necessary to understand whether RBF has impact (and how much), this is not sufficient. More information is needed about the causal mechanisms and the interpretation of IE results: under what circumstances is RBF successful? What is the role of contextual factors, including non-RBF aspects of the health system? Were the assumptions made at the design of the RBF program met?

This **organized panel session** is supported by a paper in which we propose a comprehensive learning agenda and a conceptual framework that can help achieve key operational goals.

We will highlight the Conceptual Framework for understanding RBF and set the stage for three papers to be presented (i) Verification in RBF for Health: Findings and Recommendations from a Cross-case Analysis (ii) Impact of RBF on Quality of Basic Health Services in Burundi (iii) Building the Evidence for RBF for Health Through Impact Evaluation: Results from Argentina, Cameroon and Zimbabwe.

PS 08/2

Design, Implementation and Evaluation of Results-Based Financing Programs in the Health Sector: Conceptual Framework and Methodological Options

Rifat Hasan, Christel Vermeersch, Elisa Rothenbühler, Monique Vledder, Shunsuke Mabuchi⁵

Aim: Results-Based Financing (RBF) is a health system approach for improving health outcomes. An alternative to input-based financing, RBF is a package of interventions – including contracting of priority services, increased autonomy of health facilities and verification of results – that can bring about systemic changes. Various RBF approaches are being piloted globally, and many of these are being evaluated. The vast majority of these evaluations are impact evaluations (IEs) aiming to estimate the causal impact of the programs on maternal and child health indicators.

Objective: However, it is becoming increasingly evident that while it is necessary to understand whether RBF has impact (and how much), this is not sufficient. More information is needed about the causal mechanisms and the interpretation of IE results: under what circumstances is RBF successful? What is the role of contextual factors, including non-RBF aspects of the health system? Were the assumptions made at the design of the RBF program met? Despite the overwhelming plea for a more integrated analysis and understanding of RBF programs, most existing evaluations of RBF are based on the premise of a causal chain model that linearly links inputs to outcomes in a “black box” approach. However, understanding the various aspects listed above requires going beyond this and embracing a broader, multi-faceted conceptual and methodological approach.

Methods: In this paper, we propose a comprehensive learning agenda and a conceptual framework that can help achieve key operational goals. Opportunities to learn and contribute to the knowledge base exist at all stages of an RBF program. The combination of theory, exploratory studies, impact evaluations, monitoring and documentation, implementation studies and topic-specific analyses collectively answer how an RBF program is implemented, whether it achieves results, why or why not and what the causal mechanism is.

Key findings: The conceptual framework unbundles the components of and assumptions about RBF programs and embeds RBF within the health system and its broader context. The objective of the conceptual framework is to facilitate and foster rigorous learning from RBF programs in a methodical and disciplined manner. Because assumptions about RBF rely heavily on changing individual or organizational behaviors through incentives, behavioral responses are central in conditioning the efficiency of RBF programs. The conceptual framework integrates principles about human behavior and highlights the relationships within and between the health facility, health system, community and political economy. The paper also discusses the need to adopt a multidisciplinary approach with both quantitative and qualitative methods in order to arrive at comprehensive answers.

PS 08/3

Impact of Results-Based Financing on Quality of Basic Health Services in Burundi

Huihui Wang, Moulay Driss, Alain-Desire Karibwami

Aim: Strengthening quality of health services is a fundamental priority for improving health sector performance in addition to increasing the coverage of health services. Among various mechanisms aiming to improve the quality of services, Results-Based-Financing (RBF) is one that provides financial incentives for health facilities to improve service quality in many developing countries. In Burundi, a national RBF program was introduced in April 2010 for all government health centers and hospitals, under which facilities receive regular payment based on quantity of selective services and overall service quality measured by quality scores.

Objectives: This study aims to assess the impact of this RBF program on quality of services provided by health centers (500+) in Burundi during its first two years of implementation (Apr.2010-Jun.2012).

Methods: Technical quality is measured quarterly based on a quality supervisory check list that

covers essential health services such as vaccination, antenatal care and drug management. Subjective quality is measured quarterly as well through small-scale household surveys conducted by community-based organizations. Total quality score is the sum of technical (60% weight) and subjective (40% weight) quality score. All quality scores range between 0 and 100. In addition to analyzing the time trend of total quarterly scores, this study also examined the changes in quality scores of specific service areas (e.g., antenatal visits and birth attendance), as well as scores of specific functions (e.g., health human resources and drug availability).

Key findings: It shows that on average, the total quality score in health centers has almost doubled during the first implementation, from 34.6 to 72.9, and continued to improve during the second year but at a slower pace, from 72.9 to 80.5; in the meantime, the standard deviation has decreased from 14.8 to 9.4. Similar trend has been observed in all 17 provinces of Burundi. Variation between provinces has also reduced; the difference between most and least performing provinces reduced from 41.2 to 18.6.

We concluded that overall service quality of health centers in Burundi has greatly improved with the implementation of the RBF program, which also applies to all types of service areas and functions. With the decrease in variation between provinces and health centers, geographical equity has also been improved at the quality dimension. Further work needs to examine factors that affect the improvement of quality at different stage of RBF implementation so that lessons may be learnt from Burundi's experiences.

PS 08/4

Building the Evidence for Results-Based Financing for Health Through Impact Evaluation: Results from Cameroon

Jake Robyn, Gaston Songo and Omer Zang

Aim: The objective of the Health Results Innovation Trust Fund (HRITF) is to design, implement and evaluate sustainable results-based financing (RBF) pilot programs that improve maternal and child health outcomes for accelerating progress towards reaching MDGs 1c, 4 & 5. A key element of the program is to document the extent to which RBF programs are effective, operationally feasible, and under what circumstances. It does so by conducting rigorous impact evaluations of most of the RBF projects financed by the HRITF.

Objectives: The evaluations are essential for generating new evidence that can inform and improve RBF, not only in the HRITF pilot countries, but also elsewhere. Rigorous prospective impact evaluations on the causal effects of health-related RBF interventions on the access to and quality of service delivery, health expenditures, and health outcomes are currently being conducted or in design and planning stages in over 30 countries.

Methods: The session will provide an overview of the HRITF impact evaluation design and present preliminary results from Cameroon, where a quasi-experimental impact evaluation was conducted between 2011 and 2013 in the Littoral region to measure the effect of performance-based financing (PBF) on the quantity and quality of health care services provided in targeted areas. Baseline (2011) and endline (2013) household and health facility surveys were conducted in four PBF districts and six control districts. 52 public and private health facilities

and 1,000 households were sampled in each survey round. Three quasi-experimental impact evaluation methods were applied: Kernel propensity score matching, simple difference in difference (diff-in-diff) and diff-in-diff combined with propensity score matching

Key findings: The impact evaluation shows significant increases in the quality and coverage of key maternal health services such as institutional deliveries, antenatal care, and immunization. An increase in the availability of physicians was also found. There was a very significant impact on utilization of curative care health services, use of modern contraceptives and avoidance of unwanted pregnancies.

Rigorous impact evaluations of RBF investigating the relationship between RBF and health outcomes are an essential element to strengthening the evidence base. In the coming years, the HRITF impact evaluation portfolio will continue to generate further knowledge on RBF by exploring relationships between specific RBF design elements and key maternal and child health outcomes.

PS 08/5

Learning from Implementation to Improve Results-Based Financing: Lessons from Nigeria

Shunsuke Mabuchi, Ayodeji Oluwole Odutolu

Introduction: Result Based Financing (RBF) aims to transform the challenging health system in Nigeria. Initial results from the implementation of the Nigeria State Health Investment Project (NSHIP) show that RBF is addressing issues of fragmentation of services, lack of accountability and focus on results. It provides managerial and financial autonomy and responsibilities to frontline providers, verifies and monitors results stringently at each level of the health system and holds stakeholders accountable for their responsible results. This approach also creates an opportunity to learn from verified performance data, carry out rapid and focused studies and modify approaches based on the lessons learned in a flexible and dynamic way. In Nigeria, during the implementation of RBF pre-pilot activities, the project used in-depth operational data analysis to understand the gaps in performance, carried out two qualitative studies to understand the reasons of the gaps, and adapted the project approaches to better serve the target communities.

Objectives: This presentation aims to share the use of quantitative and qualitative analyses to address key bottlenecks limiting the utilization of health services. It will explain how the RBF project in Nigeria improved its design and implementation using rapid analyses and studies, and highlight the importance of learning from implementation.

Methods: Operational data analysis used monthly output data for basic health services from each health facility that are verified by an independent agency, and reviewed performance trend by indicator and by health facility. Using the results from the operational data analysis, two qualitative studies compared the best and poor performers to understand common barriers to access to health centers and key differentiating factors of performance under the RBF scheme. The studies used conceptual frameworks based on the theory of change for RBF to understand the dynamics of the contextual, demand-side and supply side factors and their link with

performance.

Key Findings: The operational data analysis identified a large and consistent variation in performance between health facilities in the same local government areas (LGAs) under the same RBF scheme. A case study that compared the best and poorest performers identified that community engagement and support and management capacity of officers in charge (OICs) are critical factors that differentiate the high and low performers. In contrast, some contextual factors such as number of staff, proximity to city center and technical qualification of OICs did not appear to affect the performance of the health centers. In addition, a demand-side barrier analysis revealed common and large barriers to access such as transport cost and options and variable service cost. These findings have been incorporated into the RBF implementation design through additional demand-side interventions (i.e., transport vouchers and conditional cash transfer) and supply-side technical assistance by UNICEF focusing on the identified key differentiating factors of performance in one of the three project states. This case suggests the use of focused quantitative and qualitative researches in improving project implementation, and demonstrates an example of Sciences of Delivery researches that focuses on service delivery issues, analyzes the dynamics of service delivery factors and contributes to implementation of programs.

Parallel session 8: Strategic Purchasing for Universal Health Coverage in Sub-Saharan Africa – Lessons from the Ghanaian Experience (OS)

Organized Session: Strategic Purchasing for Universal Health Coverage in Sub-Saharan Africa – Lessons from the Ghanaian Experience

Session Organizer: Irene A. Agyepong

Session Chair: Cheryl Cashin

Structure of Session

1. Chairperson's introductory remarks (5 minutes)
2. Presentations
 - a. Historical pathways and context of provider payment in Ghana (10 minutes)
 - b. Methodology of the assessment / evaluation of the NHIS provider payment system (5 minutes)
 - c. The Ghana Diagnostic related groupings (G-DRG) payment method and attainment of its policy objectives (10 minutes)
 - d. The item fee schedule for medicines payment method and medicines access (10 minutes)
 - e. Experiences and lessons from the capitation pilot (10 minutes)
 - f. A systems view of provider payment and service supply incentives under the NHIS (10 minutes)
3. Discussions (20 minutes)
4. Chairperson's concluding remarks (5 minutes)

PS 08/6

1. Historical pathways and context of provider payment in Ghana –

Helen Dzikunu, Ghana National Health Insurance Authority

Assuring equitable universal access to essential health services without exposing people to undue financial hardship requires adequate resource mobilization as well as efficient use of these resources. It also requires attention to the quality and responsiveness of service supply. The way in which providers are paid for services is a critical part of this process because it can create complex incentives and patterns of provider behavior related to supply and also affect client behavior related to demand. This organized session presents Ghana's experiences and lessons arising related to provider payment; and what other countries in SSA struggling towards universal coverage can also learn from this experience. In this introductory section the historical pathways and Ghana of provider payment in Ghana is briefly described. The Ghana National Health Insurance law was passed in September 2003 and implementation started in 2004. Before the implementation of the NHIS Public sector provider payment in Ghana was by a mix of budgets and out of pocket itemized fee for service with no standard fee schedule.

Private self financing provider payment was by itemized fee for service with no standard fee schedule. The private not for profit sector – mainly mission facilities – provider payment systems were mainly out of pocket payment by clients but they also received some central government budgets and donor money. At the start of implementation of the NHIS, provider payment under the NHIS was by the same schedule as the out of pocket itemized fees for service. In 2008, in response to cost escalation and variable and inequitable fee schedules; a case based payment systems for services known as the Ghana Diagnostic Related Groupings (G-DRG) was designed and introduced in country. Medicines continued to be paid for under itemized fee for medicine, but a standard medicine list and fixed prices periodically negotiated were introduced. In 2010, in response to continued rising costs, cumbersome claims processing procedures and delays in provider payment among others; Ghana set out to design and pilot a per capita provider payment system for primary outpatient care. Since January 2012, the pilot has been in implementation in the Ashanti region of Ghana that has 19% of Ghana’s population. Plans are now being put in place to scale up capitation nationwide in Ghana.

PS 08/7**2. Methodology**

Irene Akua Agyepong, University of Ghana, School of Public Health

This organized session draws upon two studies. The first is a mixed methods study involving document, grey and published literature reviews, health management information system and primary interview data collection and analysis that was used to evaluate the G-DRG and itemized fee schedule for medicines payment methods between April and November 2013. Primary data comprised indepth interviews with providers, insurance scheme managers and frontline staff at national, regional, district and facility levels as well as exit interviews with clients. The second is an internal review conducted by the Provider Payment Mechanism Technical Steering Committee (PPM-TSC) of the process and experiences of designing and implementing the capitation pilot in the Ashanti region.

PS 08/8**3. Case Based payment: G-DRG for services**

Justice Nonvignon, Department of Health Policy, Planning and Management, School of Public Health, University of Ghana; Moses Aikins, Ghana National Health Insurance Authority

This section describes the design of the Ghana DRG payment method for services and analyzes the extent to which relative to the itemized fee for services and medicines payment system it replaced; the design and implementation of the G-DRG for services and had resulted in the objectives with which it was introduced namely:

- simplifying the claims process,
- controlling cost inflation,
- encouraging efficiency i.e. ensuring more cost effective strategic purchasing and

- supporting the sustainability of the NHIS;
- providing sufficient resources to providers for high quality health care delivery under the NHIS;
- improving equity among providers in terms of fairness of reimbursement for the same level and type of service.

PS 08/9**4. Itemized fee schedule: Medicines: Medicines**

Daniel Kojo Arhinful, Noguchi Memorial Institute for Medical Research

This section describes the itemized fee schedule payment method for medicines under the NHIS and analyzed the effects on access to medicines under the Ghana NHIS. The data presented is from the health management information system data analysis, client exit interviews and prescription analysis and provider and purchaser interviews of the mixed methods G-DRG evaluation. The prescription component of the evaluation was intended to measure quality in terms of the outcome and impact of improved access or otherwise and rational use of medicines under the GDRG in the national health insurance scheme. Access was measured in terms of the availability of essential medicines. Rational use was assessed by examining the prescribing and dispensing habits of health providers and the implementation of key strategies such as standard treatment guidelines (STG) and essential medicines lists (EML). A number of indicators were used to measure prescribing and dispensing habits prospectively in health facilities covered in the study.

PS 08/10**5. Experiences and Lessons from the capitation pilot**

Francis Asenso Boadi, Ghana National Health Insurance Authority

In June 2010, the National Health Insurance Authority set up a multi-stakeholder Provider Payment Mechanism Technical Support Committee to advise on the design and support the implementation of a pilot of a per capita payment mechanism for primary health care in the Ashanti region of Ghana. The pilot was to provide information to support plans to make per capita payments for primary health care part of provider payment under the NHIS. Implementation of the pilot started in January 2012. The program remains a pilot in the Ashanti region, but plans and work are under way to scale it up nationwide. This session summarizes the experiences from design and implementation and highlights lessons. It is based on an internal evaluation carried out by the PPM TSC.

PS 08/10

6. A systems view of provider payment and service supply incentives under the NHIS

Irene Akua Agyepong, University of Ghana, School of Public Health

This last presentation in the panel uses a systems' thinking perspective to analyze the "what", "how" and "why" of service supply incentives in relation to the provider payment methods under the Ghana National Health Insurance Scheme (NHIS) in context. It draws upon predominantly qualitative data from the mixed methods G-DRG evaluation. Data analysis was predominantly qualitative and manual and took a grounded theory approach to draw out themes, commonalities and contrasts. As part of the analysis, causal loop diagrams were used to develop a model of how different payment methods may be interacting in context to influence supply incentives and behavior. Findings show that provider payment in Ghana has evolved incrementally over time with reforms generally treated as distinct events rather than interventions in a complex adaptive system. The result is a complex interaction of context and methods to produce intended and unintended effects in terms of service supply incentives. As countries consider or start to implement Universal Health Coverage reform, there is a need to design and implement provider payment methods to support reform from a systems thinking perspective; rather than in isolation. Essential in this should be a critical analysis of actual and potential interactions of methods in context as part of a complex system and the resulting effects on service supply and responsiveness to the needs of clients.

Parallel session 8: Resource allocation and management

PS 08/11

Examining Priority Setting and Resource Allocation Practices in Hospitals: The Case of County Hospitals in Kenya

Edwine Barasa, KEMRI-Wellcome Trust Research Programme Kenya; Sassy Molyneux, KEMRI-Wellcome Trust Research Programme; Mike English, KEMRI-Wellcome Trust Research Programme, Kenya; Susan Cleary, University of CapeTown

Aim To examine priority setting and resource allocation practices in County hospitals in Kenya

Objectives To critically examine the effect of context and actor relations on the content and process of priority setting

Methods We conducted a case study of priority setting practices in two County hospitals in coastal Kenya. We conducted 70 interviews with hospital decision makers, reviewed key documents and conducted 7 months of non-participant observations. Data were analyzed using the thematic approach. We described priority setting practice using a policy analysis framework that examines the context, process, content and actors, critically examining the effect of context and actor relations on priority setting practice

Results The hospital operated under severe resource scarcity, with budgeted needs exceeding available resources by 45%, and strong reliance on out-of-pocket payments by users. Insufficient funds led to a focus on operational objectives rather than strategic goals, and to undesirable incentives including inequitable allocation of budgets that favor high revenue generating departments. Although on paper community values were incorporated into decision making through a hospital management committee including community members overseeing decisions, in practice this committee often simply “rubber stamped” decisions. Some respondents also questioned how representative of the community committee members were. Whereas the hospital conducted an annual planning exercise, most respondents felt that this exercise was just on paper and never implemented. These plans were neither monitored nor evaluated. Decision making in practice was conducted by a small formal committee of senior management and did not involve other health managers and frontline practitioners. These decisions were not accessible to other actors and were often based on arbitrary information and influenced by personal interests. For example, members of this decision making committee allocated budgets in a manner that favored their departments and those of heads of departments they were “friends with”.

Conclusion Severe resource scarcity, limited decision making capacity, an ineffective financing model, poor quality information, ineffective leadership, and perverse decision making structures, among others, curtail effective priority setting. There is need for a targeted initiative to remove these barriers and orient the hospital towards improving its priority setting practices.

PS 08/12**Direct funding of health centres: early experiences of implementing a national financing mechanism in Kenya**

Sassy Molyneux, KEMRI-Wellcome Trust Research Programme; Evelyn Waweru, KEMRI-Wellcome Trust Research Programme; Sarah Kadenge, KEMRI-Wellcome Trust Research Programme; Benjamin Tsofa, KEMRI-Wellcome Trust Research Programme; Catherine Goodman, London School of Hygiene and Tropical Medicine

Aim The Health Sector Services Fund (HSSF) is an innovative scheme established by the Government of Kenya (GOK) to disburse funds directly to health facilities to enable them to improve health service delivery to local communities. HSSF empowers local communities to take charge of their health by actively involving them through the Health Facility Management Committees (HFMCs) in the identification of their health priorities and in planning and implementation of initiatives. HSSF was implemented nationwide in Kenya from 2010. With 3 years of implementation experience, and given important contextual changes such as devolution, the merging of the two ministries of health, and the abolition of user fees at peripheral facilities, it is timely to review HSSF experience to date.

Objectives

- To describe the process of HSSF implementation to date, including facilities covered, funds disbursed, and activities undertaken.
- To review evidence on the experience with HSSF implementation in health centres, given their longer experience to date with HSSF
- To identify key issues including devolution for consideration in future planning around HSSF

Methods We draw upon two main sources: a qualitative study and Independent Integrated Fiduciary Review Agent (IFFRA) Reports. The qualitative study examined the implementation and experience of HSSF in government health centres. Five districts (2 rural, 2 urban and one mixed), and 2 health centres within each district (total n=10), were purposively selected. Interviews were held with in-charges, health facility committee members, and users in each facility (n=10, 31 and 99 respectively), and with health managers in each district, and 9 national level key informants. Facility income and expenditure documents were also reviewed. IFFRA reports drawn upon included the annual report for the period ended 30th June, and for the quarter that ended September 2012.

Key findings Overall, HSSF has been implemented well in health centres, with funds reaching facilities and being appropriately overseen by HFMCs. There is a general positive impression of HSSF impacts in terms of facility operations, quality of care and staff motivation, patient satisfaction, outreach activities, and utilisation. However there have been some unintended or unexpected outcomes, including: complex and centralised accounting processes; inability to use user fees as easily and as flexibly as in the past; lack of clarity in roles and responsibilities of key players; and general community members being inadequately informed. The implications for future policy and practice will be discussed.

PS 08/13**The Process and Influences on the Annual Operational Planning (AOP) and Budgeting Processes in Kenya's Health Sector**

Benjamin Tsofa, KEMRI-Wellcome Trust Research Programme; Sassy Molyneux, KEMRI-Wellcome Trust Research Programme; Catherine Goodman, London School of Hygiene and Tropical Medicine

Aim Operational planning in public sectors has been considered as an important tool for translating government sector policies and strategic objectives into day to day operational activities. For a long time, public sectors in developing countries, including the health sector, have had a problem of misalignment between policy, planning and budgeting. The Medium Term Expenditure Framework (MTEF) process was introduced and widely adopted as a tool to help address the challenge of this misalignment. The Kenya government adopted MTEF in early 2000s and in 2005; the Ministry of Health (MoH) in Kenya introduced the Annual Operational Plan (AOP) as a way of implementing the sector strategic plan, and of aligning planning and budgeting.

This study aims to assess how the AOP process in the Kenyan government sector has been able to achieve alignment between planning and budgeting as envisaged by the MTEF policy

Objectives

- To describe how the national AOP and the MTEF budgeting processes are supposed to be conducted in theory in the Kenyan health sector
- To examine how the 2012/2013 AOP planning, and MTEF budgeting processes, were executed in practice
- To examine the factors that influenced the execution of the AOP and MTEF processes for the 2012/13 fiscal year

Methods We undertook a qualitative approach involving document reviews, participant observation and key informant interviews; sort to critically examine the AOP and budgeting processes at national level in Kenya's health sector; and factors influencing these processes. We used Walt and Gilson's policy analysis triangle as a framework for inquiry and analysis.

Key findings Generally, the Kenyan health sector is still struggling to achieve planning and budgeting alignment, and has no structured way of balancing national and peripheral level priorities during planning. Several factors have contributed to challenges in implementing the AOP process as designed in the policy and strategic documents. These factors include poor stakeholder participation particularly by non-governmental actors, inadequate leadership and coordination by the MoH, and the prevailing political environment within the Ministry of Health and the broader government. There is however lots of optimism among many key actors within the sector; and a conviction that if these challenges are addressed, the planning and budgeting would be improved

Parallel session 9: Household out-of-pocket health payments

PS 09/01

The distributional impact of direct out-of-pocket health financing in Uganda's health system

Brendan Kwesiga, HealthNet Consult; John Ataguba, University of Cape Town; Charlotte Zikusooka, HealthNet Consult

Research objective: Health systems in Africa are faced with significant challenges in ensuring equitable health financing which is necessary to attain universal health coverage (UHC). One of the challenges is that most of these health systems are still financed mainly through direct out-of-pocket payments as opposed to pre-payment systems. Financing health services through direct out-of-pocket payments is likely to have adverse welfare effects on the population particularly with regards to attaining the health system goal of equity. In Uganda, OOP payments contribute about half of the total health expenditure. This study aims at assessing the impact of direct out-of-pocket financing on the distribution of household income in Uganda.

Methods: This study uses data from the nationally representative Uganda National Household Survey 2009/10 (UNHS IV) to assess the income redistributive impact of direct out-of-pocket health care financing by households on their disposal income. The Aronson, Johnson and Lambert (AJL) framework of decomposing the redistributive effect is used. In this framework, the income redistributive effect is decomposed into vertical redistribution, horizontal inequity and reranking effect. Vertical redistribution indicates the extent to which the health system is sensitive to the differences in household ability to pay. Horizontal equity on the other hand indicates whether people with same ability to pay contribute equal amounts to financing the health system. The reranking effect measures the repositioning of the households due to difference in the prepayment and post payment income distribution. This reranking of households is induced by the difference in their contribution to financing the health system.

Key findings: The results indicate that direct out-of-pocket financing in Uganda causes redistribution from poor households to the rich households leading to increased inequality. OOP payments induced a redistributive effect at -0.004 (i.e. an increased gini index of income inequality from 0.423 to 0.427). With the decomposition of the redistributive effect of out-of-pocket health care financing, the vertical redistributive effect is 0.009; the horizontal inequity effect is 0.006 while the reranking effect is 0.007. This shows that significant inequities and reranking effect resulting from OOP payments are inherent in Uganda's health system.

Conclusion: Based on international evidence, Uganda needs to finance the health system mainly through mandatory prepayment financing mechanisms structured in a way that enhances a pro poor redistribution.

Assessing the distribution of household out-of-pocket health payments in South Africa

Naomi Tlotlego, University of Pretoria; Steven Koch, University of Pretoria

Aims: This paper contributes to the existing literature by assessing how out-of-pocket health payments are affected by a user fee abolition program adopted in South Africa in 1994. User fees were abolished (in the public health sector) for young children and the elderly, as well as pregnant and nursing mothers.

Objectives: Existing empirical evidence documents that, compared to low and high income countries, children and the elderly in middle-income countries are more likely to be located in households facing high (or catastrophic) health expenditures. We therefore, believe, that user fee abolition has the potential to improve this situation. However, it is important to provide empirical support to our hypothesis, and, therefore, we intend to analyse the impact of user fee abolition on the distribution of out-of-pocket health payments. In that sense, we expect to show the extent to which this policy has provided financial protection amongst different types of households.

Methods: We use two household surveys collected in South Africa in 1995, namely the Income Expenditure Survey (IES) and the October Household Survey (OHS). The datasets followed the same households, and, therefore, it is possible to merge information from the two surveys. The merged data provides information on their health expenditure patterns, as well as each household member's illness status, age, and health consultation activities. The combined information allows us to classify households into two groups: those eligible for free care, and those not eligible for free care.

These groups are compared using recent advances in the estimation and comparison of densities, as well as cumulative distribution functions, including tests for various orders of stochastic dominance, such as first order, second order and third order. The use of densities and distributions provides more information about the effect of the policy, than would a more common average treatment effect.

Key Results: Although the final analysis is not complete, preliminary results suggest potential. For example, the descriptive statistics about health seeking behavior and provider choice suggests that households with children under 6 years, as well as households with sick elderly who members were more likely to seek professional health consultations within the public health facilities. Similarly, there is a noticeable difference at lower income quantiles than higher income quantiles, which is suggestive of an equity improvement. Overall, household direct health payments appear to be progressive, implying that the non-poor contributed more to the health system through out-of-pocket health payments. With regard to the distribution of health payments, we are currently finding that out-of-pocket health payments for households with members able to access the public sector for free, is first order stochastically dominated by other households, which further implies second and third order dominance. However, further work still needs to be undertaken to ascertain the sensitivity of these results to various changes in assumptions.

Aim: This study investigates the prevalence of Catastrophic Health Expenditures (CHE) among slum residents in Nairobi

Objectives: How sensitive are the estimates of catastrophic health expenditures to the method
What factors influence significantly the likelihood of catastrophic health spending

Methods: The data come from the Indicator Development for Surveillance of Urban Emergencies (IDSUE) study which collected information on household composition, income, and expenditures components from a representative sample of households living in six Nairobi and Kisumu slums between April 2012 and 2013.

We use two approaches to assess the prevalence of CHE. In the first approach, out-of-pocket (OOP) payments on health in excess of pre-specified fraction of income (say Z_{cat}) are termed catastrophic. The second approach is based on the ability-to-pay and proposed by the World Health Organization (Xu, 2005). The CHE threshold is calculated as a proportion of the household income after subsistence level expenditures. For both approaches, we explore different cutoffs.

We create a binary variable =1 if the household faced a catastrophic health expenditure. We run a logistic multivariate regression to determine the characteristics of households facing CHE using both approaches and the 10% and 15% cutoffs.

Key Findings: Using the first approach based, and different cutoffs at 10%, 15%, 20%, and 30% of total household income, there were 22.6%, 20.7, 19.5%, and 18.3% households that faced CHE respectively. Using the second approach based on the ability to pay, and similar cutoffs, there were 5.84%, 3.81%, 2.51%, and 1.35% households that faced CHE respectively.

The multivariate logistic regression suggests that membership in a social safety net grouping such as a merry-go-round, a second working adult in the household and belonging to a higher income group all reduce the likelihood of CHE. Conversely, belonging to a higher spending group, occurrence of multiple illnesses in the family, longer household stay in the slum, and community (covariate) shocks increase the likelihood of CHE.

Conclusion: Estimates of the prevalence of catastrophic health expenditures appear sensitive to the approach used. The proportion of households in slums subject to CHE is about 4 times as high when using the first approach compared to the second one. While households could act on some of the factors that expose (shield) them to (from) CHE, many of the remedial factors are beyond their sole reach. Mechanisms that pool risks and funds—insurance are needed to protect poor households from CHE and thus further impoverishment.

Parallel session 9: Social health insurance experiences

PS 09/04

Has Ghana's Health System benefited the Poor almost a Decade after the Operationalization of the National Health Insurance Scheme (NHIS)? Lessons from Northern Ghana.

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Aim: To explore the need, affordability, and the acceptability of health care services after the introduction of the National Health Insurance Scheme in Ghana.

Objectives: In many developing countries, the access to and the utilization of health care services continue to pose problems which can create serious health challenges due to the delay in seeking medical care or choosing self-treatment. With the purpose of ensuring equitable universal access for all residents of Ghana to acceptable quality health care services; devoid of out-of-pocket payment being required at the point of service use, the NHIS Act was passed in 2003 and was operationalized in 2004. Whereas membership under the scheme is free to the poor, the extent to which the poor are benefiting from the insurance scheme is unclear. This study therefore seeks to explore the need, utilization, affordability, and the acceptability of health care services in rural northern Ghana almost a decade after the introduction of the NHIS.

Methods: Data source are from a multi-centre cross sectional household survey from a longitudinal population-based register comprising of 41,197 individuals in about 12,000 households in rural northern Ghana. The study sought information on health status, care satisfaction, registration onto the national health insurance (reasons for not registering or renewing) and the burden of direct health care payments using structured questionnaires between July 2012 and December 2012. This paper narrows down on the issue of health care access using the Chi Square test in testing the differences in proportions.

Key findings: Preliminary findings show socio-economic status, age, sex, area of residence, type of insurance and insurance status were associated with access to health care, with the poor, the uninsured and more rural respondents facing the outmost barriers. Attaining equitable universal health coverage as a cure for inaccessible, unaffordable health care services will not only provide the antidote for high out-of-pocket (OOP) payments for care but will ensure equitable universal access for the vulnerable populations in low and middle income countries especially in Ghana.

Key words: health systems; health-care utilization; out-of-pocket payment; longitudinal data; Northern Ghana

PS 09/05

The need for and utilization of outpatient health care services by households under the National Health Insurance Scheme in Northern Ghana

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Aim To determine the need for and use of health services among individuals in Northern Ghana.

Objective The WHO considers health to be a fundamental human right. The right to health encompasses the affordability, availability, acceptability and the appropriate mix of quality of health services for populations. Despite these considerations, many people particularly the poor and vulnerable are unable to meet their needs for critical health services due to barriers limiting utilization. Thus, international bodies including WHO have entreated all nations to create the necessary conditions to ensure all people especially the poor and marginalized are covered by quality and affordable health services. Following this, Ghana implemented the pro-poor National Health Insurance Scheme (NHIS) as one of the social interventions to meet the health care needs of its citizens. After a decade, what is the state of need for and utilization of health services under the NHIS? The objective of this paper is to provide insights to the need for and utilization of outpatient health services among individuals in the Kassena-Nankana districts of Northern Ghana.

Methods A multi-centre cross-sectional household survey was carried out in Ghana and Vietnam, from July to December, 2012, using structured questionnaire. The main study examined the impact of health sector reforms (national health insurance) on vulnerable groups in both rural Ghana and Vietnam. This paper uses data only from Ghana which was collected among 12,000 households, capturing over 50,000 individuals in the Kassena-Nakana districts. The paper particularly examines the relationship between the socio demographic characteristics including insurance status of all respondents who reported ill/injured in the last one month and their subsequent utilization of outpatient health services. Chi square test was used to test for differences.

Key findings Preliminary results from the study demonstrated that vulnerable groups including the uninsured were reported to have fallen ill/injured in the last one month, hence requiring health services. This was not the case for high income groups. On utilization, women and children tended to utilize more outpatient services than other groups. Low income groups utilize less formal health services compared to high income groups. Generally, the insured were found to use more health services in comparison to the uninsured. In conclusion, it is observed that there are variations of health care needs and utilizations. Further interventions are required to address the gap between need and use of health services, especially for low income groups and the uninsured.

Constraints and enabling factors in scaling-up coverage with social health insurance in Nigeria

Chima Onoka, University of Nigeria; Obinna Onwujekwe, University of Nigeria; Benjamin Uzochukwu, University of Nigeria; Nkoli Ezumah, University of Nigeria

Background The National Health Insurance Scheme (NHIS) in Nigeria was launched in 2005 as part of efforts by the federal government to achieve universal coverage using financial risk protection mechanisms. However, only 4% of the population, and mainly federal government employees, are currently covered by health insurance and this is primarily through the Formal Sector Social Health Insurance Programme (FSSHIP) of the NHIS. This study aimed to understand why different state (sub-national) governments decided whether or not to adopt the FSSHIP for their employees.

Methods This study used a comparative case study approach. Data were collected through document reviews and 48 in-depth interviews with policy makers, programme managers, health providers, and civil servant leaders.

Results Although the programme's benefits seemed acceptable to state policy makers and the intended beneficiaries (employees), the feasibility of employer contributions, concerns about transparency in the NHIS and the role of states in the FSSHIP, the roles of policy champions such as state governors and resistance by employees to making contributions, all influenced the decision of state governments on adoption. Overall, the power of state governments over state-level health reforms, attributed to the prevailing system of government that allows states to deliberate on certain national-level policies, enhanced by the NHIS legislation that made adoption voluntary, enabled states to adopt or not to adopt the program.

Conclusions The study demonstrates and supports observations that even when the content of a programme is generally acceptable, context, actor roles, and the wider implications of programme design on actor interests can explain decision on policy adoption. Policy implementers involved in scaling-up the NHIS programme need to consider the prevailing contextual factors, and effectively engage policy champions to overcome known challenges in order to encourage adoption by sub-national governments. Policy makers and implementers in countries scaling-up health insurance coverage should, early enough, develop strategies to overcome political challenges inherent in the path to scaling-up, to avoid delay or stunting of the process. They should also consider the potential pitfalls of reforms that first focus on civil servants, especially when the use of public funds potentially compromises coverage for other citizens.

Parallel session 9: Human resources for health 2

PS 09/07

Supporting the shift towards universal coverage by establishing the right incentive environment for health workers – lessons from three post-conflict regions and countries in sub-Saharan Africa

Sophie Witter, ReBUILD; Yotamu Chirwa, BRTI; Mohamed Samai, COMAHS; Justine Namakula, Makerere University

Aim and objectives: Health worker attraction, retention, distribution and performance are arguably the most critical factors affecting the ability of a health system to provide effective coverage for all. In post-conflict settings, where health systems and health worker livelihoods have been disrupted, the challenges facing the establishment of the right incentive environment are particularly significant, and the contextual dynamics around them especially important to understand and incorporate sensitively into policy measures.

No study to date has focused on how the decisions made, or not made, in the post-conflict period can affect the longer term pattern of attraction, retention, distribution and performance of health workers, and thus ultimately the performance of the sector. This is the focus of this project, which seeks:

- a. To understand the evolution of incentives for health workers post-conflict and their effects
- b. To derive recommendations for different contexts on incentive environments, which will support health workers to provide access to rational and equitable health services.

Methods used: Four case studies were examined (three of them in Africa – northern Uganda, Sierra Leone and Zimbabwe). A mix of research methods was used, including: stakeholder mapping; document review; key informant interviews; career histories of health workers; analysis of trends in health worker supply, distribution and outputs over time, using routine data; and health worker surveys, in two of the countries, focussing on personal characteristics, working practices and hours, remuneration from various sources, living conditions and preferences/motivation.

Key findings: Analysis of findings will be completed in autumn 2013. Preliminary findings highlight the different patterns of policy responses post-conflict. In some cases, where only one part of the country has been affected, policy making has focussed on bringing that region in line with national policies, without fully recognising the trauma inflicted and the need for particular support to conflict-affected areas. In other countries, political stasis prevents solutions being introduced, even where the problems are widely understood. In others again, reforms waited for a major sectoral reform which could galvanise wider changes, including for HRH.

From a health worker perspective, the career histories approach highlights the often dramatic experiences of health workers during conflict and the need to recognise those who have stayed in post during the conflict, and to reinforce the extrinsic motivation which is often built up during this time.

All research tools highlight the often partial and ineffective implementation of incentive schemes designed to attract, motivate and retain in remote and conflict-affected areas.

PS 09/08**Forecasting Health Worker Shortages in Kenya: Building a Process for Routine Review of Staffing Gaps**

Abeba Taddese, Program Officer, Results for Development Institute; Joel Lehmann, Consultant, FUNZOKenya; Marty Makinen, Principal, Results for Development Institute, Norbert Rakiro, Technical Director, FUNZOKenya Project, IntraHealth International.

Aim: To routinely estimate, monitor and project the size, composition and geographic distribution of the health workforce over the next 10 years in order to inform strategic workforce planning, including training needs.

Objective: To conduct a health workforce in collaboration with the Ministry of Health to better understand health worker supply and demand dynamics in Kenya and provide the first comprehensive picture of health workers in both the public and private sectors in Kenya (for selected cadres). To use the findings to inform the number of health workers that need to be trained and to develop processes for routine review of human resources for health (HRH) staffing gaps.

Methodology: Through stakeholder engagement and data mapping activities, we collected secondary data on the health workforce and identified gaps in information on the private sector. To address these gaps, we implemented a representative survey of the workforce in the private sector. We drew on data from the Ministry of Health, regulatory bodies and councils, professional associations, and the private sector to understand the state of the health workforce based on a stock and flow approach. We collected pipeline information from training institutions to more accurately link training needs to shortages in the workforce. To ensure routine review of HRH staffing needs at national and county levels, we make recommendations for interoperable data collection systems, and establish channels for routinely collecting data on the private health sector, training of health workers and the pool of trained but unemployed health workers.

Key Findings: There has been significant growth in numbers of newly registered clinical officers and laboratory technologists over the past three years, but this growth is insufficient to meet Kenya's staffing needs. We also found wide gaps between numbers employed and staffing norms for the doctor and nurse cadres. These gaps are too significant to be addressed through the existing training infrastructure alone and will require strategic review of HRH priorities and an absolute increase in health workforce training capacities. Process related findings at the time of this study revealed that 1) consolidated information on the health workforce in the private sector was largely unavailable 2) despite a notable amount of information on health workers in the public sector, the quality and use of this data had been suboptimal, and 3) there has been limited discussion/consensus to date on a methodology for setting targets or staffing norms for the health workforce.

Key terms: human resources for health, HRH, forecast, workforce planning

PS 09/09**Labor income of health workers and multiple jobholding in Urban Areas of Cameroon**

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Objective: Following the theoretical debate on the main motivation of moonlighting in health sector, the objective of this study is to evaluate and analyze the influence of labor income obtained by health workers from primary and secondary jobs on the decision to use a second job in urban Cameroun.

Methods: this study uses an univariate probit model. The dependent variable is the use of a second job in addition to the first main job. The income variables are the logarithm of hourly income in the main job and the logarithm of the predicted hourly income in the second job. Others socioeconomic and main job (health facility) variables are used as control variables. Data used here are primary data from 1126 health workers (doctors, nurses and health technicians) from public and private health sub-sectors of Yaoundé and Douala. Yaoundé and Douala are respectively political and economic towns of Cameroun. This study focus on health care centers belonging to Health District of Yaoundé and Douala. Those health care centers are Hospital of District, Subdivision's medical centers and integrated health centers.

Key results: Financial motivations contribute highly in the explanation of secondary jobs use in health sector. *(i)* Labor income of a health worker in his main job has significantly a negative effect on the use of a second marketable job. An increase in the income of a health worker in his main job reduces the probability to have multiple jobs in the medical or non-medical sector. *(ii)* Labor income of a health worker in his secondary job has significantly a positive effect on the use of a secondary job. The opportunities for health worker with a main job to make profitable economic activities increase the probability to use a secondary job.

Conclusion: In a context of health worker scarceness, public policies has to increase labor income of health workers for maintaining health workforce in health centers in order to improve health conditions in Cameroon.

PS 09/10**Provider Payment Reform and Information Technology Systems: A Chicken and Egg Question for National Health Coverage Programs**

Kate Wilson, PATH

Aim: Globally, many countries working towards universal health coverage are grappling with the selection of the appropriate provider payment mechanisms for their system. A key underlying factor of the success of that choice is the current state of national- and provider-level information and communication technology (ICT) systems, the interoperability of those systems, and the planned investment in those systems going forward. At the same time, reforms to payment approaches often drive improvements in ICT systems, as payment increasingly is

linked to data. These two components of the overall health system are highly interrelated, creating a “chicken and egg” situation of where to begin on the path of reform.

Our goal is to address key implementation questions raised by countries on this journey, and provide concrete data so that policymakers and IT professionals alike may understand the ramifications of the provider payment choice on the IT systems underpinning them.

Objectives and methods: Specifically, this paper:

- 1) Advances a conceptual framework for understanding the IT requirements of various payment methods, the choices, trade-offs, and implications of various options.
- 2) Provides evidence of the benefits of improved use of IT to support provider payment methods, drawing examples from countries that have taken steps in this regard.
- 3) Examines case studies from countries that have invested in IT to support reforms, exploring the key enablers, policy and technical processes followed, and benefits realized.
- 4) Reports on lessons learned from these countries and a set of practical next steps for better incorporating investments in IT into reform plans.

Key findings: The authors believe that program policy and design decisions must be driven by the interests of a country and its citizens, and that national-level policymakers are best placed to make those decisions. This paper does not judge or offer recommendation about the provider payment methodology adopted or the IT systems implemented. Our goal is simply to highlight areas where complexity and costs arise from these decisions and provide policymakers with more context about their choice before implementation.

This paper was produced with the generous support of the Rockefeller Foundation as part of the Joint Learning Network (JLN) for Universal Health Coverage. The JLN is a network of policymakers and practitioners from low- and middle-income countries in Asia and Africa that learn from one another, jointly problem-solve, and collectively produce and use new knowledge, tools, and innovative approaches to accelerate country progress towards universal health coverage. Please see www.jointlearningnetwork.org for more information.

Parallel session 9: Studies on costing of HIV, Malaria, TB

PS 09/11

Costs of HIV Prevention Interventions in Zambia and Kenya: How much scale and quality can explain the cost variability of HTC, PMTCT and MC services? Results of an African Multi-country ORPHEA- project

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Aim and objectives: Despite the need to increase the value for money in HIV spending, limited evidence on the efficiency of HIV prevention interventions is a barrier in creating effective policy. Funded by the Bill and Melinda Gates Foundation, the ORPHEA project is a four-year, five-country project that collects and analyses micro-economic data to assess the costs and determinants of cost variability for four HIV prevention interventions: prevention of mother-to-child transmission (PMTCT), HIV testing and counseling (HTC), male circumcision (MC) and prevention intervention for sex workers (FSW).

Methods: We collected data from a representative sample of PMTCT, HTC and MC services in Zambia and Kenya. Relevant intervention-specific input, prices and output data were collected. Levels of personnel effort, drugs and medical supplies, training and supervision, capital and utilities data were collected retrospectively by month for 2011/2012. Data on costs of inputs, time allocation and process quality of HIV-prevention services, using registers, provider vignettes, time motion analysis, patient exit interviews and interviewer-administered questionnaires. We estimated average cost by dividing the total cost per intervention by the number of HIV clients per intervention and regressed the average cost against scale (number of services provided) and quality of services.

Key findings: Estimated average costs were respectively US\$25.37 (*s.d.* \$27.14) and US\$21.60 (*s.d.* 45.73) per HTC client in Zambia and Kenya, US\$80.04 (*s.d.* \$97.03) and US\$70.06 (*s.d.* 84.92) for women tested in PMTCT services and US\$125.26 (*s.d.* \$152.22) and US\$85.76 (*s.d.* 140.48) per MC client. While adjusting for process quality of the services, health-facility type across both samples, an increase of 1% in the scale of production reduced the cost per HTC client tested by 0.40% (*p-value*, 0.00), the cost per tested pregnant women in PMTCT by 0.53% (*p-value*, 0.00) and the cost per MC client by 0.74% (*p-value*, 0.00). While scale and quality of services explain approximately 35% of the variability in average costs, still a significant proportion of such variability is likely explained by inefficiency in the production of services.

Conclusions: While the average cost per service delivered may be lower than ten years ago¹, variability still persists. Almost 23% of it for HTC, 28% for PMTCT and 56% for MC can be explained by scale, HIV-local prevalence and quality of services. Differences between the two countries are mostly driven by staff costs. We will develop recommendations from this analysis with the objective of increasing efficiency in the production of HIV services.

PS 09/12**Cost-effectiveness of RTS,S malaria vaccine candidate in children estimated using a Markov cohort model and Phase 3 trial results**

Christophe Sauboin, GlaxoSmithKline Vaccines; Ilse Van Vlaenderen, CHES In Health; Laure-Anne Van Bellinghen, CHES In Health; Baudouin Standaert, GlaxoSmithKline Vaccine

Aim and Objectives: To estimate the potential cost-effectiveness ratio of the RTS,S candidate malaria vaccine versus no vaccination in 42 malaria endemic countries in sub-Saharan Africa, based on Phase 3 trial results.

Methods: This static Markov cohort model uses three categories of transmission intensity (Malaria Atlas Project definitions). Malaria incidence without vaccination in each category is estimated using data from the Phase 3 trial and a concurrent malaria transmission intensity study. Two vaccination strategies are considered: doses at 6, 10 and 14 weeks; or at 6, 7.5 and 9 months. Data on vaccine efficacy against clinical malaria come from the Phase 3 trial. The 2017 birth cohort in each country is divided between transmission categories and followed to 5 years of age. Vaccination coverage is based on diphtheria-tetanus-pertussis-3 coverage in 2011, with 25% reduction for the second strategy. The vaccine cost is assumed to be \$5 (\$2–\$10) per dose and administration cost \$1 per dose. Country-specific costs per malaria case come from a cost-of-illness study in Ghana, Tanzania and Kenya. An average of these three is used for other countries. The cost offsets from cases and hospitalisations prevented by vaccination are calculated. Cost and outcomes are undiscounted. Cost-effectiveness is calculated as \$ per disability-adjusted life-year (DALY) averted, from the health system perspective (health system cost only) and the societal perspective (health system plus household costs).

Key Findings: For vaccination at 6, 10 and 14 weeks, the expected vaccination cost would be \$439 million (\$219.4–\$804.7 million at vaccine prices of \$2–\$10), which would avert 10,322,000 malaria cases, \$18 million in health system cost and \$58 million in household cost. Cost-effectiveness would be \$246/DALY (\$118–\$461/DALY) from the health system perspective and \$213/DALY (\$84–\$427/DALY) from the societal perspective. For vaccination at 6, 7.5 and 9 months, the expected vaccination cost would be \$329.2 million (\$164.6–\$603.5 million), which would avert 23,139,000 cases, \$42 million in health system cost and \$130 million in household cost. Cost-effectiveness would be \$74/DALY (\$31–\$144/DALY) from the health system perspective and \$40/DALY (cost-saving to \$111/DALY) from the societal perspective. The RTS,S candidate malaria vaccine is expected to be highly cost-effective in sub-Saharan Africa, especially with vaccination at 6, 7.5 and 9 months. These results are aggregates over 42 countries with wide variations. Targeted vaccination only in regions with high malaria risk could improve cost-effectiveness.

PS 09/13**Reducing mortality among HIV-infected subjects starting antiretroviral therapy: the health service costs of an intervention under evaluation in a randomised trial**

Goodfather Kimaro, National Institute for Medical Research; Lorna Guinness, London School of Hygiene and Tropical Medicine; Victoria Simms, London School of Hygiene and Tropical Medicine; Sokoine Lesikale, National Institute for Medical Research; Amos Kahwa, National Institute for Medical Research; Saidi Egwaga, Ministry of Health and Social Welfare; Sayoki Mfinanga, National Institute for Medical Research; Shabbar Jaffar, London School of Hygiene and Tropical Medicine

Aim: Mortality of HIV-infected subjects in Africa is very high just prior to and in the first 6 months of antiretroviral therapy (ART). The REMSTART trial aims to reduce this through: using lay workers for additional monitoring and support; improved diagnostics (antigen screening (CRAG) for cryptococcal meningitis (CM) and TB screening with Xpert MTB/RIF assay); and accelerated initiation of ARV in peri-urban sites.

Objectives: Information regarding the costs and cost-effectiveness of ART in Tanzania is very limited with no studies on the costs of task-shifting or home based care. This paper addresses this gap by reporting on a cost analysis of the REMSTART intervention in Tanzania.

Methods: Cost data are being collected from a provider's perspective using micro-costing for all trial patients (n= 430). Data sources include patients' clinic records, clinic staff interviews and financial records at medical stores, laboratories and hospitals. Costs were converted to 2011 US dollars. The 6 month treatment cost per patient was estimated for 3 groups of patients, according to diagnosis of opportunistic infections. Sensitivity analysis was carried out on key assumptions. A regression model will also be used to explore how intervention costs vary by site, CD4 level and status of opportunistic infection at initiation, patient characteristics and adherence.

Key Findings: Preliminary analysis shows the range for the 6 month cost per-patient with neither CM nor TB is US\$193 - 214. The range for cost of patients diagnosed with CM is \$195-216; and for patients undergoing TB treatment this is \$282-302. ART drugs are 32-35%, 35-37% and 31-35% of total costs, respectively. Of total costs, layworker costs range from 7-10%, Xpert costs from 10-14% and CRAG screening from 0.6-1%. The regression model will help identify important cost drivers in the intervention.

Conclusions: Layworkers and CRAG screening in REMSTART are low cost technologies, with potential to increase retention and adherence in HIV care, and reduce mortality. The additional costs need to be balanced against the effectiveness of the strategy which will be carried out in a cost-effectiveness analysis once the trial is complete. The understanding of the cost structure and drivers of cost in this analysis provide important information to help improve the efficiency of the intervention.

PS 09/14**Assessing the Cost of Private Sector ACT Subsidies - The Financial and Economic Costs of the Affordable Medicines Facility – Malaria (AMFm) in Three African Countries**

Catherine Goodman, London School of Hygiene and Tropical Medicine; Daniel Cobos, London School of Hygiene and Tropical Medicine; Sarah Tougher, London School of Hygiene and Tropical Medicine; Kara Hanson, London School of Hygiene and Tropical Medicine

Aim: AMFm was designed to improve uptake of quality-assured artemisinin combination therapies (ACTs). Hosted by the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria, it operated in eight national scale pilots, involving three key elements: (i) price negotiations with ACT manufacturers; (ii) a subsidy for ACTs at the top of the global supply chain; and (iii) supporting interventions, such as communications campaigns and provider training. An Independent Evaluation of AMFm found that in most but not all settings AMFm improved the availability, affordability and market share of quality-assured ACTs. However, no data were collected on AMFm costs, though there is considerable interest in the value for money of alternative approaches to expanding ACT use through the private sector.

This study aims to address this gap by estimating the costs of implementing this multi-national ACT subsidy programme.

Objectives: To assess the financial and economic costs of implementing AMFm in the private for-profit sector in Kenya, Nigeria and Madagascar from 2010 to 2012. To identify major cost drivers and opportunities for efficiency savings. To assess financial sustainability and costs of replication

Methods: Three AMFm pilot countries were selected to represent a range of contexts (e.g. east and west Africa, francophone and anglophone) and experiences with AMFm (encompassing strong, medium and weak performance on AMFm indicators). Costs were included for all AMFm-related activities at both country level and at the Global Fund headquarters. The time frame for the country-level costing was defined as the date the AMFm agreement was signed (all in 2010) until the end of 2012. Costs incurred by the Global Fund headquarters in setting up AMFm before these dates were also included. We adopted a “funders perspective”, covering all resources contributed by external funding agencies, NGOs and national governments, but excluding costs to commercial actors and households. Development / start up costs were annualised over their expected useful life (base case of 5 years, with a discount rate of 3%). Care was taken to include only those costs relevant to provision of subsidised ACT in the private for profit sector, and to exclude the costs of external evaluation activities.

Key Findings: Results will be presented for each country on the total financial and economic costs of AMFm implementation, per dose delivered and per person at risk of malaria. Sensitivity analysis will be conducted to explore the impact of assumptions employed, and implications for future ACT programmes assessed.

Poster Presentations

Poster Session 1

PT 01/01

Promotion de la conscience sanitaire : un défis a relever pour la perenisation de la sante en Côte d'Ivoire

Memon Fofana, Doctorant à l'Université Felix Houphouet Boigny, Abidjan-CocodyAim:

Ce papier s'inscrit dans une contribution à la promotion de la santé en Côte d'Ivoire à travers l'interrogation d'un élément jusque-là insoupçonné: la conscience sanitaire de la population.

Objectives: L'objectif est d'expliquer les éléments sociaux "insoupçonnés" qui freinent les politiques relatives à la promotion de la santé en Côte d'Ivoire.

Méthode: Le papier repose sur une approche qualitative à visée compréhensive axée sur les entretiens, l'observation, les focus group et la documentation.

Résultats: Retenons que lors des investigations il n'était pas rare d'entendre dire, de la part des populations qu'on met en garde (à travers les campagnes de sensibilisation) contre des pratiques d'hygiène risquées, que « *microbes ne tuent pas l'homme noir* ». Est-il nécessaire de souligner que ce discours sécuritaire et/ou fataliste est destiné à anesthésier la conscience sanitaire des opinants. Dans le même ordre d'idées, l'on rencontre des individus sexuellement actifs qui ne craignent pas le VIH/SIDA, et qui utilisent le préservatif de "temps en temps", estimant qu' « *il faut bien mourir de quelque chose* ». La croyance populaire en la sorcellerie et ses conséquences sur le bien-être physique et mental des individus et des groupes de la population Ivoirienne défraient la chronique. La plupart des maladies portent le nom des facteurs supposés en être la cause. En effet, les Bété et les Gouro de Côte d'Ivoire nomment respectivement *udigu*, *djizran* la diarrhée infantile qu'ils croient être associés au fait que la mère et le père du bébé ont partagé le lit de façon précoce. Or, pendant que l'opinion "incrimine" les rapports conjugaux, la diarrhée fait des victimes. Autant d'idées reçues et de tendances qui peuvent permettre, au niveau d'une population donnée, de prédire les chances de survenance de maladies et de cas de décès évitables. En outre, cette situation continue de maintenir les nations Africaines dans une situation de précarité sanitaire. Et pourtant le politique et les nombreuses études diagnostiques consacrées aux 30 dernières années d'application d'Alma-Ata, ont rarement incriminé les pratiques néfastes ou débouché sur des opérations systématiquement dirigées contre la population elle-même. Et comme la raison d'être de la promotion de la santé demeure la transformation qualitative des comportements à risque qui passe par la construction de pont culturel entre le savoir populaire et le savoir médical, la promotion de la conscience sanitaire est perçue, à cet égard comme un défi à relever.

PT 01/02

Poverty and the Challenge of Urban Health in Nigeria

Geoffrey Nwaka, Abia State University, Uturu, Nigeria

Poverty and slum conditions pose a serious public health challenge to Nigeria's rapidly expanding urban population. Almost everywhere in these cities environmental amenities lag

behind population growth. Some elite neighbourhoods enjoy relatively high quality housing and residential environment, but the bulk of the urban poor live in appalling and health threatening conditions. Inadequate housing, sanitation and waste management, and the poor state of public health infrastructure have led to the spread of a wide variety of water-borne and other communicable disease. Nutritional standards are low, and food contamination is common, especially in the extensive street food industry. Indoor pollution from open fires and stoves in poorly ventilated homes is known to be responsible for many respiratory ailments among women and children who are exposed constantly to toxic fumes in the cooking areas. As environmental and health problems overlap, the poor suffer disproportionately from the adverse health effects of environmental problems. Many of the Millennium Development Goals – in health, environmental sustainability, poverty reduction and enhanced international development assistance - will not be met in Africa despite improvements in some areas. Unfortunately, the current pattern of government spending on the health sector tends to favour the well off in society who are the main users of curative health services. The paper considers how best to reach the poor, and decrease inequalities in access to health services; ways to forestall the growth and spread of slums, and reduce poverty which leads to slum conditions. The central argument is that human development ought to be at the centre of the concern for sustainable urbanization in Africa. To achieve this, the paper considers how best to promote the growth of more inclusive and humane cities by reviewing discriminatory laws and codes which tend to inhibit the access of the poor to affordable land, healthcare and housing security. The concluding section stresses the need for appropriate and well targeted urban health and other interventions by state and local authorities, the international development community, private sector and civil society organizations, and the urban poor themselves in a collaborative effort to build safer, healthier and more equitable cities

PT 01/03

Forecasting Health Worker Shortages in Kenya: Building a Process for Routine Review of Staffing Gaps

Abeba Taddese, Results for Development; Joel Lehmann, FUNZOKenya; Norbert Rakiro, FUNZOKenya; Marty Makinen, Results for Development

Aim: To routinely estimate, monitor and project the size, composition and geographic distribution of the health workforce over the next 10 years in order to inform strategic workforce planning, including training needs.

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Methodology: Through stakeholder engagement and data mapping activities, we collected secondary data on the health workforce and identified gaps in information on the private sector. To address these gaps, we implemented a representative survey of the workforce in the private sector. We drew on data from the Ministry of Health, regulatory bodies and councils,

professional associations, and the private sector to understand the state of the health workforce based on a stock and flow approach. We collected pipeline information from training institutions to more accurately link training needs to shortages in the workforce. To ensure routine review of HRH staffing needs at national and county levels, we make recommendations for interoperable data collection systems, and establish channels for routinely collecting data on the private health sector, training of health workers and the pool of trained but unemployed health workers.

Key Findings: There has been significant growth in numbers of newly registered clinical officers and laboratory technologists over the past three years, but this growth is insufficient to meet Kenya's staffing needs. We also found wide gaps between numbers employed and staffing norms for the doctor and nurse cadres. These gaps are too significant to be addressed through the existing training infrastructure alone and will require strategic review of HRH priorities and an absolute increase in health workforce training capacities. Process related findings at the time of this study revealed that 1) consolidated information on the health workforce in the private sector was largely unavailable 2) despite a notable amount of information on health workers in the public sector, the quality and use of this data had been suboptimal, and 3) there has been limited discussion/consensus to date on a methodology for setting targets or staffing norms for the health workforce.

PT 01/04

“And they truly think they can make a difference” - An ethnographic research on the impact of western medical visits in a hospital in Cameroon

Judith van de Kamp, Amsterdam Institute for Social Science Research (AISSR), University of Amsterdam

AIM Fifty years ago, western medical work in Africa was considered to be only temporarily; Africans would soon take over. Nowadays, it has even become a trend among western health workers and students to work in Africa for a few weeks or months. However, this trend is being publically criticized, for having more to do with adventure than to improving health or health care institutions. Another point of critique is that this work can be harmful without knowing the local (medical culture).

Remarkable about the public debate is that the voice of Africans is missing. There is also little information about what aspects contribute to creating a certain impact on the health care setting, both according to the local health workers and the western visiting health workers. To what extent do their expectations, intentions and goals match, and what happens when they do not match?

This research aims to identify and explain how different people involved talk about the impact of western medical visits in a hospital in Cameroon.

OBJECTIVE The knowledge that this research provides, helps western health workers in deciding where (not) to go and for what reason, what (not) to bring and for what reason, and how (not) to behave in their temporary working environment. It also helps local hospital staff in African countries to state their position; do we unconditionally accept western visitors, and if not: how do we define our needs and wishes when it comes to asking help of western visitors.

METHODS Qualitative and ethnographic methods will be used: observations, in depth interviews, informal conversations.

KEY FINDINGS There is no such thing as ‘the impact’ of western visits in a hospital setting. There is a huge variety of ways of looking at it. For instance, an Italian team of eye surgeons might define the impact of their visit by the amount of patients they have been able to operate. A local doctor in that hospital might also take into account the amount of money the hospital had to spend on hosting the Italian team, including picking them up from the airport, arranging food and accommodation, while patients are not being charged for these operations. The general director might be defining the impact of the team mostly by the goods the Italians have brought for the AIDS clinic he would like to open soon.

Le système de santé public togolais est caractérisé par une pénurie de personnel médical et paramédical en quantité et en qualité. Dans la plupart des services et formations sanitaires, les équipements et matériels sont insuffisants à tous les différents échelons du système. L'examen des budgets alloués à la santé traduit une insuffisance budgétaire. Comme conséquences, le taux de couverture en consultation post- natale est resté faible et varie entre 9,5 % et 39,4 %. A peine la moitié des accouchements se font dans les formations sanitaires (47,1%). Sur le plan national environ 42,2% des ménages ont déclaré avoir accès aux structures de santé. Les raisons évoquées sont la cherté des services de santé (30,9%). Ces problèmes auxquels est confronté le système sanitaire togolais nous ont conduits à nous interroger sur la possibilité de faire mieux malgré la pénurie des ressources.

Pour ce faire, nous avons eu recours à l'approche par les fonctions distance directionnelle développée par Chambers, Chung et Färe (1998). Il s'agit de montrer qu'il est possible pour chaque hôpital de réduire les inefficacités observées en s'intéressant simultanément à la contraction des inputs et à l'expansion des outputs. Les calculs de la fonction distance directionnelle ont été réalisés avec le logiciel R.

En moyenne, les résultats montrent que les hôpitaux publics togolais sont techniquement inefficaces. En considérant l'orientation output, en moyenne 46,42% des hôpitaux sont inefficaces en 2010. Il est possible pour l'ensemble des hôpitaux en 2009, en moyenne, soit à niveau d'input inchangé d'augmenter ces outputs de 41735,749 unités, soit avec les mêmes niveaux de production diminuer ces quantités d'inputs utilisés de 14,6534 unités. En outre, les hôpitaux de petite taille sont plus efficaces et doivent être encouragés à augmenter leurs quantités d'outputs dans le cadre d'atteinte des OMD. Ces résultats viennent également confirmer le fait qu'il n'est pas possible dans le contexte togolais de chercher à minimiser les quantités d'inputs utilisés plutôt que de maximiser la production.

La question principale que l'on pourrait se poser est de savoir quels sont les facteurs susceptibles de réduire l'inefficacité technique des hôpitaux publics togolais. Avec une population rurale d'environ 73% sous le seuil de pauvreté⁶, la création ou l'expansion d'un système de couverture maladie communautaire en milieu rural bien organisé et structuré devrait permettre d'augmenter non seulement le volume des activités des établissements de soins de santé mais aussi protéger les populations de ces zones contre le risque maladie élevé

⁶ Profil de pauvreté 2006-2011

PT 01/06**Assessing the costs and effects of anti-retroviral therapy task- shifting from physicians to other health professionals in Ethiopia**

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Objective: To evaluate the effects, costs, and cost-effectiveness of different degrees of antiretroviral therapy task shifting from physician to other health professionals in Ethiopia.

Design: Two year retrospective cohort analysis on antiretroviral therapy patients coupled with cost analysis.

Interventions: Facilities with minimal or moderate task shifting compared to facilities with maximal task-shifting. Maximal task shifting is defined as non-physician clinicians handling both severe drug reactions and antiretroviral drug regimen changes. Secondary analysis compares health centers to hospitals.

Main outcome measures: The primary effectiveness measure is the probability of a patient remaining actively on antiretroviral therapy at two years; the cost measure is the cost per patient per year.

Results: All facilities had some task shifting. About 89% of patients were actively on treatment two years after ART initiation, with no statistically significant differences between facilities with maximal and minimal or moderate task shifting. It cost about \$206 per patient per year for ART, with no statistically significant differences between the comparison groups. The cost- effectiveness of maximal task shifting is similar to that of minimal or moderate task shifting, with the same results obtained using regression to control for facility characteristics.

Conclusion: Shifting the handling both severe drug reactions and antiretroviral drug regimen changes from physicians to other clinical officers is not associated with a significant change the 2 year treatment success rate or the costs of ART care. As an observational study, these results are tentative, and more research is needed in determining the optimal means of task shifting.

PT 01/07**Economic Evaluation of a Long-Lasting Insecticidal Net (LLIN) delivery programme to control malaria in children less than five years in Enugu state, South East Nigeria**

Charles Ezenduka, John Nixon Nnamdi Azikiwe University

Aim: Economic information on key malaria prevention strategies is essential for generating evidence for planning and policy in the provision of malaria control services.

Objective: The study estimated the cost-effectiveness of a social market delivery model for LLIN, for the control of malaria in children less than five years, through private health facilities, as part of Global Fund for Malaria project in Enugu state, South East Nigeria. Method; From a provider perspective, a spreadsheet model was used to estimate the

economic costs and effects of the intervention on incremental basis. Effects were measured as malaria cases averted, deaths prevented and disability adjusted life years averted. Regional estimates were used to model malaria cases. Cost data were obtained from financial reviews and interview with key stakeholders. Univariate sensitivity analysis was used to test the robustness of study results.

Results: Total financial cost of the programme was \$930,860 over a three year period, including the user contribution for net purchase. Economic costs averaged \$6.23 per LLIN delivered, taking into account saved treatment costs. Assuming 40% of shared costs with two other malaria projects, a total of 50,310 children were protected at the net costs of \$10.96 per malaria case averted, \$661 per death prevented and \$22.32 per DALY averted. Variations in coverage and transmission levels showed significant impacts on the cost-effectiveness results. Conclusion; Results demonstrated high cost-effectiveness of social market delivery model of LLIN as a key strategy in reducing malaria morbidity and mortality in SSA, and greater efficiency gains are derived from joint delivery of the intervention with other programmes.

PT 01/08

Trend analysis and determinants of contraceptive use in Ghana: evidence from the Demographic and Health Surveys

Jacob Novignon, Department of Economics, University of Ibadan; Justice Nonvignon, Department of Health Policy, Planning and Management, School of Public Health, University of Ghana

With two years to the end of the Millennium Development Goals (MDGs), maternal and child health has barely improved in most developing countries and Ghana is no exception. The use of contraceptives is widely considered as a measure of reducing the chances of maternal and child deaths through effective family planning and general health improvements. The objectives of the current study were to examine the trend in the use of contraceptives in Ghana and to identify what factors determine the use of contraceptives.

Methods The study used cross-sectional data sets from the Demographic and Health Survey (DHS) for the years 1988 (sample size of 14, 216), 1993 (sample size of 13, 298), 1998 (sample size of 13,188), 2003 (sample size of 15, 086) and 2008 (sample size of 11,888). The sample sizes for each year were made up of women in their reproductive age (15-49 years). Cross tabulations with Chi-square tests were employed to examine the trend in the use of contraceptives and a probit regression model was used to determine the socioeconomic factors influencing the use of contraceptives in Ghana.

Results/key findings The results showed that the number of respondents who did not use any method of contraception reduced from 86.00% in 1988 to 79.31% in 2008. While Traditional contraceptive method use reduced from 7.70% in 1988 to 4.22% in 2008, Modern contraceptive method use increased from 6.30% in 1988 to 15.92% in 2008. Contraceptive use reduced in urban localities but increased in rural localities over the period 1988-2008. After controlling for confounding variables, results from the probit model showed that relative to the

lowest poverty quintile, individuals from the higher wealth quintiles were significantly more likely to use contraceptives. Further, education, rural location, and age were significant determinants of contraceptive use.

Conclusion The findings indicate that, in general, the use of contraception has increased marginally over the years and varies across various socioeconomic groups of the population. In an attempt to improve general health levels and to reduce maternal and child mortality/morbidity, there is need for policy makers to improve contraceptive use by improving such determining factors as education, and reducing poverty. These may be important steps in improving Ghana's performance with regards the health related MDGs and the post MDG policy goals and targets.

PT 01/09

Media violence and its effects on children's health and aggressive behaviour in osun state, Nigeria

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Aim: Over the years, media violence and its effects on children's health and aggressive behaviour remain a puzzle to be solved in many urban centres of developing world. At different ages, children due to their exposure, watch, sight-see, read, play and understand videos, television, magazines, videogames and films in different ways and as such, mimic behaviour from media especially when such behaviour is presented in a simple and instructional manner.

Objectives: This paper examines the kind of media device parents acquired for their children. It also assesses factors responsible for children aggression, and identifies the causal connection between media violence and how children unconsciously translate it to behaviour, as well as its health implication.

Method: The study adopts a survey research design where primary data were obtained through mixed methods (quantitative and qualitative techniques). The sample consists of 150 parents selected for questionnaire administration and two groups for Focus Group Discussion comprising of parents of both sexes. Quantitative data were analyzed using descriptive and inferential statistics while qualitative data were analyzed through thick description.

Key Findings: The findings reveal that media violence has a great effect on children aggressive behaviour in particular and countless impacts on their health and our society at large. The most often cited reasons were parental role, Government influence, societal influence and peer influence in the exposure of children to violence. It concludes that children's aggression in the contemporary times have taken a worrisome and complex dimension that could not be curtailed as this disrupts the process of socializing the children into the norms and values of society. Hence, the ways of curbing children's aggressive behaviour range from the government regulation, media censor, parental control and counseling in schools to religious control.

Key Words: *Media Violence, Children's aggression, Imitation, Behaviour and Urban Centres*

Poster Session 2

PT 02/01 Socioeconomic status and the prevalence of fever in children under age five: evidence from four sub-Saharan African countries

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Background The burden of fevers remains enormous in sub-Saharan Africa. While several efforts at reducing the burden of fevers have been made at the macro level, the relationship between socioeconomic status and fever prevalence has been inconclusive at the household and individual levels. The objective of this study was to examine how individual and household socioeconomic status influences the prevalence of fever among children under age five in four sub-Saharan African countries.

Methods The study used data from the 2008 Demographic and Health Survey (DHS) from Ghana, Nigeria, Kenya and Sierra Leone with a total of 38,990 children below age five. A multi-level random effects logistic model was fitted to examine the socioeconomic factors that influence the prevalence of fever in the two weeks preceding the survey. Data from the four countries were also combined to estimate this relationship, after country-specific analysis.

Results The results showed that children from wealthier households reported lower prevalence of fever in Ghana, Nigeria and Kenya with odds ratio (OR) of 0.62, 0.87 and 1.4, respectively. Result from the combined dataset showed that children from wealthier households were less likely to report fever (OR=0.6). In general, vaccination against fever-related diseases and the use of improved toilet facility reduces fever prevalence. The use of bed nets by children and mothers did not show consistent relationship across the countries.

Conclusion Poverty does not only influence prevalence of fever at the macro level as shown in other studies but also the individual and household levels. Policies directed towards preventing childhood fevers should take a close account of issues of poverty alleviation. There is also the need to ensure that prevention and treatment mechanisms directed towards fever related diseases (such as malaria, pneumonia, measles, diarrhoea, polio, tuberculosis etc) are accessible and effectively used.

PT 02/02

Female Education, HIV/AIDS and the Education Vaccine in SSA: The Condoms Piece of the Puzzle

Robert J Brent, Fordham University

Aim and Objectives of the paper

There exists the view, first expressed by researchers at the World Bank, that education used to be positively related to HIV, but that this relationship has subsequently been reversed over time. The alleged reversal has been so strong that investing in education was alleged to be a “vaccine” - see Vandemoortele and Delamonica (2002). However, there are many recent studies, for example Hargreaves et al. (2008), that indicate that female education and HIV are still

positively related in sub-Saharan Africa (SSA). So education is not a vaccine as claimed and there exists a puzzle (why female education and HIV are positively related) that needs to be resolved.

In this study, by focusing on the use and non-use of condoms by females with their sex partners in Tanzania, we provide one piece of the puzzle. That is, we identify one transmission mechanism (partner choice) by which female education leads to higher rates of HIV infection.

Methods Used

The dependent variable was a dichotomous choice in terms of when the last time sex had occurred whether a condom was used (Yes = 1, or No = 0). There were three sets of independent variables used: an education dummy variable for the level of education achieved, a set of partner dummy variables indicating the choice of sex partner (regular, irregular and spouse) and a set of control variables according to the characteristics of the individual (age and income). To uncover the transmission mechanism by which education affects HIV/AIDS, the education variable was combined with the sex partner variables to form an interaction term.

Our data was based on a survey of condom use by 527 sexually active females undertaken by PSI in Tanzania. Probit was the estimation technique used and this was applied first as a single equation and then in the form of IvProbit where a random serial number identifier was used as an instruments for the possibly endogenous interaction terms.

Results

The total effect of education was usually positive when the sex partner was the regular or irregular one as expected by those who claim that education is a vaccine. However, when the spouse was used as the partner in the interaction term, the direct positive effect was swamped by the induced negative effect causing education to have an overall negative impact on condom use. This helps explain the female education and HIV puzzle.

PT 02/03

The Operational Efficiency Evaluation of the Community Health Service Station in Yinchuan before and after the New Medical Reform

Lang Ying, management college of Ningxia Medical University; Meng Qingyue, PKU China Center for Health Development Studies

Objective: to evaluate and compare the efficiency of community health service stations in Yinchuan. before and after the new medical reform.

Methods: to select 20 CHS in Yinchuan as the research objects, using CCR and BCC model of DEA and Malmquist index to analyze the operational efficiency of CHS.

Results in 2008, the average efficiency of CHS is 0.94, among which 15% is DEA effective and 85% is non-DEA effective. While after the new medical reform (2009-2012), the average efficiency is much more higher than before , it is 0.98. **Conclusions:** the operational efficiency of 2009-2012 is much higher than before, but there exists input redundancy and output deficiency

problems of non-DEA effective CHS. **Recommendations:** allocating rationally the health resources, strengthening regional health planning and enlarge the scale.

Objectives: Diabetes is a preventable disease with prevalence in Kenya considered on par with Western countries. Diabetes prevention and care is important in non-Western countries because of the high costs and health burden associated with the acute care model of treatment, however, it is unknown how rural residents will perceive such a program. Willingness to pay (WTP) is a survey method used to value the benefit or loss of an intervention in a hypothetical or contingent market. This study compared the validity of two WTP methods the commonly used payment card (PC) and the recently developed structured haggling (SH, Onwujekwe 2004) in a diabetes prevention program in rural Kenya.

Methods: Convenience sample of adult residents from a rural county in Kenya (Kiambu) were randomized to one of two WTP elicitation methods, PC and SH. WTP data was collected via structured pre-tested individual face-to-face interviews that took an average of 12 minutes to complete. Consistent with the societal perspective both individuals with and without diabetes were eligible to participate. Therefore, both the ex-ante and ex-post approach was used. Theoretical validity was supported by determining if t-tests, correlation matrices and regression analyses resulted in coefficients consistent with theory based on their sign and significance.

Results: WTP data was collected from 398 rural residents 198 for the PC group and 200 for the SH group (52% male, 65% married, 5.5% diabetic, 16% owned a vehicle). Mean monthly household expenditures was Ksh10,898 (SEM=577.97)[US2011\$1= Ksh 85.37]. Mean WTP elicited using the PC method was significantly lower than the SH method KSh 533.59 (SEM=30.90) versus KSh 637.55 (SEM=28.00), differing by Ksh 103.96 (p=0.01). Bids for both PC and SH ranged from Ksh 0 to 2,000. Generalized linear model (GLM) regression supported the theoretical validity of both SH and PC in both magnitude and direction of the coefficients (p<.05) with a greater number of significant coefficients for SH.

Key Findings: Rural Kenyan residents valued the diabetes prevention program favorably with over 95% WTP to access the program. This is the first published study comparing PC and SH. Both methods were shown to be feasible for use in rural sub-Saharan Africa. This study showed that SH was at least as valid and PC. These study results, with all other things being equal, favors SH over PC in rural Kenya based on theoretical and content validity: SH more closely mirrors marketplace transactions in the rural Kenyan setting.

PT 02/04

Contradictions and inconsistencies in public policies. An analysis of healthcare fee exemption measures in Burkina Faso, Mali and Niger

Jean-Pierre Olivier de Sardan, LASDEL

Many African countries are now implementing user fee exemption policies for certain vulnerable population groups. In all cases, an increase in the number of health centre visits has been confirmed, an expected effect that has been widely documented. But what about unexpected effects ? This paper is the product of research comparing the design and operationalisation of user fee exemption policies in three countries (Burkina Faso, Mali and Niger) which, in similar contexts, have chosen to apply relatively different exemption measures.

One of our objectives was to better understand the implementation gap (bottlenecks, failures and problems that have emerged during the implementation process).

Mixed methods have been extensively used in this research. But to understand both the policy process and the local service delivery process, qualitative methods (based on anthropological fieldwork) have been especially relevant (sometimes complemented by quantitative inquiries): public discourse, official figures, numbers and statistics more often than not hide rather than reveal the daily reality of interactions between health providers and patients and the dysfunction of the health system. Private discourse and in-depth fieldwork are better suited to analyze the implementation gap.

Open interviews, systematic observations, and case studies showed convergent results. In the three countries, problems encountered are very similar. Exemption measures have been adopted on the basis of a mix of internal political calculations and external pressures. Due to the lack of preparation, communication, effective management and adequate funding, the implementation of measures is chaotic and inconsistent in most cases. Many unexpected effects were revealed by the research, notably the fact that quality of free care is far from reliable, due to shortages in supplies, but also to the routine functioning of the health system and to health providers' behaviors. These behaviours often reflect "practical norms" (informal regulations) that can diverge significantly from official norms and standards. Moreover most health providers are hostile to the exemption measures that they are supposed to operationalise.

Any move toward universal coverage should seriously address the issue of quality of care and take in account two problems : (a) contradictions and inconsistencies in health public policies; (b) practical norms followed by health providers

PT 02/05

Botswana's Global Competitiveness: Efficiency Analysis of Health Expenditure

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Botswana is considered one of the most competitive economies in the Sub-Saharan region. It is amongst the top five competitive economies in sub-Saharan region. According to the 2012/13 Global Competitiveness Reports, Botswana's strength lies on "reliable and transparent institutions, efficient government spending, strong public trust of politicians and low levels of corruption" (GCR, 2011/2012; 42). This paper assessed the efficiency of government expenditure on health in Botswana and compared it to other countries that are in the transition stage of development as Botswana. The paper also attempted to answer the question: why is Botswana lowly ranked in the pillar of health and education (emphasis is on health) in the global competitiveness yet it spends a lot on health? Data for Botswana shows that rates for health indicators are declining implying that Botswana is doing better in trying to improve the health of Botswana. Based on these improvements, the expectation is that Botswana should be ranked higher given that it spends a higher proportion of GDP as compared to other countries, but this is not the case. As shown in the various Global Competitiveness reports, it seems Botswana's rankings are not improving every year. From the findings of this study, Botswana is more efficient in its expenditure on health. It is more efficient than most of the countries that

are ranked better than it and this contradicts the Global Competitiveness Report findings. The paper used secondary data from the World Bank and Statistics Botswana publications and frontier analyst was used for analysis.

PT 02/06

Why Do People With Access To Public Healthcare Use Alternative Medicine? The Prevalence And Pattern Of Herbal Medicine Use Among Pregnant Women In Nairobi, Kenya

Mamothena Mothupi, Moi University

Aim: The aim of the study was to assess the role of alternative care, particularly herbal medicine, in maternal health. Studies show high prevalence of use of herbal medicine related to maternal care in African and other regions, use of traditional care systems in rural contexts in Kenya, as well as suggest poor health outcomes or outcomes of care related to such use. Scarcer are studies in an urban context in Kenya where women have relatively higher access to public healthcare, and the factors that may influence continued use of herbal medicine. This study adds to knowledge on maternal care practices that occur outside the formal health system but nonetheless may affect maternal health outcomes.

Objectives: To determine the prevalence of use of herbal medicine during pregnancy; to determine reasons for use of herbal medicine; to determine the socio-demographic and other factors associated with herbal medicine use; to assess health seeking behaviors related to herbal medicine use and; to assess respondents' beliefs about safety and efficacy of herbal medicine alone in comparison with Western medicine.

Methods: This cross-sectional descriptive study surveyed 333 women attending childcare clinic in a public hospital in Nairobi to assess use of herbal medicine during pregnancy, factors associated with such use, perception of safety and efficacy and health seeking behaviour. Chi-square tests examined relationships between independent factors and use of herbal medicine and open-ended responses were analysed thematically.

Key Findings: About 12% of respondents used herbal medicine during pregnancy. Use was associated with lower level of education ($p=0.007$) and use before index pregnancy ($p<0.001$). The majority of users (87.5%) did not disclose use to healthcare professional. About 20% of users also used herbal and Western medicine concurrently. The most common indications for use included aches and pains, stomach/digestion conditions, and respiratory tract infections. There were significant differences between users and non- users in terms of beliefs about safety and efficacy of herbal medicine alone and in comparison to Western medicine. Health seeking behaviour was influenced by perception of effectiveness, source of herbal medicine (with high rates of self-prescription), and the sociocultural environment (especially the influence of kin/friends). Both users and non- users tend to trust Western medicine and practitioners although this is not always translated into utilization when the subject is ill or seeks help.

PT 02/07**Projet couverture médicosociale des groupes vulnérables au Sénégal, cas des PVVIH (personnes vivant avec le VIH/SIDA) de Kaolack**

Christian Yao, MSAS Sénégal

But Le but est d'améliorer la qualité de vie des PVVIH en augmentant leur capacité d'auto-prise en charge médicosociale.

Objectifs

- Réduire les dépenses privées directes des PV VIH associées à la prise en charge des Infections Opportunistes et des bilans
- Assurer l'accès au crédit aux PVVIH pour le financement d'activités génératrices de revenus
- Renforcer les capacités des acteurs impliqués dans le schéma de prise en charge des PVVIH
- Mettre en place des partenariats au niveau local pour soutenir la pérennité et la coordination de la prise en charge des PVVIH

Méthodes :

- Faciliter l'accès et l'adhésion des PVVIH et de leur famille aux (MS) mutuelles de santé (paiement des frais d'adhésion et de cotisation pour certaines PVVIH indigentes)
- Faciliter l'accès des PVVIH aux crédits (négociation de conditions allégées avec les SFD et activités de renforcement des capacités)
- Mettre en place un fonds de garanties sociales pour mitiger les risques potentiels encourus par les MS et les SFD:
- Pour les SFD: garantir les risques de non remboursement
- Pour les MS: subventionner les soins spécifiques au VIH non couverts par le paquet de services des MS (traitements des IO et bilans biomédicaux); et selon le cas, les excédents de dépenses par les mutuelles pour la PEC des PVVIH.
- Responsabiliser les bénéficiaires PVVIH à travers la participation active des associations à tous les niveaux
- Mettre en place une unité de gestion et de coordination au niveau régional
- Renforcer les capacités des acteurs impliqués
- Construire des partenariats au niveau local pour soutenir la pérennité de la prise en charge des PVVIH (autorités administratives et locales)

Résultats clé à Kaolack

- 193 adhérents PVVIH aux MS et de 403 bénéficiaires (membres de famille et proches)
- Le Fonds de Garantie Sociale a supporté 45% du coût total de la prise en charge des PVVIH, les Mutuelles de Santé 32 % et les PVVIH 23 %

- Contribue à la politique de couverture maladie
- Témoignages de l'apport du projet dans la vie des PVVIH (réduction des paiements directs, satisfaction d'avoir accédé à la MS, ...)
- Tous les partenaires techniques (pharmacies privées, mutuelles de santé, ...) sont disposées à poursuivre la collaboration
- Réplication dans 3 autres régions par le ministère

PT 02/08

Identification and Intervention for Dementia in Elderly Africans: IDEA study

Laura Ternent, Newcastle University; Mark Deverill, Newcastle University; Richard Walker, Newcastle University

Background: Dementia is an under-diagnosed condition in sub-Saharan Africa (SSA) and treatment, where available, is rarely accessed. The burden of dementia on carers is high, with loss of income and psychosocial stress common. Large scale screening for dementia in SSA is currently neither affordable nor sustainable. This study will implement a novel, sustainable approach to the diagnosis and treatment of dementia in SSA. The project is organized into three main areas of work: (1) validation of a dementia screening tool to identify people living with dementia in a simple and sustainable way; (2) pilot study to determine benefit of cognitive stimulation therapy (CST); (3) initiate a program of community based CST where local health care specialists train carers in CST. An economic evaluation of the program will be conducted.

Aim: The aim of the economic evaluation is to evaluate the costs and effects of the community based CST intervention.

Methods: The study will take place in Tanzania and Nigeria, providing data on two distinct but complementary rural populations. The study will focus on individuals aged >70. An evaluation of CST intervention, including a micro costing exercise for the initial set up and on-going costs of for the program, training costs, additional staff costs etc. will be undertaken.

Results: Results are not yet available.

Discussion: It is hypothesized that CST will save resources in terms of numbers of appointments, assessments and investigations and improve quality of life. We will map out the care pathway of individuals who would receive CST and those who would receive usual care and conduct a cost-consequence analysis, where potential costs and consequences are displayed. Given the barriers to accessing services in low- and middle-income countries we will also examine broader societal costs and consequences. Quality of life of individuals and carers will also be measured, pre and post intervention.

Implications for health care provision and use: A review of dementia in low income countries (Kalaria et al (2008) estimated that dementia costs US\$2.9 billion per year in direct and informal care costs in SSA. This project will provide evidence on whether the intervention is effective and cost-effective use of resources for identifying and managing people with dementia in SSA.

PT 02/09

Understanding Variations in Immunization in Nigeria

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There are clear benefits to receiving full immunization in childhood. Immunization is known to prevent disease, save lives and save against unnecessary future health expenditure. It is also a positive externality in that through herd immunity, it helps prevent the spread of communicable diseases, thereby also protecting present and future generations.

Despite these apparent advantages, barriers to routine immunization persist in Nigeria. The system is beset with problems of staff shortage, non-availability of staff with the right skill sets in many parts of the country and poor systems for delivery of vaccines. Immunization coverage rates remain generally low in the country but especially within some regions of the country where the demand for routine immunization is quite poor.

We use a mixture of descriptive and econometric modeling techniques on routine immunization data from Nigeria to evaluate variations in demand for different types of vaccines on the national immunization schedule, as a way of understanding any differences between individuals and due to geographic and cultural boundaries. The results of this analysis will ultimately feed into ongoing immunization campaigns by mapping out the areas and groups that need better targeting and the types of vaccines that are required to strengthen routine immunization and increase immunization coverage rate in Nigeria.

Keywords: Nigeria, immunization, vaccine, variations, demand for health.

Poster Session 3

PT 03/01

Estimating the economic burden of malaria in young children: results from a highly endemic low-income setting in Northern Uganda

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Abstract Malaria remains the leading cause of childhood morbidity and mortality – and accounts for nearly 91 percent of deaths in Africa and 85% of deaths among children below five years. In Uganda, about 36 percent of outpatient visits for all ages, and about 20 percent of hospitalization for under5 are due to malaria. Thus, malaria poses a heavy economic burden on the health system and households. However, there is paucity of information on the economic costs malaria impacts on households in Uganda. This study fills this gap.

Aim This study estimated the economic burden of malaria in Uganda using the cost of illness approach, using a case study of Apac district, Mid-northern Uganda.

Methods Data were collected from households, public and private healthcare providers. A face-to face questionnaire was administered to a random sample of 500 households to collect data on household direct and indirect costs for malaria treatment for under-5s and on malaria prevention practices. Data on provider and household treatment costs were collected for 175 outpatient and 150 inpatient cases at health facilities. . Patient records for both 150 inpatient and 85 outpatient cases were reviewed to document treatments received. A total 38 healthcare providers at the district hospital and health centres were also interviewed. The cost per malaria episode was then estimated, and mode of financing direct costs assessed.

Key findings About 66.4% of households interviewed reported at least one episode of malaria over the last month prior to the survey. The average household-level treatment cost per case was US\$5.35 for out-patients (of which US\$ 3.10 is opportunity costs) and US\$ 16.70 per inpatient (of which US\$ 11.00 is opportunity costs) and a 3- day length of stay on average. Provider costs per outpatient cases were estimated to be US\$ 1.35 and US\$ 3.58 for in-patients . Personal savings, money from business and selling assets were the most common payment mechanisms. Per capita household expenditure on bednets ranged from US\$ 0.19 to US\$.50 for the poorest and least poor quintiles respectively.

Conclusion A higher economic burden was found to be borne by households than health system, and indirect costs of illness account for over 60% of household total costs of malaria treatment-related costs. Therefore interventions to prevent malaria among children, including mass distribution of treated bednets should be scaled up and will significantly reduce the economic burden of malaria both to households and the healthcare system.

PT 03/02**Socioeconomic correlates and the choice of treatment for childhood fever in Ghana**

Eric Arthur

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Aim Fever is a common symptom of illness in children, and it is associated with malaria, pneumonia and other childhood diseases. These diseases are main contributors to deaths among children under age five in the sub-Saharan African region. The World Health Organization's (WHO 2006) report on infectious diseases posits that these diseases cause most of the deaths from infectious diseases in children. The burden of fever remains enormous in Africa and especially in sub-Saharan Africa. While efforts at reducing the burden of fever have been made in many countries through several interventions, the relationship between socioeconomic status and the choice of treatment for childhood fever still remains a mystery, especially at the household and individual level.

Objective The objective of this study is to examine how individual and household socioeconomic status influences the choice of treatment for childhood fever among children under age five using data from the Demographic and health surveys for Ghana (2008).

Method The multinomial Probit regression model is employed to investigate how the socioeconomic variables influence the choice of care from private and public hospitals compared to no care for the sick child, in which case the caretaker resorts to either self medication for the child or traditional medicine amounting to home care.

Key findings The results from the study indicates that wealth, age of the child, health insurance of status of the mother, birth order of the child, and residence are important predictors of the choice of treatment for childhood fever in Ghana.

PT 03/03**Cost-Effectiveness of Phototherapy Strategies for Uncomplicated Neonatal Jaundice in Nigeria**

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Background: In-patient phototherapy (IPP) is exclusively practiced in Nigeria. We aimed to evaluate the cost-effectiveness of home-based phototherapy (HBP) as an alternative to IPP.

Method It was a cross-sectional study. Primary and secondary data were collected from patients' files, admission register and interviews of parents and providers. The evaluated hyperbilirubinemia treatment options were: IPP, HBP and "no treatment option (sun exposure)". "Effectiveness" used was the ability to clear jaundice and in proxy prevents Bilirubin-induced neurologic dysfunction (BIND). HBP was of equal effectiveness as IPP, thus

allowed cost minimization analysis. The “cost-effectiveness” was the cost per BIND prevented. The estimated charges were used to analyze for the estimated costs based on the probabilities in the decision tree. The “incremental cost” of either HBP or IPP was estimated by comparing the least cost-minimizing strategy against the cost of “no treatment option”: the cost of managing BIND. All costs were generated in Nigerian naira and converted to U.S. dollar using current exchange rates.

Results The average cost of HBP was US\$153.1 while IPP cost was US\$118.4, showing incremental cost effectiveness (ICE) per patient of US\$28.5 for HBP. The cost per case of BIND prevented was US\$14,335.95, therefore the ICE for “no treatment option” was US\$14,181.05 compared with HBP.

Conclusions IPP is a more cost-minimizing strategy than HBP. But when HBP was compared with “no treatment option”, it was cost-effective. Therefore, parents’ preference and willingness-to-pay for HBP should be evaluated further through a discrete-choice-experiment study before recommending HBP for neonates with hyperbilirubinemia .

PT 03/04

Evaluation du coût annuel de l'hépatite B chronique non traitée au Sénégal

Yvan Agbassi, ACONDA-VS; Hervé Lafarge, CESAG, Paris Dauphine

But : Contribuer à la définition d’une politique pertinente face au virus de l’hépatite B (VHB) au Sénégal en estimant les enjeux économiques du traitement de l’hépatite B chronique (HBC).

Objectif général : Evaluer le coût annuel de l’HBC non traitée au Sénégal

Objectifs spécifiques

- Evaluer la prévalence annuelle des hépatopathies graves (cirrhose décompensée, carcinome hépatocellulaire) imputables à l’HBC non traitée
- Evaluer le coût économique des hépatopathies imputables à l’HBC non traitée
- Evaluer le coût humain (années de vie perdues) des hépatopathies

Méthodes : Nous avons commencé par simuler l’histoire naturelle d’une cohorte de 1000 naissances contaminées par le VHB à partir d’un modèle séquentiel de population pour évaluer la prévalence annuelle des hépatopathies. Une analyse de coûts par sections homogènes basée sur la comptabilité analytique de l’Hôpital Principal de Dakar (HPD) a permis de déterminer le coût médical des hépatopathies. En multipliant ce coût par le nombre de cas attendus, nous avons déterminé le coût médical annuel des hépatopathies. Le coût humain a été estimé en termes d’années de vie perdues. Une enquête de 91 dossiers médicaux de l’hôpital principal de Dakar (HPD) et de l’hôpital Aristide Ledantec (HALD) a été conduite pour récolter les données nécessaires à l’étude.

Résultats clé: Notre étude a permis d’estimer les coûts médicaux d’une cirrhose décompensée et d’un carcinome hépatocellulaire (CHC) respectivement de 1 281 000 FCFA et de 613 000 FCFA. Les coûts annuels de ces pathologies sont respectivement de 17 milliards de FCFA et de

5,88 milliards de FCFA. Le coût attendu en pourcentage du budget du ministère de la santé est de l'ordre de 16% pour les cirrhoses décompensées et de 5% pour les CHC. Sur le plan humain, le nombre de cirrhoses décompensées attendues est de 13 304 et le nombre de CHC attendus est de 9 579. Le nombre d'années de vie perdues est de 10,2 pour 1000 habitants contaminés. Nos résultats ont permis de montrer que l'HBc non traitée constitue une menace économique forte et une menace humaine moyenne au Sénégal. Cette étude met à la disposition du Programme National de Lutte contre les Hépatites (PNLH), les coûts évitables par les stratégies de vaccination et de traitement de l'HBc. Il sera donc permis au programme d'évaluer la rentabilité et l'efficacité de ces stratégies de lutte envisageables pour une meilleure définition de la politique de lutte contre l'endémie au Sénégal.

PT 03/05

“ECONOMIC COST OF MALARIA IN SIDAMA ZONE, SNNPR, ETHIOPIA”

Wondwosen Gebeyaw Kassa, Mr

Malaria remains one of the major health problems in Ethiopia as in Sidama Zone, Southern People's Nations and Nationalities Region. Though it fairly gets attention as a health problem, its cost on the economy stayed unnoticed. In the thesis, 'Economic Cost of Malaria on Sidama Zone, SNNPR, Ethiopia', an attempted has made to investigate and estimate the economic cost of malaria morbidity and mortality on households and public Health institutions in Sidama Zone.

To conduct the study, cross sectional household survey of randomly selected 100 households from rural setting of Sidama Zone has been done. Data collected by interview using the structured questionnaire and interviewing key informants' from March 15 - April 01, 2011. Desk review done using checklist. The study area was chosen based on the agro-ecological feature and malaria prevalence of the Zone. The collected data analyzed using SPSS software; the findings were presented using tables and graphs.

It was estimated that household paid an average of 20.46birr (\$1.24) for prevention and 119.91birr (\$7.27) for treatment per episode. That is household's spend 21.81% of the total direct cost for prevention and the remaining 78.19% of total direct cost for treatment. A single Household in Sidama Zone spends an average of 140.51birr /\$8.52/ direct cost for prevention and treatment of malaria/episode.

On the other hands, an average of 7.54 productive days is wasted by the victim due to illness, and 1.82 days by the person to take care of the patient. The indirect cost for productive days wasted for seeking treatment valued 99.50birr (\$6.03) per patient and 22.78birr per caretaker. A total of 122.25birr (\$ 7.40) indirect cost wasted per household while a person is sick with malaria.

Therefore, malaria withdraws 56.70% of the households' income or households pay an average of 247.40birr (\$14.99) per malaria episode from the average cumulative income of 436.33birr (\$26.44) per month.

Public health institutes spent an average of 1.33birr (\$0.09) per household for malaria prevention and 47.27birr (\$2.87) per patient for treatment. Roll Back Malaria (RBM, 2008)

Global Action Plan estimated the cost of country implementation of malaria control and elimination strategies suggested roughly US\$1.5–3.0 per capita per year.

Generally, malaria bears huge economic cost on households and public health institutions either directly or indirectly. Besides, it was observed that public spending to subsidize malaria control action for RBM from the Zone still lower than the standard. Overall, malaria manifested as a cause for underdevelopment by consuming scarce resources of Sidama Zone.

PT 03/06

Wilfried Some, IRSS

But : Evaluer la ligne verte du Comité ministériel pour la santé du Ministère des enseignements secondaire et supérieur.

Objectifs : Examiner le processus et les résultats de la ligne verte ; et mesurer son utilisation auprès des élèves et étudiants ainsi que les facteurs associés.

Matériel et méthodes : Il s'est agi de trois études transversales. D'abord une évaluation des appels pour laquelle nous avons utilisé les fiches de collecte des appels de la ligne verte sur la période allant de août 2009 à juillet 2011. Ensuite pour l'étude du processus, nous avons adressé des questionnaires différents en décembre 2012 aux animateurs et aux responsables de la ligne verte. Enfin pour la mesure de la connaissance de la ligne verte réalisée en décembre 2012, nous avons fait un échantillonnage aléatoire 390 élèves et étudiants des établissements de la ville de Kaya à qui nous avons soumis un questionnaire.

Résultats : La ligne verte ne fonctionnait pas toujours selon les normes de sa conception. Le nombre total d'appels a été de 5551, soit une moyenne de 8 appels/jour. Les appels étaient plus fréquents dans la nuit. La tranche d'âge de 15 à 19 ans représentait 64,4%. Le sexe masculin était prédominant (84,6%) avec un sexe ratio de 5,47. Les appels ont été passés, avec d'énormes disparités, de toutes les régions et provinces du Burkina Faso. Les clients ont abordé le VIH/SIDA, la SR et le paludisme dans respectivement 54,9%, 18,8 et 6,3% des cas. La recherche d'informations sur la transmission du VIH (28,9%) a été la principale question posée. Parmi les enquêtés (n=390), la proportion des élèves et étudiants qui avaient connaissance de la ligne verte était de 28,7% ; seulement 14,6% l'avait déjà utilisé et ont été dans 42,3% des cas très satisfaits.

Conclusion : La ligne verte « Info santé » a obtenu des résultats forts appréciables. Son importance ne fait aucun doute, nécessitant que des efforts soient conjugués pour l'améliorer.

Executive Summary

Everyone, as a member of society, has the right to social security, including access to health care (United Nations, 1948). However, 75 percent of the world's population is not sufficiently protected and about 40 percent lack even basic protection (Bachelet, 2011). In Côte d'Ivoire since the implementation of the policy of cost recovery in October 1994, the use of health care has decreased. Accustomed to free health care in health centers, populations, with the implementation of this policy, tend to use other practices to treat themselves. Increasingly, they resort to self-medication or traditional medicine. If nothing is done to facilitate their use of modern health care, a significant proportion of the population may be excluded from access to health care and the poverty rate is around 50% could experience very worrying increase.

Experience shows that, in the context of drawing up a schedule of health services charges, the government intervention is necessary to facilitate access to health care of a larger number of the population. That is why in most developed countries, governments have established social insurance systems.

Modes of financing such as insurance schemes vary but the goal are the same, that is, to make health care accessible to all. In the United Kingdom, Sweden and Denmark, access to health care is free. But care is financed by taxes, controlled by Parliament and managed by an administration. In Germany, Benelux and Austria, health care is financed by contributions levied on wages. The Canadian system is a single-payer system insurer (government) (Fortier, 1992) that allows more equitable care utilization by disadvantaged people (Manga, 1987).

In Côte d'Ivoire, the government decided in 2001 to establish a Micro Universal Health Insurance (MAMU). The objective of this policy is to contribute to the fight against poverty through support for health expenditure of the poorest populations in particular.

The MAMU presents itself as a form of social insurance which guarantees every person residing in Côte d'Ivoire, coverage of sickness and maternity related risks and allows to offer every person residing in Côte d'Ivoire, an effective and equal access to health care.

To secure its financing, the law on the establishment, organization and functioning of the MAMU compelled residents to pay a fee, the amount of which is fixed in proportion to the contribution capacity of each homogeneous group. Moreover, these contributions will be calculated on income or fixed on the basis of a plan if the participant has no source of income or income difficult to estimate.

Do these contributions correspond to the maximum amounts that people are willing to pay? What are the contribution rates that people, especially those living in rural areas, are willing to pay?

Are these contributions sensitive to certain socio-demographic and socio-economic factors?

To our knowledge, in Côte d'Ivoire, no empirical study has been conducted to answer these questions so that their answers would avoid the policy objective of MAMU, which is to contribute to the fight against poverty, does not produce the opposite effect by damaging the most vulnerable sections of the society. One way to reduce this risk is to suggest a contribution rate that is close to the maximum rate that people are willing to pay.

The objective of this study is to help provide information likely to throw light on the authorities' decisions in the implementation of the Micro Universal Health Insurance in Côte d'Ivoire. Specifically, to estimate the households aptitude to contribute to the Micro Universal Health Insurance and identify factors explaining these contributions. To achieve this, a survey based on the method of contingent valuation on 405 heads of farm households was conducted in the Aboisso District, an agricultural district located east of Abidjan. Data from this survey were analyzed using descriptive approach and using an econometric model: the Tobit model.

The results of the descriptive analysis indicate that the majority of heads of households surveyed would contribute an annual amount of 8,000 FCFA. The results of the econometric analysis show that this amount is influenced by age, education level and household income.

PT 03/08**Saving Money, Saving Lives: An Inquiry into a Micro-Savings Maternity Product in Kenya**

Agnes Gatome-Munyua, SHOPS Project, Abt Associates; Thierry van Bastelaer, Abt Associates; Benjamin Woodman, SHOPS Project, Abt Associates

Aim: Financial barriers to maternity services are directly linked to avoidable maternal and newborn deaths. Health finance interventions, such as microsavings mechanisms, aim to reduce these barriers and improve access to high-quality healthcare. In Kenya, the Changamka stored-value savings card allows users to save for medical expenses. Maternity care is an ideal match for such a program because it is predictable both in terms of timing and cost.

Objectives: The objective of this retrospective, third-party evaluation was to examine the implementation of Changamka's pilot maternity program, and to develop lessons learned and recommendations.

Methods: The study examined card use data collected in real time during Changamka's partnership with Nairobi's Pumwani Maternity Hospital from mid-2010 to late 2011, and from a household survey of 1600 women in the hospital's catchment area, with in-depth interviews with selected individuals.

Key Findings: The study revealed multiple key findings including:

- High level of card uptake, but high discontinuation rates.
- Card users typically obtained the card too late during their pregnancy to allow for significant savings accumulation.
- Card users felt that the card was a safe, private, and convenient alternative to cash, and appreciated a health-dedicated savings vehicle.

- Women who obtained the card were wealthier and more educated than their peers at the same facility.
- Cost, transportation, and lack of respectful treatment are the main reasons cited for home-based births

The results yield important lessons about health finance behavior and consumer preferences in maternal health, as well as guidance for the design of health savings and insurance mechanisms. They also suggest several ways that a program such as Changamka is relevant both to the new government-funded maternity scheme and efforts toward UHC in Kenya: A maternity savings card is complementary to the free maternity scheme since it allows government resources to be targeted exclusively to those who cannot pay, while those who are able and willing to pay can use instruments such as Changamka. In addition, until the free maternity scheme is operationally expanded to ANC and PNC care, a mechanism such as Changamka is also relevant to all women requiring these services. Issues such as transportation and disrespectful treatment of patients by health workers have also been noted in the Changamka study, and will require continued attention of policy makers.

PT 03/09

Towards Developing a Policy on Use of Rational Use of Medicine for Malaria Treatment in Low and Middle Income Countries.

Okwen P Mbah NWSFH, Cameroon

Background Malaria treatment in LMICs has improved in recent years encouraging more evidence based care and cost effectiveness. However, prescription include eminence based care like Vitamin B complex (VBC). In Cameroon the average adult receives 2.4 injections in a year, and recent research suggests that as of 2009 only 7% of these injections were administered by health workers.^{7,8} In addition, 15-45% of prescriptions at hospitals include at least one injection.⁹ In Cameroon, communities have set up mutual health organisations (MHOs) for financial protection from catastrophic health expenditures. The MHOs cover mostly the informal sector, which are actually the most vulnerable segment of the community to catastrophic expenditures. MHOs receive technical and financial support from the GIZ and the Cameroon government. There are currently over 10 MHOs in the NW region of Cameroon.

Research problem To estimate the cost of injectable VBC in malaria treatment for both private and public hospitals in Cameroon and use these to estimate the financial burden.

⁷ Measure DHS. Cameroon Demographic and Health Survey, 2004. Available at: www.measuredhs.com/

⁸ Okwen MP, Ngem BY, Alomba FA, Capo MV, Reid SR, Ewang EC. Uncovering high rates of unsafe injection equipment reuse in rural Cameroon: validation of a survey instrument that probes for specific misconceptions. *Harm Reduction Journal* 2011; 8:4.

⁹ Kreuzinger S. Basic health care through a mutual health organization in Mamfe, Cameroon: analysis of prescription patterns 2008/2009. Deutscher Entwicklungsdienst, 2010.

Methodology We collected invoices submitted to the Kumbo Mutual Health Organisation (KMHO) from 4 hospitals in the Kumbo health district between January 2013 to May 2013 of all patients admitted for malaria. We calculated the average number of injections given to adult patients and the average cost of VBC injection compared to the total treatment.

Results All 4 hospitals routinely prescribe VBC injections to admitted patients and oral B complex to out-patients. The mean unit cost of VBC injection was 200 XAF, SD= 81.6 (n=120). Mean number of VBC prescriptions of 5.31 per patient per admission for malaria, SD=0.85. Extrapolations from total admissions for malaria at regional level suggests that consumers in the NW Region, will spend at least 15,292,800 XAF (30,331 USD) per annum on payments for VBC prescriptions.

Discussion and Conclusion Rational use of medicines for the treatment of malaria could help reduce blood borne infections and reduce cost of service for consumers in LMICs.

There is need for a wider economic evaluation of medicines used in the treatment of malaria and these results be used in developing evidence based treatment policies and guides for malaria treatment.

PT 03/10

Understanding the role of the private sector in national HIV spending: a snapshot of four countries

Sean Callahan and Sharon Nakhimovsky, Abt Associates

Aim: Fully leveraging private sector resources for financing and providing healthcare is an important strategy for sustaining national HIV responses and increasing access to services. Authors used resource tracking data from National Health Account (NHA) HIV subaccounts to examine developments in the contribution of the private sector to countries' HIV and AIDS response.

Objectives: The analysis has three goals: identify how (and how much) donor and government funding for HIV flows through the private sector; increase understanding of the private sector role in the provision of HIV services; and share policy implications for country stakeholders.

Methods: Authors analyzed resource tracking data from NHA HIV subaccounts in Kenya, Malawi, Namibia, and Cote d'Ivoire. NHA data show the flow of HIV-related funding from funding source to finance agent, from agent to healthcare provider, and from provider to health function. Particular attention was paid to the finance agents that allocated funding to private commercial healthcare providers, and the funding sources that provided financing to those agents.

Key Findings: The size and scope of the private health sector varies from country to country. In all four countries, private donations from domestic sources accounted for five percent or less of total HIV expenditures – much less than public sources and donors, and less than private donations to overall total health expenditures. The amount of HIV funding spent at commercial providers varied from country to country. Ranging from three percent of HIV financing in Cote d'Ivoire to fifteen percent in Kenya, the private commercial sector played a larger role providing HIV care than in funding it. Across all four countries, the main agents that managed decisions

about spending at private providers were households, private and parastatal employers, and private (and in Namibia's case, public) insurance schemes. Tracing how funding flows from sources through these three agents and to facilities revealed that donor funding that reached private commercial facilities was negligible. Households spent the most amount of money at private commercial providers, through out-of-pocket payments and contributions to health insurance. Employers were the second main source of spending at private commercial facilities through direct payments and contributions to health insurance. Except for Namibia, where public money flowed through public health insurance schemes to private providers, the amount of government money that reached private commercial providers was also negligible. As donors and governments invest in sustaining national HIV responses, they should seek more opportunities to leverage private domestic finance resources.

Poster Session 4

PT 04/01

Measuring and Monitoring Progress towards Universal Health Coverage: Country case studies from Ethiopia, Cote d'Ivoire, and Senegal [Organized Panel Session]

Presenter 1: Abebe ASFAW, Independent Consultant, Addis Ababa, Ethiopia,

Countries around the world are committing to a “Universal Health Coverage” (UHC) agenda, but there is still substantial confusion about how best to measure progress towards UHC. UHC measurement is critical to help show whether coverage with quality health services and financial risk protection is continuing to expand, and to hold leaders accountable for progress. Yet it is challenging to track UHC using simple, quantifiable indicators, and systems for gathering such information routinely need to be strengthened.

The USAID-funded Health Finance and Governance (HFG) project supported the case studies in Ethiopia, to review how countries in Africa are currently measuring their own progress towards UHC. The case studies (i) explored what indicators each country is already using to measure its progress, and whether a set of proposed UHC indicators seem relevant and feasible; (ii) assessed the capacity of the country to collect data for and generate these potential UHC indicators; and (iii) identified challenges and gaps (in human capacity, health information systems [HIS], or financial resources) that need to be filled. Key informant interviews and review of secondary data sources were used to answer these research questions.

During this panel session, the researcher from Ethiopia will present an overview of the country's efforts to move towards UHC, as well as findings from their review of secondary sources and interviews with key stakeholders. A sample of key findings include the following:

- Ethiopia defined a separate sets of strategies for access, quality and financial protections but lacks a comprehensive strategy and plan to achieve UHC
- Most of the maternal, child health and communicable disease related service coverage indicators are available and being collected through surveys and routine information system. But service coverage indicators for NCDs are not available and there is no national system for collecting this information.
- Ethiopia has 36 quality measurement indicators that are being used at the hospital levels. While the UHC indicators proposed are specific to diseases, the Ethiopian one is general. There needs to be an agreement among countries how to measure progress in quality in UHC.
- The measures related to level and percentage of investment of government or households on health are available. However, the impacts of out-of-pocket spending on poor households are not available, as surveys conducted to estimate the amount of HHs spending on different aspects do not go into that depth. This can be done if agreement is reached between the statistical agency and the Ministry health. However, there is no outcome indicator defined so far that will help plan and monitor performance on annual basis.
- The private health sector, a significant provider of health services, is completely excluded from routine HIS and thus from non-survey based measures of UHC.

PT 04/02**Acceptabilité de test de la syphilis du point de prestation chez les femmes enceintes au Burkina Faso**

Fadima YAYA Bocoum, Institut de Recherche en Sciences de la Santé, Aristide Bado, Simon Tiendrebeogo , Christina Zarowsky , Seni KOUANDA

Résumé : La Syphilis pendant la grossesse pose des risques pour la santé de la mère et du fœtus et augmente également le risque de transmission du VIH. La syphilis affecte un million de grossesses chaque année et est responsable d'environ un tiers de tous les mort-nés en Afrique sub-saharienne. Comme beaucoup d'infections sexuellement transmissibles (IST) dans les milieux pauvres, dépourvus de ressources, la syphilis est souvent diagnostiquée et traitée de façon syndromique. Chez les femmes enceintes, cependant, la syphilis est souvent asymptomatique, d'autant plus que le test sérologique est nécessaire pour le dépistage. Actuellement, les tests efficaces aux points de prestations de soins existent. Ces technologies novatrices en santé sont une bonne occasion pour élargir le dépistage de la syphilis maternelle. Avant la mise en œuvre de cette intervention, il est important d'évaluer son acceptabilité par les consommateurs potentiels. Le but de notre étude est d'évaluer la capacité financière à payer et l'acceptabilité des phases test parmi les femmes.

Méthodes : Une étude test de la mise en œuvre a été menée parmi les femmes à travers « *the Kaya demographic health system surveillance (KADESS)* ». L'échantillonnage aléatoire simple a été utilisé pour sélectionner des ménages et les femmes. Un total de 200 femmes ont été interrogées dans les zones rurales et urbaines. Un questionnaire a été conçu pour évaluer leurs connaissances sur la syphilis, leur acceptabilité des différentes phases de l'essai et de déterminer les montants minimum et maximum de ce que les consommateurs seraient prêts à payer. Les statistiques descriptives telles que les moyennes, les rangs et les proportions ont été utilisés. Les tests d'association ont été réalisés. Toutes les analyses ont été effectuées à un niveau de significativité de 5%.

Résultats : Un total de 200 femmes ont été interrogées et 99,5 % ont accepté de faire le test de la syphilis. Parmi les femmes interrogées, respectivement 95,5 % et 96,4 % ont déclaré qu'il est important d'effectuer une pré et post counseling. Le consentement du patient pour l'essai est nécessaire pour 98,5 %. La moyenne du montant minimum est d'environ 1,5 USD et la moyenne pour le montant maximum est d'environ 2.2USD. Seulement 2,5 % aimeraient recevoir librement le test. La plupart des femmes (97,5 %) accepte de révéler leur statut sérologique à leur partenaire. Il n'y a pas d'association significative entre le statut socio-économique des ménages, le lieu de résidence et les montants minimum et maximum à payer.

Conclusion : L'acceptabilité du dépistage de la syphilis est élevée et les femmes sont prêtes à payer pour le test. Si un point de prestation de soins pour effectuer le test de la syphilis est disponible dans les établissements de santé, nous recommandons un dépistage systématique pour les femmes enceintes au Burkina Faso et dans les pays ayant des profils sociaux similaires.

PT 04/03**L'articulation du Plan Sésame et des mutuelles de santé : quel impact sur l'équité dans l'accès aux soins et la couverture santé universelle des personnes âgées au Sénégal?**

Aboubakry Gollock, CR-CHUM/ Université de Montréal (Canada) et CREFDES/FASEG/Université Cheikh Anta Diop de Dakar (Sénégal); Slim Haddad, Directeur Axe Santé Mondiale au CR-CHUM/ Université de Montréal (Canada); Pierre Fournier, Doyen de l'École de Santé Publique de l'Université de Montréal (ESPUM)

Introduction

En 2006, l'État du Sénégal a instauré le Plan Sésame qui offre la gratuité des soins de pour les personnes âgées de 60 ans et plus dans tous les établissements publics de santé du pays. Cette étude évalue ses incidences sur les mutuelles de santé (MS) et sur le progrès dans la couverture santé universelle (CSU).

Méthodologie

Le cadre d'analyse utilisé est celui décrit par Evans et ses collègues dans le rapport OMS (2010). Les progrès dans la CSU sont appréciés selon trois dimensions : l'extension de la couverture aux personnes non couvertes, l'inclusion de services non couvertes, et la réduction de la participation aux coûts et aux frais.

L'étude se base sur des études de cas multiples contrastés et concerne sept MS sélectionnées dans la région de Thiès. 21 entretiens individuels ont été soumis aux membres (n= 11) et ex-membres (n= 10) âgés de 60 ans et plus. 10 entretiens semi-dirigés et 4 focus groupes ont été réalisés avec des responsables des MS et des organisations faïtières. La collecte de données a été réalisée entre juillet et septembre 2012.

Résultats

Les résultats montrent que l'incidence du Plan sur les mutuelles a suivi un processus qui peut être découpé en trois séquences. De 2006-2008, l'effet d'annonce et son succès au début de son application ont détourné une partie de la population âgée des MS. Ce qui a, impacté négativement sur le fonctionnement de celles-ci. De 2008-2010, du fait de faiblesses dans son élaboration et son implantation et de la résilience des MS, les effets négatifs se sont progressivement estompés. Ce mouvement balancier se solde, finalement, à partir de 2011, par un retour progressif mais entravé des personnes âgées dans les MS.

Les stratégies d'adaptation des MS et des membres ont, dans la majorité des cas, eu des effets contraires à ceux escomptés par les initiateurs du Plan. Elles ont exacerbé les inégalités et les iniquités dans l'accès aux soins, cassé des dynamiques organisationnelles et de solidarité sociale et ont érodé les bases même de développement et de pérennisation des MS.

Dans les trois dimensions de la progression vers la CSU, la mise en œuvre du Plan n'a pas favorisé des avancées.

Conclusion

La logique de concurrence du Plan sur les MS l'a emporté sur la logique de complémentarité.

Au final, l'étude explore des pistes de solution pour prévenir et faire face aux dysfonctionnements liés aux problèmes d'articulation entre les politiques publiques et les initiatives communautaires de base.

PT 04/04**Diarrhea Treatment and Rotavirus Vaccination: An Extended Cost Effectiveness Analysis in Ethiopia**

Clint Pecenka, Bill & Melinda Gates Foundation; Stephane Verguet, University of Washington; Kjell Arne Johansson, University of Bergen

Aim Universal health coverage continues to receive considerable attention from the global health community. A key element is the design of UHC is the benefits package. The choice of the interventions to be included in this package has health, financial and equity implications. The aim of this paper is to examine two child health interventions through this lens and illustrate the tradeoffs policy makers face in choosing UHC benefits packages.

Objective This paper seeks to illustrate the tradeoffs that policy makers face in choosing benefits packages by examining universal public finance of two child health interventions: diarrhea treatment and rotavirus vaccination.

Methods We base our extended cost effectiveness analysis on Ethiopia and quantify the health and financial implications of diarrhea treatment and rotavirus vaccination by wealth quintile. We examine the number of deaths averted, private expenditures averted and the insurance value provided by universal public finance of these interventions.

Key Findings Our analysis shows that for an equal investment rotavirus vaccination saves more lives, averts more private health expenditure and provides more insurance value than diarrhea treatment. The health benefits (deaths averted) are concentrated among the poor while, on balance, the wealthy benefit more in terms of private expenditure averted. The insurance value provided by universal public finance is small, but also favors the poor. This result does not imply that one intervention should be included in a benefits package and one should not. It does, however, help illustrate the tradeoffs faced by policy makers when considering reforms toward universal health coverage.

PT 04/05**Facility and patient-level determinants of treatment failure among Kenyan adults initiating antiretroviral therapy between 2007 and 2012**

Thomas Odeny, Institute for Health Metrics and Evaluation; Anne Gasasira, Institute for Health Metrics and Evaluation; Annie Haakenstad, Institute for Health Metrics and Evaluation; Kelsey Moore, Institute for Health Metrics and Evaluation; Brendan Decenso, Institute for Health Metrics and Evaluation; Samuel Masters, University of North Carolina; Roy Burstein, Institute for Health Metrics and Evaluation; Emily Dansereau, Institute for Health Metrics and Evaluation; Pamela Njuguna, Action Africa Help- International; Caroline Kisia, Action Africa Help- International; Michael Hanlon, Institute for Health Metrics and Evaluation; Herbert Duber, Institute for Health Metrics and Evaluation; Emmanuela Gakidou, Institute for Health Metrics and Evaluation

Aim/ Objectives: Second-line antiretroviral drugs are costly. With decreased donor funding, HIV treatment programs need to detect treatment failure early and reinforce medication adherence or substitute drugs to avoid unnecessary switches and maintain susceptibility to future second-line options. In the absence of routine viral load testing in sub-Saharan African programs, switching patients based on immunological criteria lowers mortality. Identifying facility- and patient-level factors associated with immunological failure would be an important first step before viral load testing becomes routine.

Methods: In a retrospective cohort of adults (≥ 15 years) initiating ART at 60 geographically representative health facilities in Kenya between 2007 and 2012, we examined determinants of immunological failure based on WHO criteria (CD4 persistently below 100cells/mm³ after 6-12 months of ART, CD4 falls by $\geq 50\%$ from on-treatment peak value, CD4 falls to or below pre-ART level) using a mixed effects logistic regression model.

Key Findings: Among 3,165 patients with CD4 cell counts at initiation and at least one subsequent measurement 6- 12 months later, 790 (25%) experienced immunological failure. Of these, 500 (63%) were female. After adjusting for patient baseline characteristics, year of ART initiation, and CD4 cell count at initiation, patients were less likely to experience immunological failure if they attended care at hospitals compared to lower level facilities (adjusted odds ratio, aOR 0.54, 95% CI 0.32-0.90, $p=0.02$), if the facility received funds specifically for providing HIV services (aOR 0.64, 95% CI 0.44-0.94, $p=0.03$), if personnel providing ART services received bonuses (aOR 0.41, 95% CI 0.17-0.97, $p=0.04$), if the facility was part of a performance-based financing scheme (aOR 0.55, 95% CI 0.32-0.97, $p=0.04$), and if patients were referred to higher level facilities for ART initiation (aOR 0.54, 95% CI 0.35-0.83, $p < 0.01$).

In ART programs without access to routine viral load testing, facilities receive HIV-specific funding, pay personnel bonuses, are part of performance-based financing schemes, and refer patients to higher level facilities for initiation are associated with lower risk of immunological failure. As ART programs increase access to routine viral load testing with decreasing funding, strategies to reduce immunological failure rates might include performance-based incentives and bonuses for health workers.

PT 04/06

A Comparative Study Of Health Systems Costs Of Safe Abortion And Post Abortion Care In Zambia

Divya Parmar, London School of Economics and Political Science; Tiziana Leone, London School of Economics and Political Science; Eleanor Hukin, London School of Economics and Political Science; Susan Murray, King's College London; Ernestina Coast, London School of Economics and Political Science

Aim: Under the Millennium Development Goal of improving maternal health (MDG 5), the global community aims to reduce maternal mortality ratio (MMR) by three quarters. Unsafe abortion is a significant, but preventable cause of maternal mortality. In Eastern Africa for every 100,000 live births it is estimated that 160 women die from causes related to unsafe abortion – accounting for almost 30% of all maternal mortality. Zambia's MMR is 440, of which a significant proportion is likely to be due to unsafe abortions, although there are no nationally representative data available. In spite of the existence of a Termination of Pregnancy Act (1972), women face logistical, financial, social, and legal obstacles to access safe abortion services in Zambia. Therefore more attention towards implementation of interventions that direct resources to the prevention of unsafe abortions is needed. In this paper we present an economic argument for policy makers to consider. We compare the cost of safe abortion and post abortion care for the Zambian health system. Our evidence shows that post abortion care can be at least 3 to 5 times more expensive compared to safe abortions.

Objective: To estimate the per-case and annual costs of termination of pregnancy (TOP) and post-abortion care (PAC) for the Zambian health system.

Methods: We collected data on cost of drugs, materials and personnel time from the University Teaching Hospital (UTH) in Lusaka. We estimated the per-case and annual costs of providing TOP and PAC services at UTH and projected these costs to provide estimates for Zambia. Due to unavailability of the actual number of PAC and TOP cases in Zambia, we used estimates from previous studies and from other similar countries, and complemented it with sensitivity analysis to provide a range of costs.

Key findings: We found that per-case and annual costs of PAC can be at least 3 to 5 times more expensive compared to TOP. Costs of medications and supplies accounted for the bulk of these costs.

PT 04/07

Achieving universal coverage of HIV/AIDS intervention: Results of geographic mapping process in south east Nigeria.

**Ogochukwu P Ibe, Emmanuel K Nwala, Ogochukwu J Ndibe, Amaechi Osemeka, and Anyasoro Louis*

Introduction: Given the increasing prevalence of HIV/AIDS in Anambra state, efforts are geared towards improving coverage of available. In order to achieve universal coverage of HIV/AIDS intervention, it is important to identify and target other vulnerable populations. The “Other Vulnerable Populations” are defined as individuals who are subject to societal pressures or social circumstances that may make them more vulnerable to HIV/AIDS. There are concerns about this group in Anambra state as the prevalent rate of HIV/AIDS stood at 8.7% as at the last sentinel survey. It is clear that Anambra state has mixed epidemic but it is not certain where other populations that may be vulnerable to the epidemic are found. This information is important as it will help to target interventions aimed at preventing the spread of HIV/AIDS in the state

Objective The objective of the study was to identify and characterize the key venues and locales where people meet new sexual partners

Methods: The approach was a geographic mapping process involving two steps. First the venues were listed through key informant interviews and physical observation. Secondly Using the Master List of Venues to be profiled, the field workers visited all venues listed for the zone/subzone where primary key informants (venue patron, venue manager, venue worker and others) are interviewed. During the Venue profiling process, 23 zones were selected using the Probability proportional to size (PPS) sampling technique.

Results: About 68.4% of the venues where vulnerable groups are found were Bar/restaurants/night club/fish joint while 21% were hotels and lodges. Of the 756 number of venues profiled, majority operate in the evenings and night [95.6% and 79% respectively]. However, greater proportion (517) of the venues were Bar/Restaurant/Night club/fish joint operating in the evenings and night [97% and 78% respectively].

Conclusions: Interventions aimed at controlling the spread of HIV/AIDS should target venues constituting vulnerability to other groups at risk of HIV/AIDS other than those who are most at risk. These interventions must also be delivered at specific times of venue operations.

PT 04/08

The clock is ticking: timely ART initiation in Kenya at 60 nationally-representative health facilities

T. Odeny, Institute for Health Metrics and Evaluation

Aim/Objectives: Delays in antiretroviral therapy (ART) initiation for treatment-eligible patients result in increased risk of mortality. As HIV programs in sub-Saharan Africa expand rapidly, timely ART initiation will be important in order to reap the full benefits of ART for treatment and prevention. We aimed to analyze facility-level determinants of time-to-ART initiation.

Methods: We analyzed a retrospective cohort of adults initiating ART at 60 health facilities in Kenya between 2007 and 2012. We used Kaplan-Meier survival curves and log rank tests to estimate the cumulative probability of ART initiation through one year after eligibility, and random effects multilevel Cox proportional hazards regression models to evaluate the association between baseline covariates and time-to-ART initiation. The model included facility-level covariates such as hospital vs. health center, nurse-led vs. other, public vs. private, urban vs. rural, various funding mechanisms, participation in performance-based schemes, and patient volume.

Key Findings: There were 7,947 patients with data on ART eligibility and initiation dates available. At initiation, median age was 37 years (IQR 31-45), 66% were female, and median CD4 cell count was 163 (IQR 72-245). Overall at one and twelve months after ART eligibility, 76% and 97% had initiated treatment respectively. The cumulative probability of ART initiation one year after eligibility increased significantly each year from 87.3% in 2007 to 99.7% in 2011/2012 (Tarone trend test $p < 0.0001$). In multivariate analyses, patients eligible in later years had significantly higher rates of initiation compared to those initiated in 2007 (2008 adjusted hazard ratio, aHR=1.54, 95% CI 1.40-1.69; 2009 aHR=1.59, 95% CI 1.45-1.74; 2010 aHR=1.63, 95% CI 1.48-1.78; 2011/2012 aHR=1.86, 95% CI 1.70-2.04; all p-values < 0.01). No facility-level covariates were associated with time-to-ART.

Time from eligibility to ART initiation in Kenya has improved significantly since 2007, with uniform gains across different facility types and funding mechanisms, an indicator of program maturity. Importantly, the improvement is not associated with gender, disease severity (WHO stage), or facility-level factors such as rural/urban location, government/donor funding, public/private status, hospital/health-center classification, high/low outpatient volume, performance-based financing schemes, fee-for-service/free models, nurse/physician-led care, or bonus payments for staff providing ART-related services.

PT 04/09

**ETUDE DES COÛTS DE LA PRISE EN CHARGE DE LA SCHIZOPHRENIE
DANS UN HOPITAL PSYCHIATRIQUE, COTE D'IVOIRE..**

Acray-Zengbe P¹, Anoumatakky-Koffi M², Kone D^{2,4}, Akani B C³, Benie J⁴, Dagnan NS⁴, Yoh M⁵.

But Le but de l'étude est de disposer d'éléments objectifs pour un plaidoyer dans une perspective de promotion de la santé mentale d'une part et, de planification des dépenses de soins par les ménages concernés d'autre part.

Objectifs Produire des informations sur les coûts de la prise en charge de la schizophrénie en milieu hospitalier. De façon spécifique : identifier les caractéristiques sociodémographiques et cliniques des patients schizophrènes; identifier les éléments inducteurs de coûts de l'hospitalisation du patient schizophrène; calculer les coûts directs médicaux; calculer les coûts directs non médicaux; déterminer le coût médical total de la prise en charge pour schizophrénie en milieu hospitalier.

Méthodes Il s'agit d'une étude pilote de type transversal réalisée à l'hôpital psychiatrique de Bingerville (HPB). L'échantillon était constitué de 31 patients schizophrènes ayant été hospitalisés dans les différents pavillons de troisième catégorie de l'HPB du 1^{er} Janvier 2009 au 31 Mai 2010. L'échantillonnage était de type accidentel, les sujets étant interrogés lors de leurs visites de postcure. Les méthodes d'estimation des coûts étaient basées sur coûts réels des dépenses de médicaments, d'hospitalisation, d'examens complémentaires dont les prix sont connus et à partir de l'estimation des patients pour certaines dépenses comme la nourriture et le transport.

Résultats Le sexe- ratio H/F était de 3,42 ; l'âge moyen était de 29, 52 ans ; 64,5% des patients étaient sans emploi ; les travailleurs ne représentaient que 13% et 68% n'avaient aucun revenu. Les revenus mensuels de la personne ayant à charge le patient variaient entre 50 000 et 200 000FCFA (38,8%) voire plus (32,3%). La durée moyenne de séjour était de 46, 19 jours et les formes cliniques les plus fréquentes étaient la forme paranoïde (41,9%) et le trouble schizo-affectif (29%). Le coût total moyen d'une hospitalisation à l'Hôpital Psychiatrique de Bingerville pour schizophrénie était de 164 412 FCFA avec un coût journalier moyen de 3574, 173 FCFA. Le coût direct médical était en moyenne de 105 412 FCFA (64,11%) et le coût direct non médical moyen de 59 000FCFA (35,89%). Le coût journalier moyen du traitement antipsychotique était de 795 FCFA (22,24%).

Mots-Clés : Coût- Hospitalisation –Schizophrénie – HPB

Poster session 5

PT 05/01

Learning forward: Collaborative models for creating and sharing knowledge on health financing and health systems

Organizer: Allison Kelley (Senior facilitator Financial Access to Health Services Community of Practice, consultant, UNICEF)

Panelists: Nathaniel Otoo (Ghana National Health Insurance Authority (NHIA) and convenor of the JLN Steering Group), Isidore Sieleunou (co-facilitator Financial Access to Health Services CoP), Bruno Meessen (Institute of Tropical Medicine, Antwerp, Belgium and facilitator for the Performance Based Financing in Africa CoP), Shamsuzzoha B. Syed (World Health Organization)

Aim: The last 4 years have seen a burgeoning number of collaborative platforms for knowledge management and south-south learning in global health, and specifically in health financing. This innovative approach taps into the significant expertise and implementation that is available and growing in low- and middle-income countries (LMICs) by creating platforms for practitioner-to-practitioner exchange and learning. The aim of this panel is to assess the experience of several different models – including the Harmonization for Health in Africa (HHA) initiative-launched Communities of Practice (CoPs), the Joint Learning Network for Universal Health Coverage (JLN), and the Reverse Innovation movement in Global Health. The JLN began in 2010 as a global universal health coverage (UHC) knowledge platform with 9 “learning lab” countries in Africa and Asia. The two CoPs proposed for this panel, Financial Access to Health Services and Performance-based Financing (500+ and 1000+ members respectively) have more than 3 years experience today and focus on Africa, but draw expertise globally.

Objectives

1. To describe key elements of collaborative models, which involve communities of practitioners, policy makers, researchers, and experts from LMICs, as well as those from developed countries, who learn from one another, jointly problem-solve, and collectively produce and use new knowledge, tools, and innovative approaches to accelerate their countries' progress toward particular goals.
2. To explain how collaborative models identify knowledge gaps and, accordingly, develop activities to bridge them, such as research projects, study tours, workshops, webinars, and co-authored books.
3. To illustrate how facilitators ensure that activities are relevant to the group and how this effects the consolidation of the identity of the community.
4. To outline the key elements of reverse innovation in global health systems and how this has the potential to re-define “global innovation flow” between countries.
5. To articulate the potential impact of these different models on global health systems and provide recommendations for going forward.

Methods: The panel will explore the experience and impact of these collaborative models from a variety of perspectives: facilitator, researcher, promoter, and member/stakeholder. Content

will be drawn from experience as well as evaluations (both internal and external).

Findings: Despite their relatively recent arrival on the global health scene, these collaborative platforms are taking hold, attracting significant interest and membership from stakeholders, and promoting dialogue and knowledge sharing across different profiles of knowledge holders in new ways.

Speaker 1 : Nathaniel Otoo, Convenor, JLN Steering Group and Deputy Chief Executive Officer, Operations, NHIA Ghana :

The JLN is a global UHC platform with nine countries in Africa and Asia that are experimenting with UHC reforms and learning together: Ghana, India, Indonesia, Kenya, Malaysia, Mali, Nigeria, Philippines and Vietnam. The JLN also has several funders and a number of facilitating partners who provide technical, financial, and in-kind support.

JLN commissioned an independent midterm assessment in 2012 to take stock of its experience and help define a roadmap for the future. The assessment involved of a quantitative survey targeted at individuals from JLN member countries (104 individuals, 45% response rate) and a qualitative set of interviews with a broad set of stakeholders including member country focal points, technical partners, secretariat members, and current funders. Results showed member countries ready to see the network's structures evolve to enable country leaders to take ownership and direct the management of the network.

As the first convenor of the newly instituted JLN steering committee, Mr. Otoo will provide a perspective on Ghana's experience as a JLN network member, and its relative contribution to Ghana's progress toward expanding UHC.

Speaker 2 : Bruno Meessen, Facilitator PBF CoP, Institute of Tropical Medicine :

Prof Meessen, facilitator for the "oldest" of the CoPs launched under the HHA Initiative, will present a retrospective study of on-line discussion groups of 2 CoPs, and an online survey of experts members of the discussion forum, applying a conceptual framework developed to monitor and evaluate CoPs in global health¹⁰.

The study investigates an 'internal' perspective focusing on the processes, dynamics and nature of the interactions that the CoPs trigger among members. Particular attention will be dedicated to the extent to which the community of practice strategy can serve as a tool to bring knowledge holders belonging to different 'regimes' (science, policy making, implementation, aid assistance...) on a same common platform for them to put together the knowledge required for better policy design and implementation.

The assessment documents the CoPs' experience and contributes to better understanding their strengths and weaknesses, providing insights for making CoP activities more relevant for its members, and increasing their impact on evidence-based health policy.

Speaker 3: Isidore Sieleunou, co-facilitator, FAHS CoP

¹⁰ Bertone et al, Assessing Communities of Practice in health policy: A conceptual framework as a first step towards empirical research, forthcoming.

How can we consciously foster the development of African CoPs within the health sector? To meet this objective, a workshop in September 2013 in Antwerp brought together facilitators, members, and sponsors of a number of CoPs and other collaborative platforms. A methodological challenge for assessing CoPs is the lack of counterfactual; as such, benchmarking among CoPs is one strategy to identify the lessons that are rather generic and those that are more specific to some of the facilitation options taken by a particular CoP. This facilitators' workshop used a participatory approach to carry out an assessment of CoP experiences to date. Having distilled some of the best practices emerging from their combined experiences, facilitators identified synergies and outlined recommendations for further developing and strengthening CoPs in global health going forward.

This presentation will explore the key lessons learned from this workshop on the development of CoPs, as well as the strategic recommendations to consolidate their impact on health policy, especially in Africa.

Speaker 4: Shamsuzzoha B. Syed (World Health Organization): Reverse Innovation in Global Health Systems

Reverse innovation in global health systems can contribute to the countless health challenges faced by populations across the world. A growing group of leaders and practitioners see an emerging future in reverse innovation in global health systems, a broad trans-disciplinary movement which seeks to make use of low- income country health innovations within high-income country settings. One step towards the ultimate aim of “global innovation flow” is creating global architecture that can be utilized for reverse innovation. In this regard, there is already some emerging evidence of key system-wide benefits that may be accrued by developed countries in partnering with developing countries. This emerging evidence spans all six WHO health system building blocks: health service delivery; health workforce; health information; products, vaccines, and technologies; financing and leadership & governance.

A recent special series in *Globalization and Health*, launched in August 2013, seeks to harness the worldwide impetus on “developed-developing” country learning experiences and to start developing a knowledge base on the flow of innovations from the so-called developing to the so-called developed world. This movement seeks to challenge and rethink traditional practice within global health systems, by not only highlighting the need for the open-mindedness in the “North” but also by encouraging the architects of new ideas in the “South” to confidently promote the adoption of their innovations abroad. This presentation will outline the key elements of reverse innovation in global health systems and how this has the potential to re-define “global innovation flow” between countries. Further, the potential role of collaborative models in acting as a channel for reverse innovations is explored and an agenda defined for future work.

PT 05/02

Costs of HIV prevention interventions in Kenya: how much scale and quality can explain the cost variability? Preliminary results of ORPHEA project for HTC, PMTCT and MC services

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Background: Despite the need to increase the value for money in HIV spending, limited evidence on technical efficiency and the determinants of efficiency of HIV prevention interventions is a barrier in creating effective policy to improve production efficiency. Funded by the Bill and Melinda Gates Foundation, the ORPHEA project is a four-year, five-country project that collects and analyses micro-economic data to assess the costs and determinants of cost variability for three HIV prevention interventions in Kenya: prevention of mother-to-child transmission (PMTCT), HIV testing and counseling (HTC) and male circumcision (MC).

Methods: We collected detailed data from a representative sample of PMTCT (36 sites), HTC (47 sites) and MC (32 sites) units in Kenya. Relevant intervention-specific input, prices and output data were collected. Levels of personnel effort, drugs and medical supplies used, training and supervision, capital and utilities data were collected retrospectively by month for 2011/2012. We used data on costs of inputs, time allocation and process quality of HIV prevention services, provider vignettes, time motion analysis, patient exit interviews and interviewer-administered. We estimated average cost by dividing the total cost per intervention by the number of HIV clients per intervention and regressed the average cost against scale (number of services provided) and quality of services.

Results: Estimated average costs were US\$21.60 (s.d. 45.73) per HTC client-tested, US\$70.06 (s.d. 84.92) for women tested in PMTCT services and US\$85.76 (s.d. 140.48) per MC client for our sample in Kenya. Adjusting for process-quality of the prevention services, an increase of 1% in the scale of production reduced the cost per HTC client tested by 0.43% (*p-value*<0.001), the cost per pregnant women tested in PMTCT services by 0.57% (*p-value*<0.001) and the cost per MC client by 0.72% (*p-value*<0.001). While scale and quality of services explain approximately 30% of the variability in average costs in this sample, a significant proportion of variability can still likely be explained by inefficiency in the production of services.

Conclusions: While the average cost per service delivered may be lower than ten years ago¹, variability still persists. Almost 28% of this variation for HTC, 31% for PMTCT and 60% for MC can be explained by scale and quality of services. Average costs are mostly driven by staff costs, which represent the most important cost component for HIV preventions services. We will develop recommendations drawn from this analysis with the objective of increasing efficiency in the production of HIV prevention services.

PT 05/03

Costs of key HIV prevention interventions in Zambia: Preliminary results of the ORPHEA^a project.

Felix Masiye¹, Abson Chompolola¹, Kumbutso Dzekedzeke², Raluca Buzdugan³, Claire Chaumont⁴, Ada Kwan⁴, Ivan Ochoa⁴, Sandra G. Sosa-Rubi⁴, Sergio Bautista-Arredondo⁴; ¹ University of Zambia, Department of Economics, Lusaka, Zambia, ² Dzekedzeke Research & Consultancy, Lusaka, Zambia; ³ University of California, Berkeley, School of Public Health, Berkeley, California, USA; ⁴ Division of Health Economics, Center of Evaluation Research and Surveys, National Institute of Public Health, Cuernavaca, México

Background: Despite the recognized need to increase the value for money in HIV spending, limited evidence on technical efficiency and the determinants of efficiency of HIV prevention

interventions is a barrier in creating effective policy to improve production efficiency. Funded by the Bill and Melinda Gates Foundation, the ORPHEA project is a four-year, five-country project that collects and analyses micro-level data to assess the costs and determinants of cost variability for three HIV prevention interventions in Zambia: prevention of mother-to-child transmission (PMTCT), HIV testing and counseling (HTC) and male circumcision (MC).

Methods: We collected detailed data from a representative sample of PMTCT (44 sites), HTC (37 sites) and MC (9 sites) units in Zambia. Relevant intervention-specific input, prices and output data were collected. Levels of personnel effort, drugs and medical supplies used, training and supervision, capital and utilities data were collected retrospectively by month for 2011/2012. We used costs of inputs, time allocation and process quality of HIV prevention services, provider vignettes, time motion analysis, patient exit interviews and interviewer-administered questionnaires. We estimated average cost by dividing the total cost per intervention by the number of HIV clients per intervention and regressed the average cost against scale (number of services provided) and quality of services.

Findings: Estimated average costs were US\$25.37 (*s.d.* \$27.14) per HTC client-tested, US\$80.04 (*s.d.* \$97.03) for women tested in PMTCT services and US\$125.26 (*s.d.* \$152.22) per MC client for our sample in Zambia. While adjusting for process quality of the prevention services, an increase of 1% in the scale of production reduced the cost per HTC client tested by 0.30% (*p-value*<0.006), the cost per pregnant women tested in PMTCT services by 0.52% (*p-value*<0.000) and the cost per MC client by 0.878% (*p-value*<0.037). While scale and quality of services explain approximately 35% of the variability in average costs in this sample, there is still a significant proportion of variability that is likely explained by inefficiency in the production of services.

Conclusions: While the average cost per service delivered may be lower than 10 years ago¹, variability still persists. Almost 13% of this variation for HTC, 37% for PMTCT and 41% for MC can be explained by scale and quality of services. Differences are mostly driven by staff costs, which represent the most important cost component. We will develop recommendations drawn from this analysis with the objective of increasing efficiency in the production of HIV prevention services.

PT 05/04

Linking Public Financing with Private Innovation: Opportunities and Challenges

Moderator: Shan Soe-Lin, Results for Development Institute

Names of Other Presenters: Representatives from the following: National Health Insurance Authority in Ghana, the National Hospital Insurance Fund in Kenya, Unjani Clinic, Swasth Health Center, and LifeNet International

There is a rich body of knowledge on many novel and innovative approaches to sustainably finance and deliver primary health care; however, it is unclear how scalable these approaches are, or what the contextual factors are that determine success. For government policymakers working towards universal health coverage (UHC), there is a need to understand the range of successful primary care archetypes that could be applicable in their setting, including the inevitable trade-offs, and how to effectively mobilize public financing to support primary care

delivery. Increasing this understanding would enable policymakers and implementers to more effectively design the right health systems for their own settings, and leapfrog past intermediary and inefficient steps that have plagued other systems.

This session will draw on the collective knowledge of private sector innovators and government policymakers through a panel discussion. The panel will be invited to share their experience in designing or implementing primary care systems, and will highlight innovations in primary care delivery. The discussion will draw on evidence and experience from primary care sub-communities in the Joint Learning Network for Universal Health Coverage (JLN) as well as the Center for Health Market Innovations (CHMI).

Possible issues for discussion from JLN experience:

Using payment reform as an entry point for primary care reform
Administrative arrangements for primary care, including funding flows and level of centralization
Assuring provider quality in a capitated payment system
Organizing/consolidating provider networks to ensure benefit package compliance
Patient education and PCP selection processes
Information system needs to support primary care utilization and quality assurance

Innovative models in primary care from the CHMI experience:

CHMI has identified and profiled numerous innovative primary care models, some leveraging franchise models and others reinventing care delivery with mobile units and telemedicine. Swasth Health Centre, Unjani Primary Health Care Clinics, and LifeNet International are three innovative models that have each developed a franchise or chain model for primary care, resulting in greater standardization of processes and improved quality. For governments, many of which thinking hard about how to incorporate primary care services in a benefit package for universal health coverage, partnering with a networked or franchise chain could enable them to achieve greater scale while being able to assure quality.

PT 05/05

Linking Public Financing with Private Innovation: Opportunities and Challenges

National Health Insurance Authority in Ghana, the National Hospital Insurance Fund in Kenya, Unjani Clinic, Swasth Health Center, and LifeNet International

There is a rich body of knowledge on many novel and innovative approaches to sustainably finance and deliver primary health care; however, it is unclear how scalable these approaches are, or what the contextual factors are that determine success. For government policymakers working towards universal health coverage (UHC), there is a need to understand the range of successful primary care archetypes that could be applicable in their setting, including the inevitable trade-offs, and how to effectively mobilize public financing to support primary care delivery. Increasing this understanding would enable policymakers and implementers to more effectively design the right health systems for their own settings, and leapfrog past intermediary

and inefficient steps that have plagued other systems.

This session will draw on the collective knowledge of private sector innovators and government policymakers through a panel discussion. The panel will be invited to share their experience in designing or implementing primary care systems, and will highlight innovations in primary care delivery. The discussion will draw on evidence and experience from primary care sub-communities in the Joint Learning Network for Universal Health Coverage (JLN) as well as the Center for Health Market Innovations (CHMI).

Possible issues for discussion from JLN experience:

Using payment reform as an entry point for primary care reform

Administrative arrangements for primary care, including funding flows and level of centralization

Assuring provider quality in a capitated payment system

Organizing/consolidating provider networks to ensure benefit package compliance

Patient education and PCP selection processes

Information system needs to support primary care utilization and quality assurance

Innovative models in primary care from the CHMI experience:

CHMI has identified and profiled numerous innovative primary care models, some leveraging franchise models and others reinventing care delivery with mobile units and telemedicine. Swasth Health Centre, Unjani Primary Health Care Clinics, and LifeNet International are three innovative models that have each developed a franchise or chain model for primary care, resulting in greater standardization of processes and improved quality. For governments, many of which thinking hard about how to incorporate primary care services in a benefit package for universal health coverage, partnering with a networked or franchise chain could enable them to achieve greater scale while being able to assure quality.

PT 05/06

Offre privée, organisation et disponibilité des services de santé au niveau périphérique : Étude de cas dans la commune de Ngaliema à Kinshasa, en RD Congo.

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Contexte, but et objectif de l'étude : La décennie 1980 a été caractérisée dans le secteur de la santé en Afrique, d'une part, par la libéralisation et donc la privatisation de l'offre de soins dictée par la politique des ajustements structurels et, d'autre part, par la décentralisation en santé avec la Déclaration de Alma Ata de 1978 et l'Initiative de Bamako en 1987. Le but est d'examiner le rôle de ces deux processus sur les systèmes de soins locaux. L'objectif de la recherche est d'analyser l'offre privée de soins et son effet sur le fonctionnement et la disponibilité des services de santé au niveau périphérique en milieu urbain.

Méthode: Les données ont été récoltées au moyen d'une enquête transversale organisée en 2010. À partir des listes reprenant au total des 66 établissements de soins de la commune de Ngaliema à Kinshasa en R.D. Congo obtenues auprès des autorités sanitaires locales, deux strates ont été formés: 44 structures de premier échelon et 22 du deuxième échelon. En

appliquant la méthode de quotas corrigés en fonction de la non-exhaustivité des listes de la strate 1, un échantillon total de 37 établissements de soins a été tiré : 26 structures de premier échelon et 11 structures de deuxième échelon. Deux variables ont été analysées : le fonctionnement des services de santé mesuré en termes de nombre d'heures d'ouverture et la disponibilité des services en termes de demandes perdues se rapportant aux services de santé maternelle. La compilation des données et les calculs ont été réalisés sur Excel 2003.

Résultats: La recherche a permis d'aboutir à deux principaux constats. D'abord, avec un taux de privatisation élevé dans l'offre de soins (>90 %) au niveau local, la très grande majorité des structures de soins restent ouvertes en permanence. En revanche, dans les 15 jours ayant précédé l'enquête, tous les établissements de soins échantillonnés ont enregistré des cas de demandes perdues concernant les services de santé maternels. Les services d'imagerie médicale – en l'occurrence la radio et l'échographie – et les accouchements ont été les plus concernés.

Conclusion: Une adéquation est nécessaire pour marier l'ouverture permanente et disponibilité des services de santé. Étant donné l'impact du taux de privatisation du système de santé sur l'offre des soins, le rôle de l'État dans l'organisation des systèmes de santé reste de mise dans le contexte de la libéralisation du secteur de santé.

PT 05/07

Pricing differentials of Modern Contraceptives in public and private health institutions: implications for Ghana's National Health Insurance Scheme

Kwame Adjei, Kintampo Health Research Centre; Amos Laar, School of Public Health, University of Ghana, Legon; Clement Narh, Dodowa Health Research Centre, Dodowa; Martha Abdulai Ali, Kintampo Health Research Centre; Seth Owusu-Agyei, Kintampo Health Research Centre; Sam Adjei, Centre for Health and Social Services

Sub-saharran African countries have high fertility and high unmet need for family plan. The reasons for this include partner opposition and health service barriers. Family planning programmes have tried to address some of these issues particularly health service barriers but with little success. In Ghana, the passing of the National Health Insurance (NHIS) Act in 2003 has helped address health service limitation issues. The NHIS however does not cover family planning. This study sought to look at the pricing of modern contraceptives in private and public health facilities with the hope that the NHIS will be better equipped to make a decision on family planning under the scheme.

Methods The study employed a crosssectional design. It was carried out in the Ga East municipality in Ghana. The municipality is rural and peri-urban and located in the north-eastern part of Greater Accra region of Ghana. It has a total population of 320,853. The sampling frame was a list of all health facilities and 51 out of 250 were used. The health facilities were categorised into four –chemical sellers, pharmacies, clinics/maternity homes and hospitals. Selection was according to the proportion in each category. A questionnaire was used to collect information on the price of each available brand of contraceptive. The mean price of each brand of contraceptive was compared in the private and public facilities.

Key Findings Male condoms averagely cost less than other contraceptives. *Be safe* condoms, the

most commonly available brand of condoms in the health facilities on the average cost GH¢ 0.15 for one in private facilities compared with GH¢ 0.08 for one in public ones. Long term methods were the most expensive contraceptives. The jadelle implant cost GH¢ 12.50 on the average in private facilities as compared to GH¢ 3.00 on the average in public ones. The copper IUD on the average sold at GH¢ 22.50 in private health facilities as compared with GH¢ 3.00 in public ones.

Conclusion Long term methods are the most expensive type of contraceptives in the municipality. Male condoms are the least expensive. It is recommended that the NHIS should consider bearing the cost of these effective long term methods to help increase its use to reduce maternal deaths and ultimately savings on claims for maternity care.

PT 05/08

Exploring the Potential to Enhance Malaria Diagnosis and Treatment by Qualified Health Workers: A Qualitative Study.

Sarah Kedenge, KEMRI-Wellcome Trust Research Programme; Sophie Githinji, KEMRI-Wellcome Trust Research Programme; Ahmeddin Omar, Division of Malaria Control, Kenya; Dejan Zurovac, KEMRI-Wellcome Trust Research Programme; Sassy Molyneux, KEMRI-Wellcome Trust Research Programme; Catherine Goodman, London School of Hygiene and Tropical Medicine

Aim Current WHO guidelines stipulate that prompt parasitological confirmation in all patients suspected of having malaria be carried out before any treatment is commenced. Despite this recommendation, studies have demonstrated that even where diagnostics are available, they are not always used, and that health workers do not always prescribe on the basis of test results. Moreover, prescription of antibiotics often increases when malaria diagnostics are introduced.

This study therefore seeks to understand why this is so and how malaria case management can be improved in the context of Kenya, which has been gradually rolling out rapid diagnostic tests (RDTs) in public health facilities since mid 2011.

Objectives

1. To explore the factors influencing health workers' decisions to refer a patient for a malaria test
2. To explore the factors influencing health workers' adherence to antimalarial treatment guidelines for patients testing positive and negative for malaria
3. To explore the factors influencing health workers' decisions to prescribe antibiotics to patients with possible malaria symptoms

Methods We conducted a qualitative study, drawing on the perspectives of a wide range of health workers and other stakeholders with a role in malaria diagnosis and treatment. Data were collected in four districts, with varying length of experience with RDTs and varying malaria transmission levels. In each district, clinical and laboratory staff from two dispensaries and two health centres were interviewed, and curative consultations and laboratory activities were observed to understand patient flow and the process of care. Further interviews were conducted with district and national level stakeholders.

Key Findings Results will be presented on health workers' views on RDTs and microscopy; their perceptions of the guidelines on use of diagnostics; their reasons for adhering or not adhering to these guidelines; and criteria they use to determine whether to prescribe antibiotics or other medicines.

Views will be presented from stakeholders at all levels on the adequacy of malaria diagnostic training, supervision and supply systems, and their recommendations on how case management and adherence to guidelines can be improved.

PT 05/09**Improving equity in malaria treatment outcomes; relationship of patients socio-economic status with effective treatment received as well as with knowledge of health providers and characteristics of health facilities utilized for treatment of uncomplicated malaria in Nigeria.**

Jane Enemuoh, Health Policy Research Group; Obinna Onwujekwe, University of Nigeria; Nkoli Ezumah, University of Nigeria; Lindsay Mangham- jefferies, Department of Global Health and Development; Benjamin Uzochukwu, University of Nigeria; Virginia Wiseman, Department of Global Health and Development, London School of Hygiene and Tropical Medicine, London, UK

Aim This study aims to understand the current practices in delivery malaria practices in urban and rural areas in Enugu state, Nigeria

Objectives The objectives of this study were to examine patients socio-economic differences with recommended treatment received for uncomplicated malaria, to assess the patients SES differences with diagnosis received, to determine health providers knowledge on as well as the facilities patients utilized for treatment of uncomplicated malaria.

Methodology The study was a cluster randomized trial in 16 randomly selected clusters (8 from Enugu and 8 from Udi) local government areas (LGA) in Enugu State, Nigeria in 2009. Structured questionnaire was used to collect information from 1642 patient or care givers leaving the health facility and 151 health providers from 100 health facilities. Only consented, eligible respondent were interviewed. An SES was used to assess inequities in patients' treatment outcomes. Data analysis was done using STATA and principle component analysis was used to generate SES index and wealth quintile based on household assets

Results There were variations in treatment received by patients from different type of health care providers across the quintiles. The rich are more (29.5%) likely to receive and ACT than the poor (14.5%). There were relatively few differences in the accuracy with which treatment was received but, surprising the data suggested that the patients in the poorest quintile had the best knowledge of how the treatment should be taken. 65% of all the health workers surveyed reported that Artemisini-based Combination Therapy (ACT) was the nationally recommended treatment for uncomplicated malaria. Health care providers in the public health facilities (80.0%) had the best knowledge on malaria treatment using ACT and were very low in patent medicine dealers (54.2%). In all the health facilities surveyed both sites, none of them (0.0%) provided rapid diagnostic tests for malaria diagnosis as at the time of the survey but 1.2% of the health facilities in Enugu LGA provided malaria microscopy testing

Conclusion There's inequities in treatments patients from different SES groups receive using the nationally recommended treatment and health workers knowledge in Enugu than in Udi. The differential in treatment among SES and knowledge of health workers as well as health facility characteristic across the two sites could be decreased by reducing barriers such as improved knowledge by building the capacity of all health providers on the use of recommended treatment, providing RDTs at a reduced cost for all health providers.

PT 05/10**Technical efficiency of integrated HIV and SRH services in Kenya and Swaziland: An application of a two stage semi-parametric approach**

Carol Obure, London School of Hygiene and Tropical Medicine; Rowena Jacobs, York University; Lorna Guinness, London School of Hygiene and Tropical Medicine; Anna Vassall, London School of Hygiene and Tropical Medicine

Background: Although integration of HIV services into SRH services has shown promise for improving health outcomes for patients, little evidence exists on the impacts of integration on the technical efficiency of health facilities. To date, no attempts have been made to estimate the technical efficiency of providing integrated HIV and SRH services in these settings. The objectives of this study were to: i) estimate the relative technical efficiency of a sample of facilities providing integrated HIV and SRH services in Kenya and Swaziland; and ii) determine whether the level of facility integration impacts the technical efficiency of health facilities.

Methods: A two stage semi-parametric technique was applied to compute the technical efficiency of each health facility and make inferences about the determinants of technical efficiency with a particular focus on the level of facility integration. Data collected from 40 health facilities in Kenya (n=30) and Swaziland (n=10) for 2008/2009 and 2010/2011 were used. Health facilities were assumed to have no control over inputs hence an output oriented approach adopted. An index of resource integration was developed to measure the level of integration within each facility. The resource index was developed using four key indicators: number of services provided within the facility, number of services provided within the maternal and child health unit only, number of services provided per clinical staff member and number of services provided within one consultation room.

Results: Of the 40 hospitals included in the study only 15 (38%) and 22 (55%) were found to be technically efficient in year 1 and year 2 respectively. Statistically significant differences in technical efficiency were found between rural and urban sites; facility size (large, medium and small) and between the two countries. The results also show that the private not for profit health facilities performed better on average than their public counterparts. In the second stage analysis no significant relationship was found between the level of integration and measured technical efficiency.

Conclusions: The results show large variations in measured efficiency across all providers. The results suggest that inefficiency is largely a result of poor utilisation of existing resources and therefore efficiency of integrated HIV and SRH services can be improved by increasing overall output levels given existing inputs. In addition, the level of integration does not appear to have an impact on technical efficiency.

LA POLITIQUE DES SOINS DE SANTE PRIMAIRE (SSP) EN COTE D'IVOIRE: UNE EVALUATION DU DISTRICT SANITAIRE DE BOUAFLE

Isabelle Beyera, Université FHB de Cocody-Abidjan; Memon Fofana, Doctorant à l'Université Felix Houphouët Boigny, Abidjan-Cocody; Ruphin Tanoh Doua, Université FHB de Cocody-Abidjan

But : Contribuer à la promotion des soins de santé primaires (SSP) à partir de l'Initiative de Bamako

Objectifs: Déterminer les facteurs de l'échec de la politique SSP dans le district de Bouaflé

Méthodes : Les données proviennent de l'enquête réalisée en 2009 auprès de 5 localités dans le district de Bouaflé et le modèle logit est utilisé pour notre analyse

Résultats: Les facteurs de l'échec de la politique SSP sont identifiés.

Depuis les indépendances, la politique sanitaire en Côte d'Ivoire était axée sur la gratuité des soins qui s'est avérée assez onéreuse et par conséquent, a été progressivement abandonnée à partir de 1978. Dans le souci de rendre plus efficace sa politique sanitaire, la Côte d'Ivoire a adhéré à la politique des soins de santé primaires (SSP) telle qu'envisagée par l'initiative de Bamako en 1987. La mise en œuvre de cette politique a été renforcée par la création de plusieurs districts sanitaires dont celui de Bouaflé, district pilote. Cependant, force est de constater l'échec de la promotion de la santé primaire et cela se traduit à travers des indicateurs contrastés. En effet, malgré la présence d'un Centre Hospitalier Régional, deux centres de santé scolaire et universitaire, 19 centres de santé rurale et 3 centres de santé urbain, l'incidence de la diarrhée chez les enfants de moins de 5 ans est passée de 65‰ en 1999 à 130,1‰ en 2008 contre respectivement 68,9‰ à 129,51‰ au plan national; l'incidence du paludisme a augmenté également entre 2000 et 2008, au plan national elle est de 68,9‰ et 83,6‰ et dans le district de Bouaflé de 58,9‰ en 2000 à 80,18‰ en 2008 (RASS, 2000-2008). L'utilisation des établissements sanitaires reste toujours faible dans le district de Bouaflé de 1999 à 2008: il passe de 19,9% en 1999 à 13,98% en 2008 (CNS 2008). Il nous convient alors de s'interroger sur les facteurs qui rendent compte de cet échec? Le regard porté sur le phénomène s'ancre dans l'hypothèse que cet échec s'explique par l'inadéquation entre l'offre et la demande de santé.

La méthodologie de travail a porté sur la collecte de données primaires en 2009 auprès de 5 localités (Bouaflé ville, les villages de Bonon, de Pakouabo, de Nangrékro, de Zaguita) avec deux groupes d'acteurs interviewés (demandeurs et offreurs des soins de santé). Le modèle logit est utilisé pour notre analyse; il a l'avantage de donner des coefficients facilement interprétables.

Detailed Agenda

Oral Presentations Day 1

Parallel Session OA/01 (Tuesday 11 March 2014, 08:00 - 09:30)	
Room: Jambo (08:00 - 09:30) OA/01: Registration - Participant seating - Practical information - Reception of officials	
Parallel Session PL 01 (Tuesday 11 March 2014, 09:30 - 10:30)	
Room: Jambo (09:30 - 10:30) PL 01: Official opening ceremony	
Parallel Session PS 01 (Tuesday 11 March 2014, 11:00 - 12:30)	
Room: Jambo-Tsavu/Amboseli 1 (11:00 - 12:30) PS 01: Universal Health Coverage and equity	
PS 01/1	Equity in pathways towards Universal Health Coverage: What does the evidence say? <i>Lara Brearley, Daniel Cobos Munoz, Robert Marten, Thomas O'Connell</i>
PS 01/2	Will the upcoming Couverture Maladie Universelle keep its promises? <i>Juliana Gnamon</i>
PS 01/3	Equity, medical impoverishment, and the path to universal health care: Ethiopia as a case study <i>Stephane Verguet, Zachary Olson, Joseph Babigumira, Dawit Desalegn, Kjell Arne Johansson, Margaret Kruk, Carol Levin, Solomon Memirie, Rachel Nugent, Clint Pecenka, Mark Shrimme, David Watkins and Dean Jamison</i>
PS 01/4	Towards achieving universal health coverage in Zimbabwe: how equitable are the maternal and child health care services? <i>Ronald Mutasa, Jed Friedman, Davies Dhlakama, Ha Thi Nguyen, Margaret Nyandoro, Bernadette sobuthana Ndlovu and Ashis Das</i>
Room: Bogoria 3 (11:00 - 12:30) PS 01: Health and development	
PS 01/5	Does HIV/AIDS Matter for Economic Growth in Sub-Saharan Africa? <i>Anthony Mveynge, Tine Lesner and Christian Skovsgaard</i>
PS 01/6	Gender differentials in child survival in Zimbabwe 1980- 2010 <i>Lazarus Muchabaiwa, Lecturer, Bindura University of Science Education, Bindura, Zimbabwe</i>
PS 01/7	Causalité entre Santé infanto-juvénile, niveau de vie et croissance économique en Afrique subsaharienne <i>Roméo Boye and Auguste Kouakou</i>
PS 01/8	Tuberculosis and poverty in South Africa <i>Ronelle Burger, Eldridge Moses and Anja Smith</i>
Room: Jambo-Samburu 2 (11:00 - 12:30) PS 01: Willingness to pay for maternal health	
PS 01/9	Emergency Obstetric Care in Burkina Faso: effects of changing mode of reimbursement on facility-based deliveries costs and dysfunctions in implementation <i>Joël Arthur Kiendrébéogo, Danielle Belemsaga Yugbaré and Seni Kouanda</i>
PS 01/10	Inverse Care Law In Maternal Health Service Utilisation: Evidence From Ghana <i>Coretta Jonah</i>
PS 01/11	Willingness to pay for reproductive health services in the context of an output-based aid voucher program in Kenya <i>Lucy Kanya, Francis Onyango, Brian Mdawida, Rebecca Njuki, Timothy Abuya and Ben Bellows</i>
PS 01/12	Are respondents sensitive to scope? Willingness to pay for maternal health outcomes <i>Laura Ternent, David Newlands and Paul McNamee</i>

Room: Mount Kenva D 4 (11:00 - 12:30)	
PS 01: Contracting and incentive mechanisms	
PS 01/13	Using service agreements to enhance access to referral services to beneficiaries of the Community Health Fund (CHF) in Tanzania <i>Jane Macha</i>
PS 01/14	The implications of contracting out health care provision to private not forprofit health care providers: the case of service level agreements in Malawi <i>Elvis Gama, Barbara McPake, David Newlands</i>
PS 01/15	Incentivising appropriate malaria treatment-seeking behaviour with price subsidies <i>Kristian Hansen, Tine Lesner and Lars Peter Østerdal</i>
PS 01/16	Effets du financement basé sur la performance sur les prestations subventionnées et non subventionnées : cas de la RD Congo <i>Serge Mayaka, Jean Macq</i>
Parallel Session PS 02 (Tuesday 11 March 2014, 12:30 - 14:00)	
Room: Jambo-Tsavo/Amboseli 1 (12:30 - 14:00)	
PS 02: Access to health care services	
PS 02/1	Modalité de recours aux services de santé publique en Afrique subsaharienne : le cas de la Côte d'Ivoire <i>Fofana Memon, Ally YaoLanzali</i>
PS 02/2	Politique de gratuité généralisée en Côte d'Ivoire d'avril 2011 à février 2012 : Analyse de la couverture des besoins en médicaments <i>Régine Attia, Morris Kouame</i>
PS 02/3	Financial barriers to utilization of screening and treatment services for breast cancer: An equity analysis in Nigeria <i>Ijeoma Okoronkwo, PEACE Ejike-Okoye</i>
PS 02/4	Education and postnatal health care utilization of young girls in Cameroon <i>Cedric Stephane Mbella Mbella, Gaston Brice Nkoumou</i>
PS 02/5	Beyond user Fees removal: Overcoming Persistent barriers to facility-based deliveries in rural Zambia <i>Steven Koch, Chitalu Chiliba-Chama</i>
Room: Jambo-Samburu 2 (12:30 - 14:00)	
PS 02: Equity in Health	
PS 02/6	L'Absence de mécanisme explicite d'allocation des ressources dans les politiques d'exemption, ou le risque d'accroître les inéquités : Le cas du Plan Sésame des personnes âgées au Sénégal <i>Maymouna Ba, Fahdi Dkhimi, Alfred Ndiaye</i>
PS 02/7	Analyzing equity and access in health care financing strategies: Results from Rwandan nationally representative surveys (2000-2013) <i>Sabine Musange, Ina Kalisa, Jean-Louis Mukunzi, Uzaib Saya, Thérèse Kunda and David Collins</i>
PS 02/8	La subvention des médicaments entraine-t-elle l'équité de l'accès aux soins : Une analyse multi-niveaux des déterminants du recours aux soins à Dakar <i>Karna Georges Kone, Martine Audibert, Richard Lalou</i>
PS 02/9	Malaria treatment: Inequities in payment coping mechanisms in southeast Nigeria <i>Enyi Etiaba, Obinna Onwujekwe, Ifeanyi Chikezie, Benjamin Uzochukwu and Alex Adjagba</i>
Room: Bogoria 3 (12:30 - 14:00)	
PS 02: Community-based health insurance	
PS 02/10	ADéFi Santé : modèle innovant de couplage « microassurance – microfinance » ADéFi –ACEP-Madagascar <i>Louise Deroo, Ny Aina Ramananarivo, Oumar Ouattara and Thierry Perreau</i>
PS 02/11	Using Discrete Choice Experiment to Assess Community Preferences for Micro Health Insurance within the Predominantly Tax-funded Health Care System of Malawi <i>Gilbert Abiuro, Aleksandra Torbica, Kassim Kwalamasa, Manuela De Allegri</i>
PS 02/12	Increasing equity among community based health insurance members in Rwanda through a socioeconomic stratification process <i>Joséphine Nyinawankunsi, Thérèse Kunda, Cédric Ndizeye and Candide Tran Ngoc</i>
PS 02/13	Les fondements de la résilience et de la pérennité de la mutuelle de santé Fandène: quels enseignements pour la mise en œuvre de la stratégie sénégalaise de couverture maladie universelle? <i>Aboubakry Gollock, Slim Haddad, Pierre Fournier</i>

Room: Mount Kenva D 4 (12:30 - 14:00)	
PS 02: Maternal fee exemptions in West Africa & Morocco (OS)	
PS 02/14	Maternal fee exemptions in West Africa & Morocco – what is their cost and what do we know about their effects and effectiveness? Evidence from four national evaluations <i>Sophie Witter, Patrick Makoutode, Patrick Ilboudo, Mamadou Konate, Chakib Boukhalfa</i>
PS 02/15	Evaluation de la politique de subvention des accouchements et des SONU au Burkina Faso <i>Patrick Ilboudo</i>
PS 02/16	Evaluation de la politique de subvention des césariennes au Mali <i>Mamadou Konate</i>
PS 02/17	Evaluation de la mise en œuvre de la gratuité des accouchements et de la césarienne dans les hôpitaux publics au Maroc <i>Chakib Boukhalfa</i>
PS 02/18	Trois années de mise en œuvre de la politique de gratuité de la césarienne dans cinq zones sanitaires au Bénin: résultats et leçons apprises <i>Patrick Makoutode</i>
Parallel Session PS 03 (Tuesday 11 March 2014, 15:00 - 16:30)	
Room: Jambo-Tsavo/Amboseli 1 (15:00 - 16:30)	
PS 03: Contracting out and private sector	
PS 03/1	Use of multiple providers for antenatal care services in south-eastern Nigeria: Implications for improving maternal health <i>Ogochukwu Ibe, Chima Onoka</i>
PS 03/2	The cost-effectiveness of contracting out maternal and child health care Services to private-not-for profit health care providers in Malawi <i>Elvis Gama</i>
PS 03/3	Should private health providers be used to enhance equity in health service utilisation in Uganda? <i>Stephen Lagony, Charlotte Zikusooka, Brendan Kwesiga and Grace Kabaniha</i>
PS 03/4	Contracting of Health Care: Process and Effects in Sierra Leone <i>Haja Wurie, David Newlands, Joanna Raven, Joseph Edem-Hotah</i>
Room: Bogoria 3 (15:00 - 16:30)	
PS 03: Health and institutional development	
PS 03/5	Institutions and Structural Quality of Care in the Ghanaian Health System <i>Eugenia Amporfu, Justice Nonvignon</i>
PS 03/6	Complex interplay of institutional arrangement, international and local contextual factors; rise and fall of programs and policies for maternal and new-born health in Ghana <i>Augustina Koduah, Irene Akua Agyepong, Han Van Dijk, Wageningen</i>
PS 03/7	Interface between local health systems and vertical programs: Why opportunities for strengthening local health systems in sub-Saharan Africa are missed? <i>Basile Keugoung, Richard Fotsing and Bart Criel</i>
Room: Jambo-Samburu 2 (15:00 - 16:30)	
PS 03: Human resources for health 1	
PS 03/8	An assessment of the motivational value of rewards among health professionals in Malawi's Ministry of Health <i>Dr Alfred Witness Dzanja Chanza, Dr Gerrit Johannes Louw</i>
PS 03/9	"We are intimidated": justice and frontline health worker motivation in Maternal and neonatal health care services provision in Ghana <i>Matilda Aberese-Ako</i>
PS 03/10	Retention of Clinical Officers in Public Sector Facilities in Rural Kenya: A Discrete Choice Experiment <i>Toshio Takemura,</i>
PS 03/11	Examining Quality of Worklife, Work Attitudes and Retention of Tertiary Health Workers in Enugu State, Nigeria <i>Daniel Ogbuabor, Ijeoma Okoronkwo, Bernice Ogbuabor</i>

Room: Mount Kenva D 4 (15:00 - 16:30)	
PS 03: Economic evaluation	
PS 03/13	Economic cost of community based management of acute malnutrition (cmam) in Ghana: a case study of agona west municipality of Ghana <i>Abdul-Malik Abdul-Latif, Justice Nonvignon</i>
PS 03/14	Accessibilité économique des médicaments hypoglycémisants, hypocholestérolémisants et antihypertenseurs en Côte d'Ivoire <i>Stéphane Serge Agbaya Oga, Régine Attia, Constant Goubou, Marie-Berthe Adou, Adama Coulibaly,</i>
PS 03/15	Analyse des coûts et financement des soins de santé primaires dans la zone goavienne en Haïti <i>Karna Georges Kone, Charles Dago,</i>
PS 03/16	Adapting economic evaluation for assessing efficiency of health financing interventions <i>Bruno Meessen, Justine Lagier, Sophie Witter, Filip Meheus</i>
Parallel Session PL 02 (Tuesday 11 March 2014, 17:00 - 18:30)	
Room: Jambo (17:00 - 18:30)	
PL 02: High Level Policy Makers' Panel on UHC and the post 2015 African health agenda	

Poster Presentations Day 1

Tuesday 11 March 2014, 10:30 - 11:00	
Code	Room: SPH Hall Poster Session 1
PT/01-1	Promotion de la conscience sanitaire : un défis à relever pour la pérennisation de la santé en Côte d'Ivoire <i>Memon Fofana</i>
PT/01-2	Evaluation Of Health Communication Technology In Dissemination Of Contraceptive Use Among Teens In Africa <i>King Odor, Rose Opara</i>
PT/01-3	Poverty and the Challenge of Urban Health in Nigeria <i>Geoffrey Nwaka</i>
PT/01-4	Forecasting Health Worker Shortages in Kenya: Building a Process for Routine Review of Staffing Gaps <i>Abeba Taddese, Joel Lehmann, Norbert Rakiro Marty Makinen</i>
PT/01-5	The impact of western medical visits in a hospital in Cameroon <i>Judith van de Kamp</i>
PT/01-6	Efficacité technique des hôpitaux publics au Togo : Une approche par les fonctions à distance directionnelle <i>Esso - Hanam Atake</i>
PT/01-7	Assessing the costs and effects of anti-retroviral therapy task-shifting from physicians to other health professionals in Ethiopia <i>Elias Asfaw Zegeye, Benjamin Johns, Wendy Wong, Abebe Bekele, Thomas Minior, Amha Kebede and John Palen,</i>
PT/01-8	Economic evaluation of a long-lasting insecticidal net (llin) delivery programme to control malaria in children less than five years in enugu state, south east Nigeria <i>Charles Ezenduka</i>
PT/01-9	Trend analysis and determinants of contraceptive use in Ghana: evidence from the Demographic and Health Surveys <i>Jacob Novignon, Justice Nonvignon</i>
PT/01-10	Media violence and its effects on children's health and aggressive behaviour in osun state, Nigeria <i>Mr. Sakiru olarotimi Raji, M.Phil</i>

Tuesday 11 March 2014, 16:30 - 17:00

Code	Room: SPH Hall Poster Session 2
PT02-1	Accessibilité aux soins de santé chez les personnes âgées en milieu rural au Cameroun : Analyse sociologique des cas <i>Djouda Feudjio Yves Bertrand</i>
PT02-2	Socioeconomic status and the prevalence of fever in children under age five: evidence from four sub-Saharan African countries <i>Jacob Novignon, Justice Nonvignon,</i>
PT02-3	Female Education, HIV/AIDS and the Education Vaccine in SSA: The Condoms Piece of the Puzzle <i>Robert J Brent</i>
PT02-4	The Operational Efficiency Evaluation of the Community Health Service Station in Yinchuan before and after the New Medical Reform <i>Lang Ying</i>
PT02-5	Comparing the Validity of the Payment Card and Structured Haggling Willingness to Pay Methods: The Case of a Diabetes Prevention Program in Rural Kenya <i>Anne Kangethe,</i>
PT02-6	Contradictions and inconsistencies in public policies. An analysis of healthcare fee exemption measures in Burkina Faso, Mali and Niger <i>Jean-Pierre Olivier de Sardan</i>
PT02-7	Botswana's Global Competitiveness: Efficiency Analysis of Health Expenditure <i>Fidelity D.D. Kapaletswe,</i>
PT02-8	Why Do People With Access To Public Healthcare Use Alternative Medicine? The Prevalence And Pattern Of Herbal Medicine Use Among Pregnant Women In Nairobi, Kenya <i>Mamothena Mothupi,</i>
PT02-9	Couverture médicosociale des groupes vulnérables au Sénégal, cas des PVVIH de Kaolack <i>Christian Yao,</i>
PT02-10	Identification and Intervention for Dementia in Elderly Africans: IDEA study <i>Laura Ternent, Mark Deverill, Richard Walker</i>
PT02-11	Understanding Variations in Immunization in Nigeria <i>Amina Ahmad-Shehu, Divine Ikenwilo</i>

Oral Presentations Day 2

Parallel Session PL 03 (Wednesday 12 March 2014, 09:00 - 10:30)	
Room: Jambo (09:00 - 10:30) PL 03: Joint AfHEA-WHO/AFRO session on UHC and Health Financing in the African Region	
Parallel Session PS 04 (Wednesday 12 March 2014, 10:30 - 12:00)	
Room: Jambo-Samburu 2 (10:30 - 12:00) PS 04: Health financing assessments 1	
PS 04/1	The burden of health financing in post conflict n. Uganda <i>Robert Byabasheija, Sarah Ssali, Timothy Ensor, Fu-Min Tseng and Barbara McPake</i>
PS 04/2	Stratégies de financement de la couverture maladie universelle : cas des financements innovants <i>Ulrich-Anthelme Adombi and M'Boh Delphin N'gou</i>
PS 04/3	Benefit incidence analysis: who is benefiting the most from spending on health care in Uganda? <i>Christabell Abewe, Brendan Kwesiga, Charlotte Zikusooka</i>
PS 04/4	L'allocation des ressources financières aux interventions dites à gain rapide ou à haut impact : cas du Burkina Faso <i>Amina Nomtongo Ouedraogo, Fadima Yaya Bocoum, Danielle Belemsaga, Lamine Traore, Seydou Nombre</i>
Room: Bogoria 3 (10:30 - 12:00) PS 04: Maternal and child health care	
PS 04/5	Towards achieving MDGs 4 and 5 in Zimbabwe: how satisfied are the clients with the maternal and child health services? <i>Ashis Das, Jed Friedman, Ronald Mutasa, Davies Dhlakama, Margaret Nyandoro, Bernadette Sobuthana</i>
PS 04/6	Effects of a sexual and reproductive health intervention on adolescent service usage in northern Ghana: results of a community-randomised trial <i>Gifty Aninanya, Cornelius Debpuur, Abraham Hodgson and Natasha Howard</i>
PS 04/7	Factors facilitating male involvement in antenatal care in Ibadan north Local government area, Oyo state, Nigeria <i>Adebukola Shogbamu</i>
PS 04/8	Cause-specific neonatal mortality analysis in Ghana: A case study of eight hospitals in northern region <i>Alexander Laar, Ane Adondiwo, Francis Ashagbley, Isaac Amega-etigo, Sodzi Sodzi- Tettey</i>
PS 04/9	Determinants of comprehensive maternal health care seeking and of institutional delivery care and postpartum care 'dropouts' in three regions of Tanzania <i>Peter John Binyaruka, Edith Patouillard, Masuma Mamdani, Irene Mashasi, Iddy Mayumana, Ikunda Njau, Josephine Borghi</i>
Room: Jambo-Tsavo/Amboseli 1 (10:30 - 12:00) PS 04: Universal Health Coverage and vulnerable populations	
PS 04/10	'Pursuing universal health coverage with difficulties?': factors influencing the decision to disenroll from health insurance among urban slum dwellers in Ghana <i>Roger Atinga, Gilbert Abiuro, Robert Kuganab-Lem</i>
PS 04/11	Universal Health Coverage in Fragile States <i>Godelieve van Heteren, Laetitia Nyirazinyoye, Longin Gashubije, Susan M.L. Laver, Sven Neelsen, Frank van de Looij, Hilda van Riet</i>
PS 04/12	Universal coverage in a context of predominance of informal and rural sector: can the 'side commitments approach' (SCA) be a solution? <i>Pascal Ndiaye, Farba Lamine Sall, Justin Tine</i>
PS 04/13	Financing universal coverage: Income potential and sustainability of informal sector activities in Kenya <i>Vincent Okungu, Jane Chuma, Diane McIntyre</i>
Room: Mount Kenya D 4 (10:30 - 12:00) PS 04: Evaluating PHC performance	
PS 04/14	Capitalization of performance based financing (PBF) pilot scheme in Chad <i>Joël Arthur Kiendrébéogo, Louis Rusa, Matthieu Antony and Olivier Barthès</i>
PS 04/15	What affects patient outcomes? A cross-country analysis of facility ART performance in sub-Saharan Africa <i>Anne Gasasira, Herbert Duber, Brendan Decenso and Emmanuela Gakidou,</i>
PS 04/16	Evaluating Equity in the Provision of Primary Health Care in Tanzania <i>Breannon Babbal</i>

PS 04/17	Use of the Contingent Valuation Method in sub-Saharan Africa: A Review and Classification of Healthcare Studies <i>Anne Kangethe, Duska Franic</i>
Parallel Session PS 05 (Wednesday 12 March 2014, 12:30 - 14:00)	
Room: Jambo-Tsavo/Amboseli 1 (12:30 - 14:00)	
PS 05: MDGs and health financing	
PS 05/1	Millennium development goals on health and Abuja declaration: performance assessment of sub-Saharan African countries <i>Jacob Novignon</i>
PS 05/2	Mapping the patchwork of health financing schemes in 12 african countries <i>Allison Kelley</i>
PS 05/3	Per capita Health care financing and Child Health in Sub Saharan Africa <i>Eric Arthur</i>
Room: Jambo-Samburu 2 (12:30 - 14:00)	
PS 05: Performance-Based-Financing evaluation	
PS 05/4	A Quasi-Experimental Impact Of The Performance-Based-Financing In The Use And Quality Of Health Care Services In An Urban Area: The Case Of The Littoral Region Of Cameroon <i>Omer Ramses Zang Sidjou, Sebastien Djenouassi, Gaston Sorgho, Jean Claude Taptue</i>
PS 05/5	Analyses des tensions et des controverses autour de l'implementation du financement basé sur la performance dans un district sanitaire : cas du Système de sante complexe de la RD Congo <i>Serge Mayaka, Bruno Meessen, Jean Macq</i>
PS 05/6	Early evidence from results-based financing in rural Zimbabwe: Lessons learnt and the way forward <i>Jaap Koot, Ronald Mutasa, Nyasha Masuka, Portia Manangazira, Frank van de Looij</i>
PS 05/7	Performance Based Health Financing and Health System Challenges: An assessment of the design, implementation, and outcomes in Katsina State, Nigeria <i>Hyacinth Ichoku</i>
Room: Bogoria 3 (12:30 - 14:00)	
PS 05: Health financing assessments 2	
PS 05/8	La fréquentation des services de santé dépend-elle de l'extension de l'assurance maladie dans les pays du Sud? La mise en évidence par un modèle économétrique, d'un effet de seuil du niveau de vie <i>Meschac Attinwasonou, Richard Lalou, Hervé Lafarge, Chris Atim</i>
PS 05/9	Analyse des défis et opportunités de la couverture maladie universelle en côte d'ivoire : quelle implication pour la lutte contre le paludisme <i>Colette Kokrasset Yah</i>
PS 05/10	Is domestic funding for health equitable in Uganda? A financing incidence analysis <i>Charlotte Muheki Zikusooka, Brendan Kwesiga and Paul Kizza</i>
PS 05/11	Reflexions sur la gratuite des soins en côte d'ivoire en 2011 <i>Stéphane Serge Agbaya Oga, Mamadou Samba, Bi Tah N'guessan and Luc Philippe Kouadio,</i>
Room: Mount Kenya D 4 (12:30 - 14:00)	
PS 05: Exclusion from social health protection (OS)	
PS 05/12	Assessing exclusion from social health protection <i>Divya Parmar</i>
PS 05/13	SPEC-by-step: the development of a tool for assessing exclusion from social health protection <i>Werner Soors, Tanya Sheshradi, Harshad Thakur, TISS, Felix Asante, Daniel Kojo Arhinful, Noguchi Fahdi Dkhimi, Alfred Ndiaye, Philipa Mladovsky, Bart Criel</i>
PS 05/14	Impact of Plan Sesame on equity in access to health care for elders in Senegal: who is excluded from coverage and why? <i>Fahdi Dkhimi, Maymouna Ba, Philipa Mladovsky, Alfred Ndiaye,</i>
PS 05/15	Who is excluded in Ghana's National Health Insurance Scheme and why? <i>Felix Asante, Daniel Kojo Arhinful, Ama Fenny, Anthony Kusi, Gemma William, Divya Parmar</i>
PS 05/16	Enrolment of elders in social health protection programs – does social exclusion play a part? <i>Divya Parmar, Gemma Williams, Fahdi Dkhimi, Alfred Ndiaye, Felix Asante, Daniel Kojo Arhinful, Philipa Mladovsky</i>
Room: Jambo-Samburu 2 (15:00 - 16:30)	
PS 06: Une vue d'hélicoptère : la cartographie des régimes de financement de la santé dans 12 pays d'Afrique : un projet de recherche collaborative (OS)	

Room: Bogoria 3 (15:00 - 16:30) PS 06: Community participation	
PS 06/01	Affordability and perceptions of the quality of public care as determinants of health insurance coverage in South Africa: implications for National Health Insurance (NHI) <i>Anja Smith, Ronelle Burger</i>
PS 06/02	Factors influencing Participation in Community-Based Health-Care Financing Scheme by Rural Households – Osun State, Nigeria, 2012 <i>Aishat Usman</i>
PS 06/03	The impact of stakeholder values and power relations on community-based health insurance coverage: evidence from three Senegalese case studies <i>Philipa Mladovsky, Pascal Ndiaye, Alfred Ndiaye, Bart Criel</i>
Room: Mount Kenya D 4 (15:00 - 16:30) PS 06: Non Communicable diseases	
PS 06/06	Net Social Benefit of a Diabetes Prevention Program in Rural Kenya <i>Anne Kangethe, Duska Franic</i>
PS 06/07	Tobacco Taxation in Select African Countries: An Extended Cost Effectiveness Analysis <i>Stephane Verguet</i>
PS 06/08	Salt Reduction in South Africa: an Extended Cost Effectiveness Analysis <i>David Watkins, Zachary Olson, Stephane Verguet, Dean Jamison, Rachel Nugent</i>
PS 06/09	Réduction du taux de létalité liée aux morsures de serpents par la subvention du sérum antivenimeux : cas du Centre Hospitalier Régional de Gaoua (BurkinaFaso) <i>Seydou Nombre</i>
PS 06/10	Determinants des depenses de sante induites par la maladie a pikine : impact des maladies chroniques <i>Moussa Dieng</i>
Room: Jambo-Samburu 2 (15:00 - 16:30) PS 06: Une vue d'hélicoptère : la cartographie des régimes de financement de la santé dans 12 pays d'Afrique : un projet de recherche collaborative (OS)	
PS 06/11	La méthodologie d'un projet de recherche collaborative pour cartographier des régimes de financement de la santé dans 12 pays d'Afrique <i>Allison Kelley</i>
PS 06/12	2- La cartographie des RFS au Niger vue en détail <i>Mahaman Moha,</i>
PS 06/13	L'analyse transversale d'une cartographie des régimes de financement de la santé dans 12 pays d'Afrique <i>Isidore Sieleunou</i>
PS 06/14	Une vue d'hélicoptère – la cartographie des régimes de financement de la santé dans 12 pays d'Afrique – un projet de recherche collaborative <i>Allison Kelley, Isidore Sieleunou, Mahaman Moha, Serge Mayaka</i>
Room: Jambo-Tsavo/Amboseli 1 (15:00 - 16:30) PS 06: African health expenditures: latest resource tracking results (expenditure on diseases; expenditure on HRH; external funding) (OS)	
PS 06/15	A cross country comparison of health expenditure by disease and by Age: results from the latest health accounts data <i>Nathalie Van de Maele</i>
PS 06/16	Development assistance for health in africa: are we telling the right story? <i>Nathalie Van de Maele</i>
PS 06/17	How much do countries spend on their health workers? <i>Patricia Hernandez</i>
PS 06/18	African health expenditures as part of measuring and monitoring the Progress of universal health coverage <i>Nathalie Van de Maele</i>
Parallel Session PL 04 (Wednesday 12 March 2014, 17:00 - 18:15)	
Room: Jambo (17:00 - 18:15) PL 04: How to measure UHC: Presentation of ongoing work by teams from GNHE, USAID and WHO/World Bank	

Poster Presentations Day 2

Wednesday 12 March 2014, 12:00 - 12:30

Code	Room: SPH Hall Poster Session 3
PT/03-1	Estimating the Economic Burden of Malaria in Young Children: Results from a Highly Endemic Low-Income Setting in Northern Uganda <i>Fred Matovu</i>
PT/03-2	Socioeconomic correlates and the choice of treatment for childhood fever in Ghana <i>Eric Arthur</i>
PT/03-3	Cost-Effectiveness of Phototherapy Strategies for Uncomplicated Neonatal Jaundice in Nigeria <i>Maduka Ughasoro, Ndubuisi Chukwudi, Eric Obikeze, Benjamin Uzochukwu, Ihuoma Ukpabia</i>
PT/03-4	Evaluation du coût annuel de l'hépatite B chronique non traitée au Sénégal <i>Yvan Agbassi, Hervé Lafarge</i>
PT/03-5	"Economic cost of malaria in sidama zone, snnpr, ethiopia" <i>Wondwosen Gebeyaw Kassa, Mr</i>
PT/03-6	Assistance par téléphone au Burkina Faso : évaluation du processus, des résultats et de l'utilisation de la ligne verte du comité ministériel pour la santé du Ministère des Enseignements Secondaire et Supérieur <i>Wilfried Some</i>
PT/03-7	La micro-assurance de santé et promotion de la couverture universelle de santé en Côte d'Ivoire <i>Zohore Olivier Koudou</i>
PT/03-8	Saving money, saving lives: an inquiry into a micro-savings maternity product in Kenya <i>Agnes Gatome-Munyua, Thierry van Bastelaer</i>
PT/03-9	Towards Developing a Policy on Use of Rational Use of Medicine for Malaria Treatment in Low and Middle Income Countries <i>Patrick Mbah Okwen, Elma Anjie Aseneh</i>
PT/03-10	Understanding the role of the private sector in national HIV spending: a snapshot of four countries <i>Sean Callahan, Sharon Nakhimovsky</i>
Code	Room: SPH Hall Poster Session 4
PT/04-1	Measurement of Universal Health Coverage_Ethiopian Case Study <i>Asfaw Asfaw, Abebe Alebachew,</i>
PT/04-2	Acceptability of point of care test for syphilis among pregnant women in Burkina Faso <i>Fadima Yaya Bocoum, Aristide Bado, Simon Tiendrebeogo, Christina Zarowsky, Seni Kouanda</i>
PT/04-3	L'articulation du Plan Sésame et des mutuelles de santé: quel impact sur l'équité dans l'accès aux soins et la couverture santé universelle des personnes âgées au Sénégal? <i>Aboubakry Gollock, Slim Haddad, Pierre Fournier</i>
PT/04-4	Diarrhea Treatment and Rotavirus Vaccination: An Extended Cost Effectiveness Analysis in Ethiopia <i>Clint Pecenka, Stephane Verguet, Kjell Arne Johansson</i>
PT/04-5	Facility and patient-level determinants of treatment failure among Kenyan adults initiating antiretroviral therapy between 2007 and 2012 <i>Thomas Odeny, Anne Gasasira, Annie Haakenstad, Kelsey Moore, Brendan Decenso, Samuel Masters, Roy Burstein, Emily Dansereau, Pamela Njuguna, Caroline Kisia, Michael Hanlon, Herbert Dube, Emmanuela Gakidou</i>
PT/04-6	A Comparative Study of Health Systems Costs of Safe Abortion And Post Abortion Care In Zambia <i>Divya Parmar, Tiziana Leone, Eleanor Hukin, Susan Murray, Ernestina Coast</i>
PT/04-7	Achieving universal coverage of HIV/AIDS intervention: Results of geographic mapping process in south east Nigeria <i>Ogochukwu Ibe, Emmanuel Nwala, Ogochukwu Ndibe, Amaechi Osemeka, Louis Anyasoro</i>
PT/04-8	The clock is ticking: timely ART initiation in Kenya at 60 nationally-representative health facilities <i>Thomas Odeny, Anne Gasasira, Annie Haakenstad, Kelsey Moore, Brendan Decenso, Samuel Masters, Roy Burstein, Emily Dansereau, Pamela Njuguna, Caroline Kisia, Michael Hanlon, Herbert Duber, Emmanuela Gakidou</i>
PT/04-9	Etude des coûts de la prise en charge de la schizophrénie dans un hôpital psychiatrique, Côte d'Ivoire <i>Petronyl Acray-Zengbe, Madjara Anoumatacky-Koffi, Drissa Kone, Bangaman Christian Akani, Joseph Benie, N'Cho Simplicie Dagnan, Marina Yoh</i>

Oral Presentations Day 3

Plenary Session PL 05 (Thursday 13 March 2014, 08:15 - 09:15)	
Room: Jambo (08:15 - 09:15) PL 05: Joint AfHEA / NICE Session: Economic evaluation: a tool for priority setting in the context UHC - Learning from the international experience	
PL 05/1	Joint AfHEA / NICE Session: Economic evaluation: a tool for priority setting in the context UHC - Learning from the international experience <i>Tommy Wilkinson</i>
Parallel Session PS 07 (Thursday 13 March 2014, 09:15 - 10:45)	
Room: Jambo-Samburu 2 (09:15 - 10:45) PS 07: Health insurance : country experiences	
PS 07/1	Analyse de l'offre de soins dans le cadre de la mise en œuvre de l'Assurance Maladie Obligatoire (AMO) au Mali <i>Boubacar Daou</i>
PS 07/2	Multi-level stakeholder perceptions of poverty identification criteria for a pro-poor health Insurance scheme in Tanzania <i>Jithada Baraka, Dr. Fatuma Manzi, Kate Ramsey, Josephine Borgi, August Kuwawenaruwa and Edith Patouillard</i>
09:55 PS 07/3	Preferences to social health insurance among formal sector employees: a discrete choice experiment <i>Amarech Obse</i>
Room: Mount Kenva D 4 (09:15 - 10:45) PS 07: Studies on HIV, Malaria, TB	
PS 07/4	Providing ART efficiently: Determinants of facility performance in Uganda <i>Jane Achan, Anne Gasasira, Gloria Ikilezi, Samuel Masters, Allen Roberts, Kelsey Moore, Annie Haakenstad, Herbert Duber, Michael Hanlon, Emmanuela Gakidou</i>
PS 07/5	Availability of essential therapies for HIV treatment in health facilities in Kenya and Uganda: a multi-country survey <i>Gloria Ikilezi, Anne Gasasira, Thomas Odeny, Samuel Masters, Brendan Decenso, Emily Dansereau, Annie Haakenstad, Kelsey Moore, Michael Hanlon, Herbert Duber, Jane Achan, Emmanuela Gakidou</i>
PS 07/6	Implementation of a TB Reach project in Cote d'Ivoire <i>Yvan Agbassi, Siaka Toure</i>
PS 07/7	Does free distribution of long lasting insecticidal bed nets among pregnant women improve possession and usage? : Findings from cross sectional survey from 19 local government areas in Anambra state, South East Nigeria <i>Jane Enemuoh, Obinna Onwujekwe, Benjamin Uzochukwu, Joseph Oranuba and Amobi Llika</i>
Room: Jambo-Tsavo/Amboseli 1 (09:15 - 10:45) PS 07: Universal Health Coverage experiences	
PS 07/8	Universal Health Coverage and the Post-2015 Health Agenda: Issues of Sustainable Health Financing and Consumer Choice of Provider in Sub-Saharan African Countries <i>Saheed Olayiwola</i>
PS 07/9	Assessing Ghana's NHIS after 10 years <i>Eugenia Amporfufu, Chris Atim, Meschac Attinwasonou</i>
PS 07/10	Towards Universal Coverage: a policy analysis of the development of the National Health Insurance Scheme in Nigeria <i>Chima Onoka, Kara Hanson, Johanna Hanefeld</i>
PS 07/11	Mobile Money as a Vehicle for Moving Health Systems Towards Universal Health Coverage: An Analysis of Selected Case Studies <i>Abeba Taddese, Sherri Haas, Pamela Riley, Marilyn Heymann</i>
PS 07/12	Towards Universal Health Coverage in Kenya: An Evaluation of the National Hospital Insurance Fund <i>Lawrence Were, RI, Richard Wamai, Omar Galarraga</i>
Room: Bogoria 3 (09:15 - 10:45) PS 07: Governance and accountability	
PS 07/13	Actors, framing, context and decisions to provide user fee exemption for maternal and neonatal care, in Ghana <i>Augustina Koduah, Irene Akua Agvepong, Han Van Dijk</i>

PS 07/14	A stakeholder analysis of the capitation policy under Ghana's National Health Insurance Scheme <i>Joseph Nii Otoo Dodoo</i>
PS 07/15	Examining the effects of political decentralisation in Kenya, on governance and accountability structures and practices for sub-national level health sector operational planning and budgeting <i>Benjamin Tsofa, Catherine Goodman, Sassy Molyneux</i>
PS 07/16	The challenges of bridging the gap between researchers and policymakers: Experience of getting research into policy and practice in Nigeria <i>Benjamin Uzochukwu, Enyi Etiaba, Obinna Onwujekwe, Chinyere Mbachu, Chinenye Okwuosa, Monica Nystrom, Lucy Gilson</i>
Parallel Session PS 08 (Thursday 13 March 2014, 10:45 - 12:00)	
Room: Bogoria 3 (10:45 - 12:00)	
PS 08: Resource allocation and management	
10:45 PS 08/1	Examining Priority Setting and Resource Allocation Practices in Hospitals: The Case of County Hospitals in Kenya <i>Edwine Barasa, Sassy Molyneux, Mike English, Susan Cleary</i>
11:05 PS 08/2	Direct funding of health centres: early experiences of implementing a national financing mechanism in Kenya <i>Sassy Molyneux, Evelyn Waweru, Sarah Kadenge, Benjamin Tsofa, Catherine Goodman</i>
11:25 PS 08/3	The Process and Influences on the Annual Operational Planning (AOP) and Budgeting Processes in Kenya's Health Sector <i>Benjamin Tsofa, Sassy Molyneux, Catherine Goodman</i>
Room: Jambo-Samburu 2 (10:45 - 12:00)	
PS 08: Strategic Purchasing for Universal Health Coverage in Sub-Saharan Africa – Lessons from the Ghanaian Experience (OS)	
PS 08/4	Strategic purchasing for UHC in SSA: 1. Historical pathways and context of provider payment in Ghana <i>Helen Dzikunu</i>
PS 08/5	Strategic Purchasing for UHC in SSA – 2. Methodology <i>Irene Akua Agyepong,</i>
PS 08/6	Strategic Purchasing for UHC in SSA – 3. Case Based payment: G-DRG for services <i>Justice Nonvignon, Moses Aikins</i>
PS 08/7	Strategic Purchasing for UHC in SSA – 4. Itemized fee schedule: Medicines <i>Daniel Kojo Arhinful</i>
PS 08/8	Strategic Purchasing for UHC in SSA – 5. Experiences and Lessons from the capitation pilot <i>Francis Asenso Boadi</i>
PS 08/9	Strategic Purchasing for UHC in SSA – 6. A systems view of provider payment and service supply incentives under the NHIS <i>Irene Akua Agyepong</i>
PS 08/10	Strategic Purchasing for UHC in SSA: Lessons from the Ghanaian Experience <i>Irene Akua Agyepong, Daniel Kojo Arhinful, Justice Nonvignon, Genevieve Cecelia Aryeetey, Emmanuel Ankrah Odame, Joseph Nii Otoo Dodoo</i>
Room: Jambo-Tsavo/Amboseli 1 (10:45 - 12:00)	
PS 08: Early Lessons from Design, Implementation and Evaluation of Results-Based Financing Projects in the Health Sector (OS)	
PS 08/11	Overview of Panel: Early Lessons from Design, Implementation and Evaluation of Results- Based Financing Projects in Health sector; and Conceptual Framework <i>Rifat Hasan, Christel Vermeersch, Elisa Rothenbühler, Monique Vledder, Shunsuke Mabuchi, GNV Ramana</i>
PS 08/12	Impact of Results-Based Financing on Quality of Basic Health Services in Burundi <i>Huihui Wang, Moulay Driss, Alain-Desire Karibwami</i>
PS 08/13	Building the Evidence for Results-Based Financing for Health Through Impact Evaluation: Results from Cameroon <i>Jake Robyn, Gaston Sorgho, Omer Zang</i>
PS 08/14	Learning from Implementation to Improve Results-Based Financing: Lessons from Nigeria <i>Shunsuke Mabuchi, Ayodeji Oluwole Odutolu</i>
PS 08/15	Early Lessons from Design, Implementation and Evaluation of Results-Based Financing Projects in the Health Sector <i>Rifat Hasan</i>

Parallel Session PS 09 (Thursday 13 March 2014, 12:30 - 14:00)	
Room: Jambo-Tsavo/Amboseli 1 (12:30 - 14:00)	
PS 09: Household out-of-pocket health payments	
PS 09/1	The distributional impact of direct out-of-pocket health financing in Uganda's health system <i>Brendan Kwesiga, John Ataguba, Charlotte Zikusooka</i>
PS 09/2	A multi-country analysis of the extent and determinants of informal payments for health care in Sub-Saharan Africa <i>Hyacinthe Kankeu Tchewonpi</i>
PS 09/3	Assessing the distribution of household out-of-pocket health payments in South Africa <i>Naomi Tlotlego</i>
PS 09/4	Determinants of Catastrophic Health Expenditure in Slum Communities in Kenya <i>Steven Buigut, Djesika Amendah</i>
Room: Mount Kenva D 4 (12:30 - 14:00)	
PS 09: Studies on costing of HIV, Malaria, TB	
PS 09/5	Costs of hiv prevention interventions in zambia and kenya: how much scale and quality can explain the cost variability of htc, pmtct and mc services? Results of an african multi-country orphea project <i>Sergio Bautista-Arredondo, Sandra G. Sosa-Rubi, Ada Kwan, Ivan Ochoa Moreno, Claire Chaumont, Raluca Buzdugan, Omar Galarraga, Felix Masiye, Joseph Wang'ombe Richard Wamai</i>
PS 09/6	Cost-effectiveness of RTS,S malaria vaccine candidate in children estimated using a Markov cohort model and Phase 3 trial results <i>Christophe Sauboin, Ilse Van Vlaenderen, Laure-Anne Van Bellinghen, Baudouin Standaert</i>
PS 09/7	Reducing mortality among HIV-infected subjects starting antiretroviral therapy: the health service costs of an intervention under evaluation in a randomised trial <i>Godfather Kimaro, Lorna Guinness, Victoria Simms, Sokoine Lesikale, Amos Kahwa, Saidi Egwaga, Sayoki Mfinanga, Shabbar Jaffar</i>
PS 09/8	Assessing the Cost of Private Sector ACT Subsidies - The Financial and Economic Costs of the Affordable Medicines Facility – Malaria (AMFm) in Three African Countries <i>Catherine Goodman, Daniel Cobos, Sarah Tougher, Kara Hanson</i>
Room: Jambo-Samburu 2 (12:30 - 14:00)	
PS 09: Social health insurance experiences	
PS 09/9	Social Health Insurance for HIV Prevention and Treatment in Kenya <i>Lawrence Were, RI, Richard Wamai, Edwin Were, Joseph Hogan, Omar Galarraga</i>
PS 09/10	Has Ghana's Health System benefited the Poor almost a Decade after the Operationalization of the National Health Insurance Scheme (NHIS)? Lessons from Northern Ghana <i>Doris Sarpong, James Akazili, Paul Welaga, Philip Adalinzon, Anthony Kwarteng, Margaret Gyapong, Abraham Oduro, Martin Bangha and Jane Goudge</i>
PS 09/11	The need for and utilization of outpatient health care services by households under the National Health Insurance Scheme in Northern Ghana <i>Philip Ayizem Dalinjong, James Akazili, Paul Welaga, Abraham Oduro, Doris Sarpong, Anthony Kwarteng, Martin Bangha, Jane Goudge</i>
PS 09/12	Constraints and enabling factors in scaling-up coverage with social health insurance in Nigeria <i>Chima Onoka, Obinna Onwujekwe, Benjamin Uzochukwu, Nkoli Ezumah,</i>
Room: Bogoria 3 (12:30 - 14:00)	
PS 09: Human resources for health 2	
PS 09/13	Supporting the shift towards universal coverage by establishing the right incentive environment for health workers – lessons from three post-conflict regions and countries in sub-Saharan Africa <i>Sophie Witter, Yotamu Chirwa, Mohamed Samai, Justine Namakula</i>
PS 09/14	Investigating the sources of income of health workers: evidence from Sierra Leone <i>Maria Paola Bertone, Mylene Lagarde</i>
PS 09/15	Labor income of health workers and multiple jobholding in Urban Areas of Cameroon <i>Gaston Brice Nkoumou Ngoa</i>
PS 09/5	Provider Payment Reform and Information Technology Systems: A Chicken and Egg Question for National Health Coverage Programs <i>Kate Wilson</i>
Plenary Session PL 06 (Thursday 13 March 2014, 15:00 - 16:15)	
Room: Jambo (15:00 - 16:15)	
PL 06: Panel discussion - Key messages and take-aways on main conference theme	

Poster Presentations Day 3

Thursday, March 13, 2014, 12:00 PM-12:30 PM	
Code	Room: SPH Hall Poster Session 5
PT05-1	Collaborative models for knowledge management in global health <i>Allison Kelley, Isidore Sieleunou, Nathaniel Otoo, Shamsuzzoha Syed, Bruno Meessen</i>
PT05-2	Costs of HIV prevention interventions in Kenya: how much scale and quality can explain the cost variability? Preliminary results of ORPHEA project for HTC, PMTCT and MC services <i>Richard Wamai, Joseph Wang'ombe, Omar Galarraga, Mercy Mugo, Hellen Nyakundi, Raluca Buzdugan, Claire Chaumont, Ada Kwan, Ivan Ochoa, Sandra G. Sosa-Rubi and Sergio Bautista-Arredondo</i>
PT05-3	Costs of key HIV prevention interventions in Zambia: Preliminary results from the ORPHEA project <i>Felix Masiye, Abson Chompolola, Kumbutso Dzekedzeka, Raluca Buzdugan, Claire Chaumont, Ada Kwan, Ivan Ochoa, Sandra G. Sosa-Rubi and Sergio Bautista-Arredondo</i>
PT05-4	Linking Public Financing with Private Innovation: Opportunities and Challenges <i>Shan Soe-Lin</i>
PT05-5	Analyse des barrières à l'accès aux soins au Sénégal <i>Yolande Kouame</i>
PT05-6	Offre privée, organisation et disponibilité des services de santé au niveau périphérique : Étude de cas dans la commune de Ngaliema à Kinshasa, en RD Congo <i>Théophane Bukele</i>
PT05-7	Pricing Differentials of Modern Contraceptives in Public and Private Health Institutions: Implications for Ghana's National Health Insurance Scheme <i>Kwame Adjei, Amos Laar, Clement Narh, Martha Abdulai Ali, Seth Owusu-Agyei and Sam Adjei</i>
PT05-8	Exploring the Potential to Enhance Malaria Diagnosis and Treatment by Qualified Health Workers: A Qualitative Study <i>Sarah Kedenge, Sophie Githinji, Ahmeddin Omar, Dejan Zurovac, Sassy Molyneux, Catherine Goodman</i>
PT05-9	Improving equity in malaria treatment outcomes; relationship of patients socio-economic status with effective treatment received as well as with knowledge of health providers and characteristics of health facilities utilized for treatment of uncomplicate <i>Jane Enemuoh, Obinna Onwujekwe, Nkoli Ezumah, Lindsay Mangham- jefferies, Benjamin Uzochukwu, Virginia Wiseman</i>
PT05-10	Technical efficiency of integrated HIV and SRH services in Kenya and Swaziland: An application of a two stage semi-parametric approach <i>Carol Obure, Rowena Jacobs, Lorna Guinness, Anna Vassall</i>
PT05-11	La politique des soins de sante primaire (ssp) en Côte d'Ivoire: une evaluation du district sanitaire de Bouafle <i>Isabelle Beyera, Memon Fofana, Ruphin Tanoh Doua</i>