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Community health insurance: a financially sustainable approach to universal coverage in Africa? Insights from Tanzania

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Background and Objectives

- Very little evidence of costs of running community health insurance internationally
- Such information valuable for planning
- Objectives
  - Estimate annual costs of running the CHF at district level and below
  - Compare costs to revenue
  - Undertake sensitivity analysis to inform policy

Health Insurance in Tanzania

- Currently the government is committed to 30% insurance coverage (17% to 30%).
- A number of insurance schemes operates in Tanzania, however our focus is on CHF
- The premium ranges from TZS 5,000 – 25,000 per annum,
  - government will match same amount of the premium collected
- Benefits: Free outpatient care at public primary level facility of registration and some districts offer inpatient care
  - Facilities are not reimbursed directly
- The CHF is managed at the district level by CHSB
- It mainly targets informal sector

Methods

- Case study of 2 districts and 4 primary facilities
- Data sources: interviews, meeting minutes
- Perspective: ministry of health at district level and below
- Cost categories: resource inputs, activities and fixed and variable
- Ingredients approach used
- Sensitivity analysis
  - CHF membership; OPD levels; premium
  - Effect of full time coordinator and individual membership cards
  - Premium level: threshold analysis – 30% of total

Definition of core activities –Facility level

Activities	Definition	Frequency	Type of cost
Sensitisation	Individual – all OPD users not CHF members sensitised by provider Group – weekly integrated into health promotion sessions Community – ad hoc by HFGC members	All facilities 3 out of 4 facilities 3 out of 4 facilities	Variable Fixed Fixed
Registering members	Completing and issuing card, receipt and cash book	All facilities	Variable
Depositing funds	Depositing funds from cost sharing in district or facility account	All facilities	Fixed
Meetings	Meetings with HFGC to discuss use of CHF funds WDC; village; facility mgmt teams	All facilities 3 out of 4 facilities 1 out of 4 facilities	Fixed
Reporting	Preparing report on cost sharing revenue		Fixed

Definition of core activities–District level

Activities	Definition	Frequency
Meetings	CHSB meetings	Both districts
Reporting	Monthly and quarterly reports to	Both districts
Supervision	Routine CHMT Independent visits to facilities	Both districts 1 district
One-off costs		
Training	Training of HFGC members	Both districts
Service agreement	Entering into contract with referral facilities	1 district

Assumption: all district level costs are fixed

Average Annual Facility Level Costs in 1,000 TZS

	Sensitisation	Registration	Fund Mgmt	Meetings	Reporting	Total
Salaries	1,226	66	131	35	94	1,551 (85%)
Allowances	-	-	-	103	-	103 (6%)
Transport	-	-	42	-	-	42 (2%)
Supplies	-	126	1	-	-	128 (7%)
Total	1,226 (67%)	192 (11%)	174 (10%)	138 (8%)	94 (5%)	1,823 (100%)
Fixed	21	1	174	138	94	427 (23%)
Variable	1205	191	0	0	0	1396 (77%)

Total Annual District Level Management Costs in 1000 TZS

	Urban district				Rural district			
	Meetings	Reporting	Supervision	Total	Meetings	Reporting	Supervision	Total
Salaries	48	272	44	363 (61%)	408	457	537	1,402 (70%)
Allowances	235	-	-	235 (39%)	392	-	210	602 (30%)
Total	283 (47%)	272 (45%)	44 (7%)	599 (100%)	800 (40%)	457 (23%)	747 (37%)	2,004 (100%)

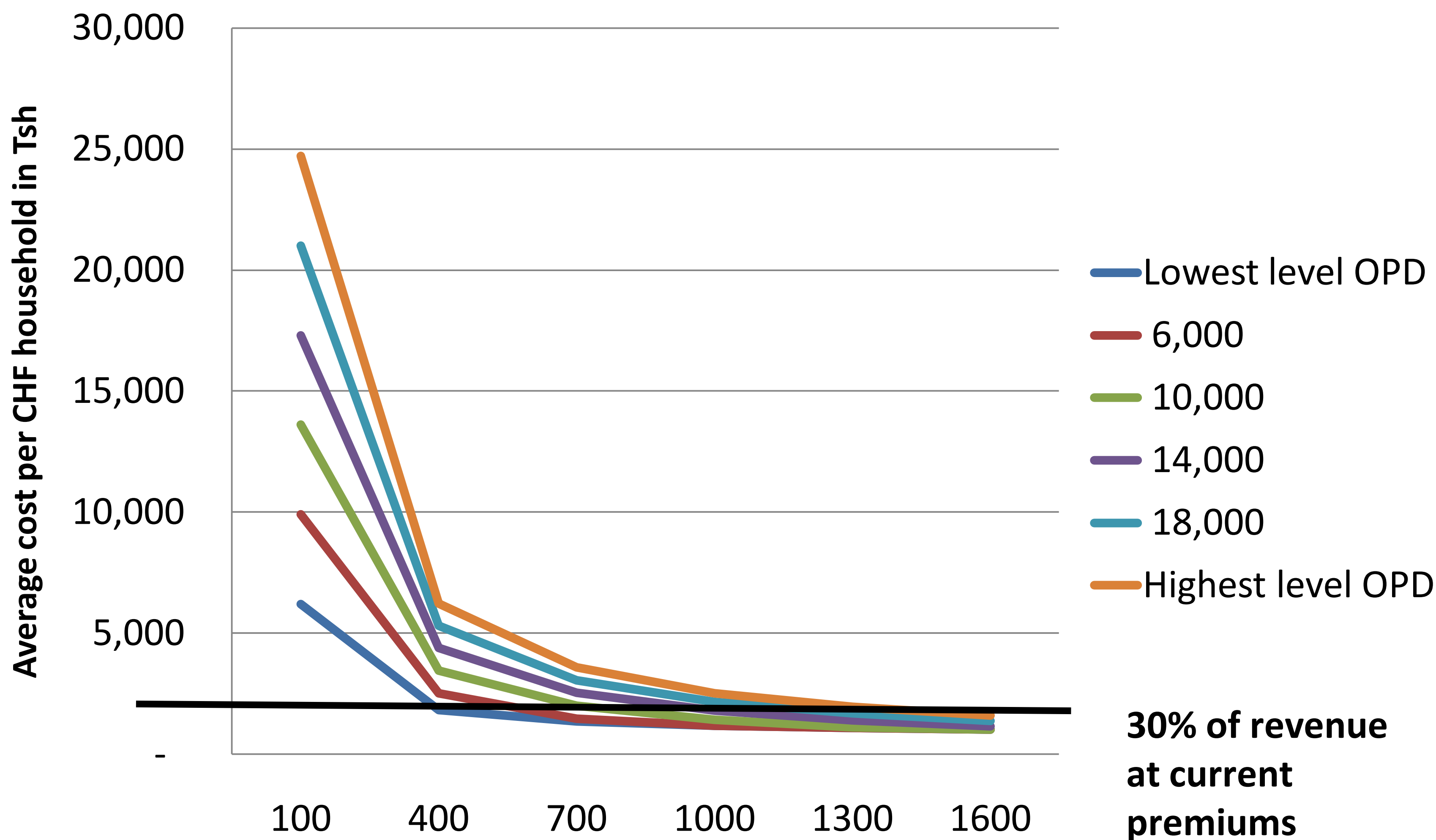
Total Annual District-Wide Costs in 1000 TZS by District

	Urban district	Rural district	Average
Dispensaries	8,576	28,688	18,632
Health centres	3,070	8,733	5,901
Total facility costs	11,646 (94%)	37,421 (82%)	24,534 (85%)
Total district recurrent costs	599 (5%)	2,004 (4%)	1,301 (4%)
Training	174	5,943	3,059
Contracting	-	232	116
Annualised start-up costs	174 (1%)	6,175 (14%)	3,175 (11%)
Total	12,419	45,601	29,010

Average Annual Administrative Cost per CHF member and Cost to Revenue Ratio

	Urban district	Rural district	Average
	Total cost	Total cost	Total cost
Total costs (1,000 TZS)	12,419	45,601	29,010
Total CHF members	683	9,127	4,905
Total cost per CHF member (1,000 TZS)	18,186	4,996	11,591
Total cost as % of revenue (inclusive matching fund)	364% (364%)	100% (61%)	118% (74%)

Cost per CHF household as a function of OPD and CHF membership levels



Estimating the cost of planned reforms

- Full time CHF coordinators: 19 fold increase in district management costs (urban) 6 fold increase (rural)
- Individual membership cards: facility costs increase by 17% (urban), by 42% (rural)
- Total cost per member household increases to 37,432 Tsh (urban)and 7,838 Tsh (rural)
- Cost to revenue ratio increases to 749% (urban) and to 79% (rural)

Threshold Analysis: Premium level required so that the cost to revenue ratio reduces to 30%

	Urban	Rural	Average
	Total cost	Total cost	Total cost
Baseline	61,000	17,000	39,000
Future design	125,000	26,500	75,000

Discussion

- CHF administration places a significant burden on health workers
- Success of the scheme depends very much on the personal commitment and initiative of the facility in-charge, as well as their ability to devote time to CHF management.
- Time spent on the CHF represents an opportunity cost to the health system

Discussion

- Need to increase premiums, which are extremely low in most districts, in order to enhance the financial viability of the scheme.
- As coverage increases, premiums can subsequently be relaxed
- Media campaigns, using community health worker to undertake enrolment, as well as school promotion would reduce the health staffs workload
- To reduce CHF management costs need to limit the timing of registration to a specific moment in the year (adverse selection).

Limitations

- Unfortunately, the study is subject to a number of limitations. We relied on the
  - Recall of various stakeholders as to time spent on administration activities
  - We were unable to examine the costs of administering the CHF regionally or nationally under the NHIF.
- Government efforts to provide free CHF cards to the poor, if evaluated would also clearly add substantially to the costs of running the scheme

Conclusion

- Questionable whether community insurance is really a viable approach for achieving universal coverage
- Looking at the costs of running the scheme vs treating the patients
- Expand fiscal space and finance informal sector health care use through tax funding
  - This will reduce CHF administrative costs
  - Freeing up human resource capacity to deliver and supervise health services