# Assessing outpatient care expenditures to inform the UHC agenda:

Baseline results from a quasi-experimental impact evaluation of a health systems strengthening project in the Democratic Republic of Congo

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### BACKGROUND



### Policy background: UHC under process

- Important milestone reached in 2014
  - with the adoption of resolutions and recommendations from the General Assembly of the National Steering Committee of the Health Sector (CNP-SS) to move forward to effective decentralization and a major reform in the health sector
- A new public health law reform aimed at implementing UHC
- WHO AFRO + UHC Partnership support policy dialogue
- Agreement on a roadmap

### Technical and policy process toward UHC are in development

→ <u>Baseline assessment</u> of financial protection associated with PHC is expected



### **OBJECTIVES**



### Aim

①To describe levels of total and disaggregated out-of-pocket expenditures (OOPs) for outpatient care, cost distributions and utilization patterns

2 To investigate whether incurring extreme, high or medium high OOPs is associated with demand- and supply-side factors



### **METHOD**



## The « ASSP – Accès aux soins de santé primaires » research project

### Study design:

A population-based study aimed at:

- Baseline, Process and Impact Evaluation
  - of a very large range interventions supported by ASSP
- Focus on selected multi-sectoral interventions for operational research studies:
  - Community Health Endowment
  - Health Workers motivation
  - Family Planning
  - User fee
  - Value for Money Assessment
  - WASH
  - Empowerment
- Timeline: 2014-2107

#### Funding bodies and Partners:

 A broader project towards HSS





A quasi-experiental village level panel design with a two-stage sampling strategy



### Outpatient survey

- Study period and sites
  - 2014: Baseline study (N=3341)
  - 5 provinces: Equateur, Kasai Occid. /Orient., Maniema, Orientale
- Participants
  - All individuals who reported illness or injury in the 4 weeks prior to interview
- Interviews
  - based on structured questionnaires administrated to head of household (
- Data covered:
  - Why care was not sought if this was the case?
  - Where the individuals who did seek care were treated (incl. Informal channels such as traditional healers)?, OOP payments for health?, Satisfaction with services received?



# Conceptual framework of predictors of OOPs and multivariate analysis approach

Supply-side factors

	Health disparities/inequities				
	Household assets		Individuals' likelihood of OOPs		
	Household composition		on health		
	III-Health condition		and associated financial burden		
	Care-seeking behaviors				
	Pharmaceutical costs				
	Geographic area		Multivariable analysis approach:		
	Control features	//////	Multilevel techniques to capture     individual household health facility		
-			related effects		
	Availability of care services and staff	<i>\                                    </i>	Multiple models to ensure		
	Healthcare Affordability	<i>X / / / / //</i> /	robutsness of findings (response		
	Availbaility of technology in Health Facility (HF)	<i>\/////</i>	variables)		
	Accessibility of healthcare facilities	X / ///	Various scenarios to test sensitivity		
	Sanitary pyramid level (HF type)	Y///	(covariates)		
	Medical malpractice	Y//			
	Quality of care services	Y/			
	Health system related patterns				



### **KEY FINDINGS**



## Service and population coverage\*



\*All estimates are weighted



### Service and population coverage (cn't)

### Place where outpatient care was received Public medical sector Private medical sector Other 11% 27% 62% Acessibility

- Avg time to reach HF: 64 min (Female: 40 min vs. Male: 95 min)
- 89% were ≥30 min per trip

### Quality

#### No dissatifaction reported: 11.77%

#### Dissatisfaction with care received:

- Health providers' explanation: 37.39%
- Provider skill: 48.17%
- Equipement in HF: 49.85%
- Time until attended to: 68.84%
- Drug supply: 77.49%



### Equity in healthcare utilization

#### Wealth gap in utilization rates (%):





### OOPs (in US\$) and financial burden





### Equity in OOPs for outpatient care

#### **Reported OOPs by wealth quintiles (in US\$):**

#### **Pro-rich distributions of OOPs:**



Fractional Wealth rank



### Multivariable logistic regression analysis for « high » levels of expenditures (≥2 times the median)

Determinant	Adjusted OR	SE	p-value	
Wealth Q1 - Poorest (vs. Richest)	0,37	0,16	0.023	* *
Wealth Q2	0,44	0,16	0.022	* *
Wealth Q3	0,46	0,16	0.031	* *
Wealth Q4	0,49	0,14	0.012	* *
Owns a transportation mean	0,43	0,12	0.002	* *
Large household size (≥6 members)	1,77	0,50	0.042	**
Days lost: One Month or above	3,97	0,19	0.005	* *
Share of oops on drugs	0,21	0,12	0.007	* *
Equateur (vs. Maniema/Orientale)	0,23	0,09	0.000	* * *
Kasai Occidentale + Orientale	0,37	0,14	0.011	* *
Under 5 years old	0,58	0,11	0.003	* *
HF has functional ultrasound	3,84	1,98	0.010	* *
HF has functional centrifuges	0,35	0,16	0.021	* *
HF at Operational level 2 (HGR)	50,59	77,19	0.011	* *
Dissatisfaction index: Score 4	2,90	1,22	0.013	* *
Ctatictical significance of $***$ , $< 0.001$ , $** < 0.001$ , $* < 10$				

Statistical significance of \*\*\*: <.0001;\*\*:<.05; \*: <.10



### DISCUSSION



### Several study limitations

- Household **consumption/expenditures or income data** were not available
  - which prevents calculation of « catastrophic expenditures »
  - $\rightarrow$  Do we need such indicator by type of care/disease or for all?
- Weaknesses related to **sensitive data collection** 
  - which acknoledges possible missclassification or mis-reporting (but minor effect)
- Choice of health facility linked to **main care-seeking pattern** (first illness reported)
  - but relatively few resorted to multiple care facilities over the 4 weeks of study period, which constitutes another limit
- Evidence reported here purposely focused on **outpatient care** 
  - This was an attempt to attribute effects of catastrophic cost to likely smaller amounts spent on health compared to inpatient spending



## Implications for UHC and health financing reform

Expenditures studies may contribute to inform policy-making in UHC – Use of baseline data for UHC assessment

Several challenges ahead:

- Wealth and geographic disparities
- Skewed distribution of OOPs across group ("extreme" risk)
- Inability of insurance schemes if any to effectively cover PHC expenses & Levels of co-payments arrangements
- Go beyond subsidized care towards vulnerable groups
- Capacity to pay & Price elasticity to demand
- Price transparency & charging practices across location of care
- Beyond quantity, quality matters



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# Appendix



### Public financing for health: Overview



Source: WHO 's Global Health Expenditure Database (NHA indictors)



### Progress in DRC

#### **UHC (WHO definition)**

- « Cube » Coverage
  - Spectrum of good-quality essential health services according to need
  - Entire population throughout the life-course
  - Protection from financial hardship, including possible impoverishment, due to oops for health
- Equitable distribution

#### Health-related SDG

 DRC ranked 21 on 31
 SubSaharan Africa for avg health outcomes



MPA Curative Activities	MPA Preventive Activities
- Growth monitoring for under-fives	- Clinic-based IMCI
- Prenatal and postnatal counseling	- Testing/treating diseases, including NTDs
– PMTCT (ARV and Cotrimoxazole)	- TB: Sputum collection/forwarding to CDTs
- FP counseling and services	- Nutritional rehabilitation
– Immunizations	– Minor surgery
- Infection prevention & blood safety	- Normal labor & delivery services
- Distribution of IPTp and LLINs	– IPTp for pregnant women
- HIV information	- STI syndromic treatment and referrals
- Vitamin A & other micronutrients	<ul> <li>S/GBV Post-exposure prophylaxis &amp;</li> </ul>
– HIV/AIDS: PMTCT & blood testing	counseling
	<ul> <li>Acute respiratory infection treatment</li> </ul>
	- Other basic curative care
MPA Promotional Activities	MPA Community Activities
- Condom use for dual protection	- Community-based IMCI (c-IMCI)
- Environmental sanitation	<ul> <li>Food safety and food handling</li> </ul>
- Exclusive breast feeding	<ul> <li>Potable water improvements, (e.g., spring</li> </ul>
- Healthy eating & food handling	capping)
- Iodized salt	- Household sanitation, (e.g., improved latrines)
- Improved latrines	- Community water treatment
- ORT and diarrheal disease control	– Disease/Vector control (e.g., LLINs & tsetse
- Fistula awareness and prevention	control)
- Vegetable gardens, fish farming, livestock	- Community based IEC
	– Distribution of FP commodities
	– S/GBV Community awareness and
Complementary Deckare of Activities (CDA)	prevention
Complementary Package of Activities (CPA)	Management/Administrative Activities
- Internal medicine, surgery, OB/GYN, and	- Increase availability of essential services
Long acting & permanent contracontion methods	- Resource Wight (human, material, mancial)
- Post-abortion care (PAC)	- Continuous rieatur personnei training
- Blood screening, storage & collection	Links/Referrals from private health providers
- Multi-drug resistant (MDR)TB sputum collection	Management of health information
- PMTCT-nlus with ARV pronbulavis	Management of pharmacoutical information
- TB-HIV co-infection screening and treatment	Managing resources applied research
- Rehabilitation and Physiotherapy	
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