Cambodia: Financing health care in Takeo province

“HEF, CBHI and the Activity, Financing and Efficiency of Health Facilities”

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Outline of the presentation

1. Objectives and Methods
2. Main results: Activities – Financing – Efficiency - Productivity
3. Policy oriented conclusions

(Presentation of a selection of slides – Complete presentation on the website)
1. Objectives and Methods (1/2)

• **Objectives:**
  
  To analyze the effects of HEF and CBHI schemes on activity, financing and efficiency of health facilities in Takeo province.  
  (Support of AFD: CBHI and SDGs).

• **Data**

  Data collected during a field mission on February-March 2011. Checked with local partners in Takeo.

  ✓ Yearly HC1 and HO2 activity reports, staff data, financial data (SOAs) for HCs and RHs.
  ✓ Data concerning the PH collected from (i) the health information system in charge of the activity data and (ii) from the accountant chief for the financial data.
  ✓ Data for HEF and CBHI members and activity were supplied by BfH and by the GRET.
1. Objectives and Methods (2/2)

- **Methods:** 3 + 1 approaches.
  - Statistical analysis.
  - Microeconometrics analysis.
  - Technical efficiency analysis (DEA).

+ Interviews with health facilities staff and directors, MoH, and partners (AFD, BfH, GRET, Swiss Red Cross, WB, ...)

- All the health facilities of Takeo
  - 72 Health Centers, 4 Referral Hospitals - *period 2008-2010*,
2. Results - Activities (1/12)

2.1 HEF and CBHI schemes have expanded over time, starting from 2003

- Progress of the number of beneficiaries/insured
- But still covering a small share of the population of the province (HEF ≈ 23% of the poor; CBHI ≈ 3% of the population).
- Significant heterogeneity among OD and within OD.
- HEF are more developed than CBHI, but CBHI grows more rapidly.
2. Results: Activities (2/12)

- **Gradual implementation of the HEF and CBHI schemes**

- All ODs are covered by the CBHI scheme and three ODs (Ang Roka, Kirivong and Dounkeo) are covered by the HEF scheme.

- **The HEFs (Buddhism for Health, BfH) during 2008-2010**
  - Number of HEF beneficiaries: +4%.
  - Coverage rate of the population: +12%. (23% of the poor)
  - Large heterogeneity: (Ang Roka and Kirivong; largest coverage ≈ 15% of the pop).

- **The CBHI (SKY program led by GRET) during 2008-2010**
  - The number of insured and the coverage rate of the population: have *tripled*.
  - In 2010: nb of insured ≈ 20,000; coverage rate = 2.22%.
  - The number of insured is positively correlated to the size of the catchment area of the HCs.
2. Results: Activities (3/12)

2.3 Utilization of the public health facilities has largely increased in Takeo alongside the development of HEF and CBHI schemes.

- At HC, RH and PH levels (ex: between +30% and +180% for Outpatients (OP) at HC levels)
- **Outpatients**: in facilities benefiting from SKY and HEF: ↗ more than the global trend in the province
- **Inpatients**: ↘ less than the global trend
- **Deliveries**: \( SKY = +184\% \quad HEF = +22\% \)
- More women and children complete the ante-natal and post-natal path of care.
2. Results: Activities (4/12)

• At HC level

✓ **between 2008 and 2010:**
  - The volume of outpatients (OPs) = + 29%.
  - The volume of OPs per inhabitant = + 24%.
  - The volume of SKY OPs = + 187%.
  - The share of SKY activity in the total volume of OPs: from 5.3% to 11.9%.
  - The volume of HEF OPs: + 26%.
  - The HEF = almost 7% of the HC activity.
2. Results: Activities (5/12)

✓ Mother and Child Care:

✓ The number of deliveries increases over time in Takeo province and the trend is to a generalization of deliveries at HC.

✓ The number of deliveries
  ✓ SKY: + 184%
  ✓ HEF: + 22%.

✓ Share of total deliveries at HC level in the province:
  ✓ SKY ≈ 4% ; HEF ≈ 3%.
2. Results: Activities (6/12)

- **At RH level: large increase and large heterogeneity:**
  - OPs = 197% between 2006 and 2010.
  - OPs per inhabitants = x 3 (from 5 OPs per 100 inhabitants in 2006 to 14 in 2010).
  - \( \forall \) of OPs referred by the HCs to the RHs.
  - The activity supported by SKY and by the HEF increases over the period and comes additionally to activity financed by direct payments.
  - IPs supported by SKY \( \approx \) 10% of the total IPs; and those supported by the HEF \( \approx \) 20% of the total IPs in Ang Roka and Kirivong RHs.
  - Contact rate = +24% between 2008 and 2010, from 1.98 per 100 inhabitants to 2.45 per 100 inhabitants.

- **At PH level** between 1998 and 2009.
  - OPs = x 2
  - IPs = x 4.
  - Hospitalization/100 inhabitants = +20% (from 1 to 1.19).
2. Results: Financing (7/12)

2.4 HEF and CBHI provide additional resources to health facilities - Composition of financing evolves: volume and share of resources from HEF and CBHI ↑; share of Government ↓ (at HC, RH and PH levels).

The share of user fees in total resources of HCs increases over time.

Direct payments are the main source of user fees. However, the shares of payments from the HEF and the CBHI increase and come as additional resources.

Resources come mainly from government budget (more than 70%). But the share of government budget decreases over time.

Resources of HCs and RHs
2. Results: Efficiency (8/12)

2.5 Efficiency of HCs: large room for progress

- Technical efficiency: DEA analyses (inputs => output)
- In average stable over the period, but low: average score ≈ 0.50 (maxi=1) ⇒ HCs can treat more OPs with the same level of inputs.

- More than 50% of HCs increased their Technical Efficiency.
- 42% of HCs have efficiency score <40
- 23% of HCs have efficiency score >80
2. Results (9/12)

-The efficiency is *higher* in HCs where HEF and/or CBHI are implemented, and the *heterogeneity in efficiency* between heath facilities is *lower*.

-The efficiency is the highest when *both* HEF and CNHI schemes are implemented.

- Efficiency declines with the increase of the size of the HCs.

• Others findings

  ✓ There is a negative relationship between the size of the HCs and the technical efficiency: small HCs (less than five medical staff members) are in average more efficient than medium and large HCs (more than four medical staff members).
  ✓ The technical efficiency of HCs increases with the productivity of the medical staff.
  ✓ The technical efficiency of HCs increases with the volume of inhabitants per medical staff.
  ✓ There is no strong relationship between the technical efficiency of HCs and the size of the catchment area of the HCs.
2.6 Productivity of medical staff – low in average - increased slightly over the period.

- Average OPs per medical staff per day ranges from 4 to 5
- But the productivity of midwives decreased, both at HCs and RHs levels (Why?).
- Positive (although variable) effect of HEF and CBHI on staff productivity
2. Results: Productivity (11/12)

• HCs
  ✓ Productivity of medical staff
    ✓ It increases by 9% between 2008/2009 and remains quite stable between 2009 and 2010.
    ✓ It is in average higher in Ang Roka and Prey Kabass than in the three others ODs.
    ✓ In Bati, the productivity of medical staff is higher in areas where there are HEF and CBHI rather than no demand-side financing schemes.
    ✓ In Kirivong, the productivity of medical staff is higher in areas where there are HEF and CBHI rather than HEF only.

• RHs
  ✓ Productivity of medical staff
    ✓ The productivity increases in all ODs except in Bati.
    ✓ The productivity in the delivery of outpatient services is positively linked to the coverage rate of SKY.
    ✓ The productivity in the delivery of inpatient cares is positively linked with the number of insured, the number of HEF beneficiaries and the coverage rate of SKY.
2. Results: Two groups of OD (12/12)

2.7 ODs “results” are polarized in two groups

✓ Ang Roka, Kirivong and Prey Kabass generally in “better position” or with “more progress” than Bati and Dounkeo.
✓ Important to understand precisely why.
3. Conclusions (1/2)

1. The study highlights the increase of the delivery of healthcare services at HC, RH and TPH levels along with the implementation of HEF and CBHI: large progress and achievements.

2. The HEF and the CBHI schemes contributed significantly to the increase of the medical activity and to the financial sustainability of the health facilities.

3. In spite of progress in more than 50% of our sample, the overall efficiency of the HCs remains weak. Large potential for improvements exists. Need to understand the causes of this low and heterogeneous efficiency and productivity by looking at the supply and demand side.
5. Improving productivity and efficiency can be considered as one of the highest priorities in a macro and sectoral context of “limited resources”.

6. CBHI and HEF have a positive effect on efficiency and productivity: complementarity of both schemes.

7. Need to continue the efforts to develop healthcare demand and a “culture of insurance”.

8. Building a good and unified information system is a crucial issue for evaluating and piloting financing policy.
8. Four questions:

(i) More patients in public facilities: means net increase, or partly a transfer from private providers?

(ii) What about quality of care? Discrimination between HEF, CBHI and other patients?

(iii) Do all the incentives push towards better efficiency?

(iv) Risk ahead? What will happen if donors withdraw in short-medium term from HEF and CBHI? Sustainability? Might be difficult to sustain a dynamic pace of expansion…