Strengthening Micro Health Insurance Units for the Poor in India

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Health Insurance Benefit Choices of Low-income Populations in India: Analysis of a "CHAT" Exercise

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The context

- The variety of health insurance products and the overall volume available to needy persons and in rural India is lower than demand; micro health insurance schemes, covering a few million people, fill some of the gap
- The need for health insurance is manifest, as OOPS for healthcare represents ~73% of total health expenditure (WHO, 2006)
- Micro health insurance schemes must ensure flexibility in adapting their benefit-package to context-specific ***needs*** (morbidity patterns), ***demand*** (willingness-to-pay levels) and ***supply*** (available facilities & costs)

Study Purpose

- To test the ability of the study-population to engage in priority-setting of health benefits
- To examine the judiciousness of the choices
- To assess satisfaction with the process of participating in the CHAT exercise

Data sources for actuarial calculations

Sources of information:

- Utilization: household survey (4,931 HH, representing 24,042 Individuals) conducted in India in 2005, in seven locations where micro health insurance units operate; data refer to OP in 3 months prior to survey, IP in last 2 years, and maternity in last 5 years.
- Prevalence and cost of illnesses: same household survey; data from *five* locations (3,531 HH representing, 17,323 individuals and 4,316 self-reported illness episodes during 3 months)
- Willingness to pay: same household survey, in seven locations (3,683 HH, representing 17,871 Individuals responded to WTP)
- Insurance status: HH survey in seven locations, and literature survey

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Data on choice of benefits: FGDs (see photos)

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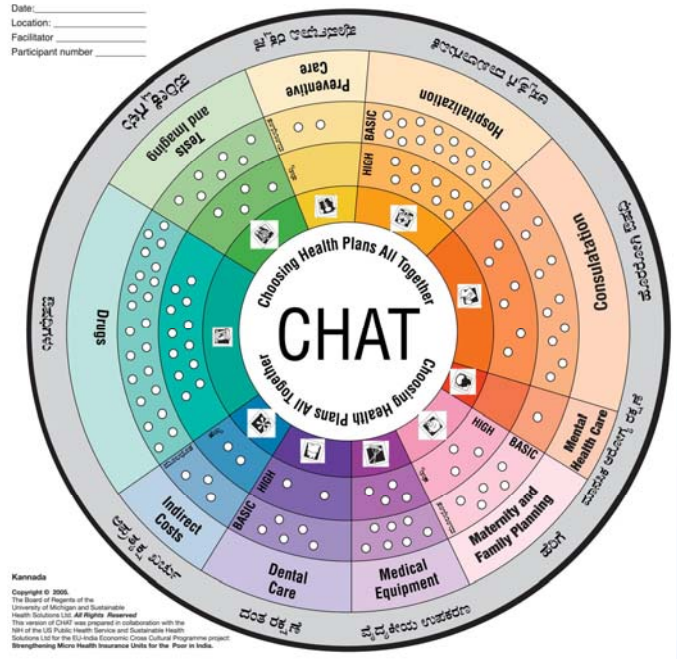
The CHAT Board



- The game board shows all 10 ***benefit types*** that can be selected
- Cumulative ***coverage level***: high is a top-up to medium; medium is a top-up to basic.
- Pegs represent the ***annual premium***, determined by actuarial calculations

Available Options

BENEFIT TYPES

1. Drugs
2. Outpatient care
3. Inpatient care
4. Tests
5. Dental Care
6. Medical equipment
7. Preventive care
8. Maternity care
9. Mental health care
10. Indirect costs

LEVEL OF COVERAGE

- Basic:
  - 50% of costs
- Medium:
  - ~75%, greater reimbursement as price rises
- High:
  - 100% of costs
- No benefit ceiling
- No deductible or co-pay
- No exclusion of age-groups
- No exclusion of pre-existing conditions

Phases of the exercise, facilitation

1. Pre-questionnaire: minimal questions on SES
2. 2 cycles of choosing healthplans (first individual, then collective)
3. Post-questionnaire: participants' assessment of the exercise
4. Bidding-game to elicit WTP for the package just chosen

Facilitation:

- The exercise is conducted in groups of ~15 participants
- All the material is translated into local languages
- Facilitators assist illiterate and innumerate participants to follow the explanations & respond to questionnaires
- The deliberative process adapted to local customs regarding consensus or vote when opinions are tied

Method of analysis

- Descriptive statistics
  - Participant characteristics
  - Benefit choices
- Assessment of effectiveness by calculating the hypothetical benefit due if the reported illness episodes and cost of healthcare were covered in the selected packages.

  (*Data for illness episodes and cost of care originate from the household survey of a comparable population)*

Results: Participants

The experiment in Nov 2005 included:

- 302 individuals, in 24 groups
- 80% female
- 73 % rural
- 41% insured
- Education
  - None 33%

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Combinations of benefits that participants chose

	"Package"	No. of groups	% of individuals	Cumul. %
1	OP(b)+IP(b)+T(b)+D(b)	6	26.80%	26.80%
2	IP(b)+T(b)+D(b)	8	31.80%	58.60%
3	OP(b)+T(b)+D(b)	3	13.90%	**72.50%**
4	OP(b)+IP(b)+D(b)	3	11.90%	**84.40%**
5	OP(b)+IP(b)+T(b)	1	4.00%	88.40%
6	IP(m)+D(b)	1	4.30%	92.70%
7	T(m)+D(b)	1	4.00%	96.70%
8	IP(h)+T(h)	1	3.30%	100.00%

Legend: OP= Outpatient; IP= Inpatient; T= Tests; D = Drugs; (b) = basic; (m) = medium; (h) = high

3 criteria to assess effectiveness of choices

- **Reimbursement criterion**: Insured will wish to be reimbursed regardless of the absolute level of expenditure
  - Measured by mean reimbursement rate
- **Fairness criterion**: A higher reimbursement rate should apply to more expensive services
  - Measured by correlation of expenditure and reimbursement rate
- **Catastrophic criterion**: Higher reimbursement should exist for higher expenses
  - Measured by extent of reimbursement for outlier cases

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Hypothetical Reimbursements for the Different Packages

		Reimbursement % of expense*	
No.	Combination	Mean**	SE ±
1	OP(b)+IP(b)+T(b)+D(b)	46.80%	±0.27%
2	IP(b)+T(b)+D(b)	30.72%	±0.38%
3	OP(b)+T(b)+D(b)	41.97%	±0.34%
4	OP(b)+IP(b)+D(b)	44.26%	±0.30%
5	OP(b)+IP(b)+T(b)	23.46%	±0.37%
6	IP(m)+D(b)	22.72%	± 0.37%
7	T(m)+D(b)	19.41%	±0.34%
8	IP(h)+T(h)	11.10%	± 0.46%

Reimbursement of catastrophes (Top 10% of cases)

No.	Combination	Mean	SE ±
		(%)	(%)
1	OP+IP+T+D	50.0%	±0.0%
2	IP+T+D	41.7%	±0.7%
3	OP+T+D	31.7%	±1.1%
4	OP+IP+D	44.3%	±0.6%
5	OP+IP+T	32.4%	±1.0%
6	IP(m)+D(b)	34.9%	±1.3%
7	T(m)+D(b)	18.4%	±1.1%
8	IP(h)+T(h)	38.9%	±2.0%

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Participants' Satisfaction

Survey Item	%*
I learned a lot playing the CHAT game	91
The information presented in CHAT was clear	92
The way the group reached its decision was fair	96
I was satisfied with the group's decision	97

*Numbers represent percent of survey respondents who responded either 'Agree' or 'Strongly Agree'

Conclusions

- Low income and predominantly illiterate groups of individuals in India (many of whom have no health insurance) are able to compose health insurance benefit packages within a limited budget
- 88% included at least 3 of 4 of the following: outpatient care, hospitalization, drugs, and tests
- The most frequently chosen packages scored highly using 3 effectiveness criteria.

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Relevant publications

- Dror DM, Koren, R; Ost A, Binnendijk, E; Vellakkal, S, Danis, M: *Health Insurance Benefit Packages Prioritized by Low-Income Clients in India: Three Criteria to Estimate Effectiveness of Choice*, Social Science and Medicine, in press, October 2006

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- Dror DM, Radermacher R, Koren R: *Willingness to pay for health insurance among rural and poor persons: Field evidence from seven micro health insurance units in India*. Health Policy, in press, September 2006, doi:10.1016/j.healthpol.2006.07.011

- Van Putten O, Koren R, Dror DM: *Household Attributes and Prevalence of Illness; Ramifications for Low-Cost Health Insurance in India.* Health Policy, Submitted for publication in Oct 2006

Questions? Comments?

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