## Incentivizing Use of Health Care

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## **Economics of incentives**

- Economic argument: Incentives as a version of price subsidies
  - Compensate for informal fees, travel costs, time costs.
- Can we afford them?
- Can we administer them?
- Do they exacerbate corruption?

## Ethics of incentives

"We propose that concerns around the potential for incentives to undermine recipient autonomy are misplaced when incentives are used to overcome economic obstacles or a lack of effective motivation, and when recipients are incentivized to engage in health-related behaviors or practices with which they are already familiar and which they regard as beneficial or worthwhile."

Source: London AJ, Borasky DA Jr, Bhan A, for the Ethics Working Group of the HIV Prevention Trials Network (2012). Improving ethical review of research involving incentives for health promotion. PLoS Med 9(3): e1001193.

# Psychology of incentives

Intrinsic vs. extrinsic motivation

- High discounting and present bias
- Regret and loss aversion
- Nudges as salient signals; fight procrastination
- Change the frame
- Incentives to learn (e.g., bednets)
- Adolescent sensitive periods in brain

# Design of incentives

- Size
- Frequency
- Certainty vs lottery
- Unit incentivized: person, family, group
- Unit receiving income: father, mother, teen
- Means testing

## Domain: health care utilization

- Family planning
- Prenatal care
- Facility-based childbirth
- Vaccination
- Screening such as HIV testing
- Adherence such as TB meds

## Lim (Lancet 2010): Facility-based delivery CCT in India National-level mean Estimated treatment e

53.6% (53.0 to 54.3)

54·1% (53·5 to 54·8)

59·3% (58·7 to 60·0)

37·3 (35·6 to 39·0)

30·3 (28·8 to 31·9)

294·0 (267·1 to 322·1) 618·0 (576·2 to 660·4)

10.7% (9.1 to 12.3)

43.5% (42.5 to 44.6)

36.6% (35.6 to 37.7)

-3.7 (-5.2 to -2.2)

-2.3 (-3.7 to -0.9)

DLHS-2 (2002-04) DLHS-3 (2007–09) **Exact matching** 

45·7% (45·1 to 46·3)

41.0% (40.5 to 41.6)

48·7% (48·1 to 49·2)

42·0 (40·6 to 43·4)

33.6 (32.1 to 35.1)

Antenatal care, three

Perinatal deaths (per

Neonatal deaths (per

Maternal deaths (per

100 000 livebirths)

1000 livebirths)

1000 pregnancies)

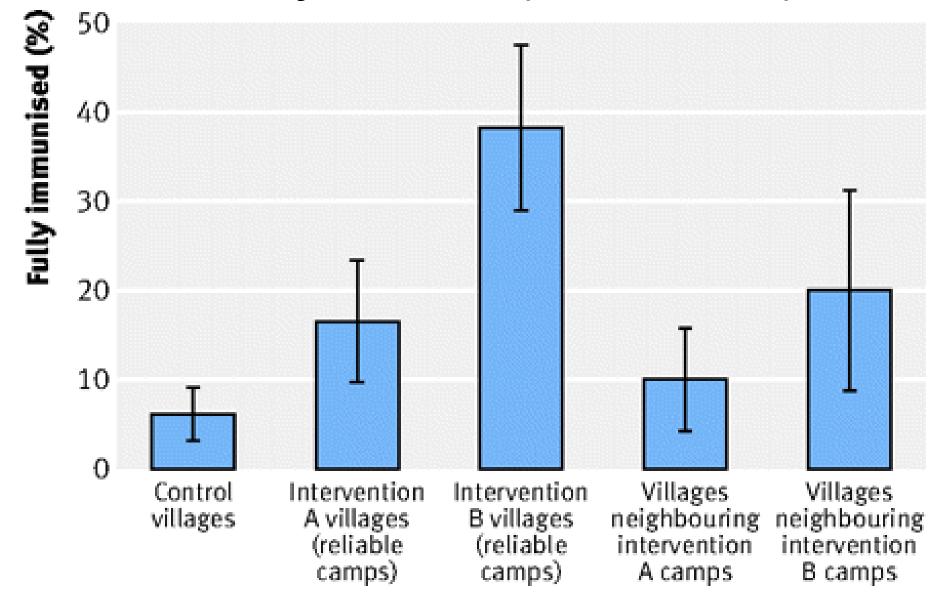
In-facility births

Skilled birth

attendance\*

visits

# Banerjee et al. (BMJ, 2010)



#### Domain: non-medical health behaviors

- Contingency management for substance abuse
- Smoking: cash for quitting
- Physical activity

## Domain: health outcomes

- Weight loss
- Workplace wellness (blood pressure, cholesterol tobacco, BMI)
- Sexually transmitted infections

# Conditional cash transfer (CCT) programs

- Acceptable and scalable
- Effects for prenatal care, well-child care, vaccination, health education, child anthropometrics
- Long-run affects via poverty alleviation and increased education of next generation's mothers
- Interpretation:
  - Price incentives are strong
  - Price vs Income pathway
- Unconditional cash transfers (UCT)
  - Mixed results, likely fade-out?

### Promise for Future?

- Incentives often eschewed: good/bad reasons
- Evidence is too suggestive to ignore
- Effects and design will be context-specific:
  - Prices, incomes, prevalence, utilization
  - Knowledge, attitudes, acceptability, buy-in
  - Administrative capacity

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- Health outcomes: too little evidence to date
- Health behaviors: growing importance
  - Substance abuse: middle-income countries, but need estimate cost-effectiveness
  - Smoking cessation: growing demand
- Health care utilization:
  - All MCH domains potentially promising, when combined with education and supply investment
  - Continue to expand evidence base