Objectives and Background

Objectives of the paper

- To evaluate whether the scheme has affected the healthcare expenditure among those hospitalized specifically comparing changes in the public and private sector
- To evaluate whether the scheme has achieved equity of access to healthcare for serious

Background of the paper

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health" (south-east Asia) - India ranks third.

- India has recognized these problems and is addressing them.

Role of Private Health Sector in India

1947

- Private market: 8%

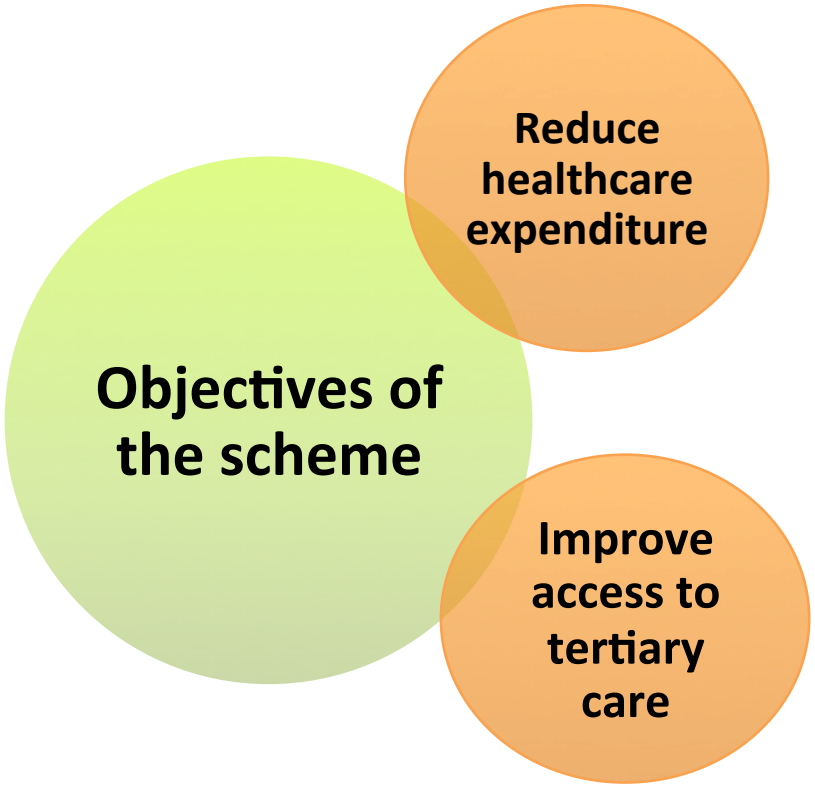
2009

- Private market: 73%

Market value Private

- 29 billion USD (2009)

About Rajiv Aarogyasri Scheme – ANDHRA PRADESH, INDIA

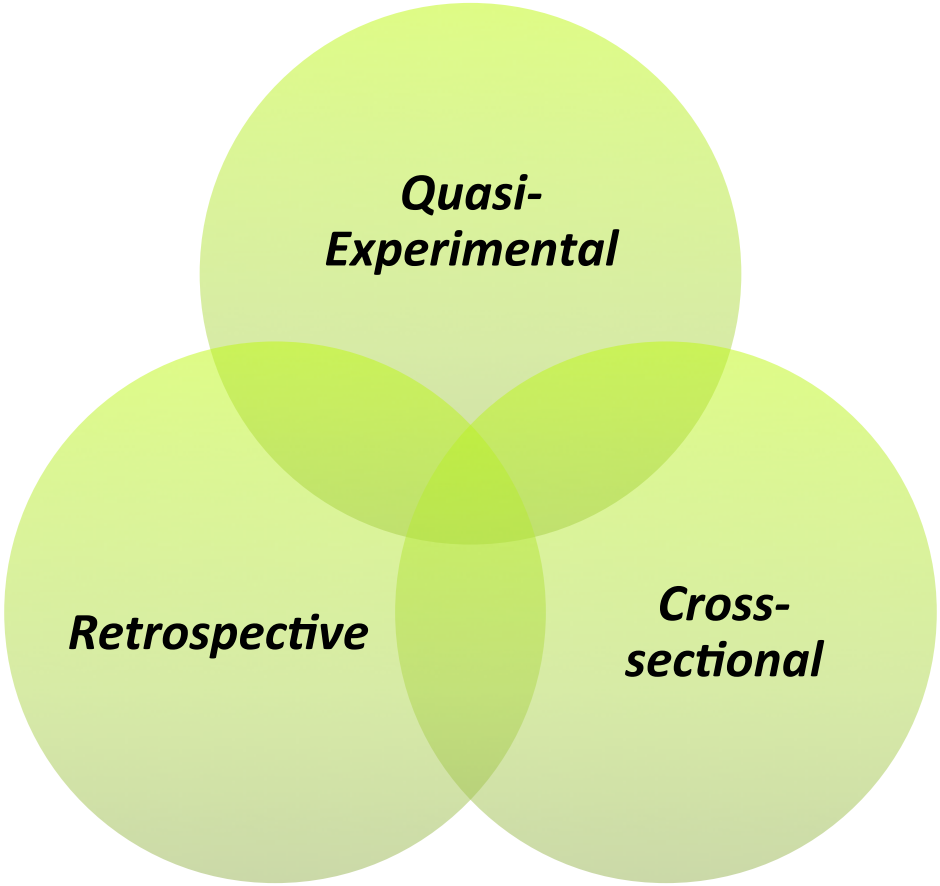


- Covers over 23 million Below Poverty Line households (~80% of the total population)
- Provides cashless hospital treatment for about 938 'listed therapies', to a maximum of INR 200,000 (~ USD 4000).
- Is facilitated via health workers known as 'Aarogyamithras' (health friend) and health camps.
- Operates on a sophisticated information technology platform
- Has about 400 network hospitals

About the study population of our study

Maharashtra	Indicator	Andhra Pradesh
112.37	Population (2011 census, in millions)	84.66
35	Number of districts	23
5,314	Households covered in NSSO 60th round (2004-05)	5,059
10,073	Households covered in the study 2012	8,623

Study Methodology – Household Survey



- Data used baseline and endline with a case (Andhra Pradesh – AP) and treatment (Maharashtra – MH)
- To infer causality to a particular intervention – best approach – usage of panel data
- Limitation – panel data was unavailable
- Best alternative – Difference in differences within these cross sections

Data

2004

- Baseline
- NSSO
- AP & MH

2012

- Endline
- HH Survey
- AP & MH

Outcomes of Interest

Access	• Proportion of people being hospitalized (public vs private) • Among those hospitalized public vs. private- cardiac and nephrology cases
Cost	• Expenditure on hospitalization- public vs private • Expenditure on high end procedures- public vs private
Efficiency	• Duration of stay – self reported in number of days- public vs. private

Findings – *Access*

- Hospitalization rates increased in both states
  - Higher increase in AP as compared to MH (5.6 per 1000 population vs. 2.2), but DID not significant
- Utilization of private facilities increased in AP but remained stable in MH (p-value= 0.07668)
  - Utilization of private hospitals in urban increased by 14 percent in AP and reduced by 6.7 percent in MH (p-value 0.00027)
- Utilization of public facilities reduced in both but more in AP (p-value 0.08654)
- Urban nephrology IP cases in private sector increased in AP (p-value 0.00008)

Findings – *Cost**

- Overall IP expenditure in private facilities has gone up in both states, but less so in AP (p-value 0.4295)
- Expenditure in public facilities has increased in both states, but relatively less so in MH (p-value 0.3587)
- Average expenditure for hospitalization in case of cardiac care has:
    - Decreased in both public and private sector in AP (significant in public sector in urban areas 0.0448)
    - Increased in public and private sector in MH
- Overall expenditure on nephrology cases increased in AP and decreased in MH (p-value 0.01814).

* All figures of 2012 are deflated to 2004 figures for comparison

Findings – *Efficiency*

- The duration of stay (recorded in days) in private facilities reduced in AP and increased slightly in MH. The results from DID analysis were significant (p-value 0.0325).
- The duration of stay in public facilities decreased in both AP and MH, but significantly more so in AP

  (p-value 0.02581)

Discussion

		MH	AP		MH	AP
		Public			Private	
Cardiac usage	Overall	Inc	Dec	Overall	Dec	Dec
	Rural	Inc	Dec	Rural	Dec	Dec
	Urban	Dec	Dec	Urban	Dec	Dec
Nephro usage	Overall	Dec	Dec	Overall	Dec	Inc
	Rural	Dec	Dec	Rural	Dec	Dec
	Urban	Dec	Inc	Urban	Dec	Inc
Cardiac OOP exp	Overall	Inc	Dec	Overall	Inc	Dec
	Rural	Inc	Dec	Rural	Inc	Dec
	Urban	Inc	Dec	Urban	Dec	Dec
Nephro OOP exp	Overall	Inc	Inc	Overall	Dec	Inc
	Rural	Inc	Inc	Rural	Inc	Inc
	Urban	Inc	Dec	Urban	Dec	Inc

Conclusions

- In terms of use of inpatient care, AP has seen a significant increase in the use of private sector as compared to MH.
- In terms of expenditure on inpatient care, AP has relatively lower expenditures in the private sector than MH.
- The Aarogyasri scheme may have contributed to these impacts in AP
- Andhra Pradesh has also seen a substantial increase in private healthcare facilities. (LaForgia, G ; Nagpal, S, 2012)

- *Further analysis needs to be done on specific conditions and the linkages to primary and secondary care*
- *Models to assess scheme specific impacts will be presented on Wednesday morning in the IHEA Symposium*

ACCESS
health international

Thank You