

**Ackoff Doctoral Student Fellowship Application:
Evaluation of Government-Funded Health Insurance for the Poor in Andhra Pradesh**

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Summary: I am requesting \$3,000 from the Wharton Risk and Decision Processes Center under the Ackoff Doctoral Student Fellowship Program towards preliminary research for a collaborative impact evaluation of state-funded health insurance in Andhra Pradesh. This will prepare me for a subsequent dissertation on the demand for health services in India.

Background: Health shocks are one of the largest sources of uncertainty facing the poor, and in the absence of accessible public health facilities or formal health insurance, most Indian families have historically covered these expenses through out-of-pocket health payments to private sector providers. These expenditures are a leading cause of household debt and a major “poverty trap.” To relieve this financial risk burden and improve health outcomes among the poor, many government initiatives now seek to expand access and affordability of health care through private sector channels.

Within this context, Andhra Pradesh launched the Rajiv Aarogyasri Community Health Insurance Scheme in April 2007. All families below the poverty line – an estimated 75% of the state's 18 million population – are eligible to participate in the Aarogyasri scheme, which covers 860 procedures requiring hospitalization and surgery through approved network providers (up to approximately \$5,000 per family per year).

Several other Indian states have expressed their intent to introduce similar insurance schemes, as have countries as diverse as Rwanda and Laos. Although existing studies have shown that community health insurance improves poor people's access to health services, further research is required to better understand the different approaches and their effects on inequities; moreover, the evidence of impact on *provider* incentives is even more limited, both with regard to the financial dimension as well as the quality of care.

To help shed light on these important questions, the government of Andhra Pradesh has requested an independent evaluation of Aarogyasri, to be led by the ACCESS Health Initiative of the Center for Emerging Markets Solutions at the Indian School of Business, in collaboration with the Harvard School of Public Health, the Public Health Foundation of India, and the London School of Hygiene & Tropical Medicine.¹ This large-scale study will consider: the scheme's impact on the health and financial outcomes of its beneficiaries; its impact on the behavior of public and private providers, the associated implications for quality of care, and the financial status of hospitals; the potential use of information to improve patients' choices (e.g. through a hospital ratings system); and the interaction with other initiatives of health sector reform in Andhra Pradesh, including the Health Management and Research Institute.

Research Question: Should Aarogyasri be expanded to other countries/states? There is an implicit assumption that private providers are more efficient than the public clinics, and thus the government can

¹ Pending funding for faculty time and survey expenses.

improve the health of the poor more effectively by going through those channels (rather than simply expanding the existing national health infrastructure). Thus the deeper questions for investigation are: Are there different costs of providing care in public versus private settings (from the perspective of the government-as-payer); are there similar differences in outcomes and/or quality; and how are these effected by reimbursement schemes and price negotiation under the insurance program?

Another key question looks at the value of having the insurance from a financial perspective by constructing a utility function for the intended beneficiaries of the insurance scheme based on a survey of their willingness to pay; the resulting welfare gain from the program could then be compared to the actuarial costs.

Beyond the “big picture” questions underpinning the economic rationale for implementing and expanding the insurance program, above, there are also important descriptive research questions regarding the magnitude of the impact on beneficiaries' health and financial outcomes, as well as analyses of potential improvements to the program design itself with regards to patient targeting, hospital participation, spillover effects and reimbursement schedules.

Scope of Work: I will work with ACCESS Health from June through August to lay the groundwork in advance of the evaluation and collect preliminary data. Responsibilities will include:

- Conducting in-depth literature reviews, expert interviews and stakeholder consultations to situate the initiative within the broader context of health reform in India, including federally-mandated RSBY schemes.
- Review India's National Sample Survey (NSS), which was last collected in 2004, to assess its potential for approximate baseline data.
- Initiating the collection and analysis of hospital and medical facility claims records to: 1) assess the relationship between the Aarogyasri reimbursement policies and the pattern of interventions for specific health conditions; and 2) compare the drugs, diagnostics and other procedures provided for a specific condition with standard treatment protocols to identify a process indicator of the quality of care.
- Drafting household surveys and a corresponding input database to measure health care utilization, out of pocket spending on health services, non-health expenditures, assets, debts and labor market participation among ~8,000 Aarogyasri beneficiaries and two comparison groups: 1) families just above the income eligibility threshold, and 2) matched households in neighboring states immediately opposite the border. *These surveys will be conducted by the broader consortium once funding is secured.*

Affiliation: I will serve as a research associate in my capacity as a doctoral student with the Health Care Management Department at the Wharton School of the University of Pennsylvania. There may be additional opportunities for ongoing involvement and/or joint publications, and I will have access to the resulting data for the purposes of independent dissertation research.

Faculty Approval:



Mark V. Pauly, PhD
Bendheim Professor and Chair
Health Care Management Department.