India's Health Protection (Insurance) Models in the International Context
Some Observations and Thoughts
Results for Development Institute[i]
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How well are the new India health financial protection (insurance) models performing?

It is difficult to make a sweeping assessment—good or bad--of India's recent large-scale experiments with health insurance to cover the poor for hospital services (e.g., RSBY nationally, Aarogyasri in Andhra Pradesh, Kalaignar in Tamil Nadu, Yeshasvini in Karnataka). There are clearly some potentially positive elements to the designs of these schemes and some potentially negative elements. And it is early days for these schemes, which have only been under implementation for a few short years, and for which there have not been enough systematic assessments, despite some very good analysis that has been done recently by PHFI and others.

We will discuss each of the key features of these programs separately (considering primarily RSBY, as that is the scheme we know the best, and recognizing that though RSBY and Aarogyasri, Kalaignar, and Yeshasvini have some similar features, each scheme is distinct).

This analysis assumes that the current design features do not necessarily come as a package. Going forward some key features could be altered even while others stay the same (i.e., you don't have to scrap the entire system because several design features are flawed, if it turns out that other design features make sense).

Core Design Features of RSBY (and the other three South India state schemes)

As we understand it, RSBY and the other three state-specific schemes exhibit certain core characteristics:

1. Target the poor (below poverty line households)
2. Funded primarily by general taxes, with minimal out-of-pocket patient expense
3. Benefits package restricted to hospital services (secondary and/or tertiary care), but excluding primary care
4. Demand-side financing approach – funds follow the patients to the provider of their choice
5. Delivery system – mix of private and public providers (emphasizing private), minimal accreditation, paid on a standard case basis
6. Administrative structure – reliance on winner-take-all private insurance contracts in distinct geographies in each state, private insurers act as purchasers, bear financial risk, and are paid set premiums by the government

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In the remainder of this note, we examine each of these design features and offer our initial thinking about their pros and cons, linking this analysis to the experiences of other countries that we feel may be relevant.

Our assessment below should be taken as preliminary, given that our Institute has just recently begun to assist PHFI and provide technical support to the HLEG process, and this note was prepared against a very short deadline to be a timely input to a meeting with the Planning Commission on 30 March 2011. We intend to carry out more systematic work in this area over the coming months, as requested by PHFI and the HLEG subcommittee on financing.

Feature 1: Target the poor

It is laudable that India has expanded so quickly insurance programs that target the poor. In many other countries (e.g., Argentina, Indonesia, Mexico, Turkey), the philosophy was to start with formal sector workers and civil servants, and then to find a way to provide financial protection for low income households. In recent years, India has instead tried to increase coverage from the bottom up, moving to cover the poor in a big way.

A challenge of this approach is targeting. Recent studies show that BPL cards are owned by many non-poor. Thus, a good number of people who should not qualify for subsidies are receiving them. At the same time, it is not clear that all families truly living in poverty are being covered. We would argue that this is more of an implementation issue than a problem with the policy design. In theory, this could be fixed.

A related challenge is that by definition, programs that target the poor are not universal. If India hopes to achieve long-term solidarity across its population, there are some advantages to bringing people across the income spectrum into the same program and same risk pool. This will ultimately make it easier to cross-subsidize and may help maintain political support for government health coverage programs. This could be done, for example, by formally extending eligibility under RSBY to those above the poverty line, perhaps with a premium requirement; or by looking for ways to use a portion of payroll taxes under social insurance programs such as ESIS to subsidize the funds available under RSBY, as is done in countries like Colombia and the Netherlands. Note that a number of countries around the world with multiple risk pools are now working to find ways to consolidate these pools (e.g., Thailand, Indonesia, Japan). They find it very politically challenging to combine pools once programs are entrenched. India should consider whether to avoid this challenge down the road by developing broader risk pools at an earlier stage.

Bottom Line: In the early days, it may make sense to continue to target the poor, though experiments with non-poor populations who would contribute premiums or cross-subsidize the scheme, are an interesting way to test if this model could ultimately become more universal. Targeting could also be improved in the meantime so that a large portion of the benefits (in terms of expanded access to services and protection from catastrophic out of pocket payment) accrue to the poor.

Feature 2: Funded primarily by general taxes, with minimal out-of-pocket patient expense

The reliance on tax funding and limited point of care fees may be one of the best design features of RSBY and other South India state schemes. Health economists worldwide appear to be moving in the direction of favoring general tax funding for care (especially care for the poor), sometimes blended with payroll taxes, rather than relying on individual or household contributions. The latter have in some instances been shown to discourage access to needed health services, and are notoriously hard to collect from the informal sector (which is very large in India). Reliance on general taxes also allows for cross-subsidy across populations, even if a program like RSBY is targeted to the poor.

These days, "free care" is in vogue. It's certainly very appealing, especially for the poor. There are numerous studies that show that even small copayments/user fees reduce utilization. Note that in high-income countries, there has been a big push in recent years to raise user fees to control demand for care and contain costs. Copayments for the non-poor population are generally supported by health system experts in higher income countries, especially when the most cost-effective services are exempted from such fees. For example, in the US immunization/well-child check-ups and prenatal care are typically exempted from copayments, while routine office visits for minor acute illnesses require larger copayments. Similarly, drug benefits are designed such that patients pay more for expensive brand name drugs and less for cheaper generics.

Bottom line: Don't move toward premium contributions for the poor. Though consider some contributions if RSBY expands beyond the poor target population. Keep out of pocket payments minimal, but over time consider a more sophisticated approach by charging copayments for less essential services that are more likely to be over utilized.

Feature 3: Benefits package = hospital services (secondary and tertiary care)

The theory behind the RSBY inpatient benefits package is that, if you want to reduce out of pocket payments, you should cover high-cost, low probability events. This makes intuitive sense and is the conventional wisdom for insurance. But a few studies recently have shown that on average, people actual spend more cumulatively on outpatient care and may get as significant financial protection from outpatient coverage as from inpatient coverage (e.g., Hsiao and Yip in China). Also, recent data shows that a large percentage of out of pocket payments in India are for drugs (Selvaraj and others). So one must question how much financial protection comes from covering just hospital care. Likely some…but households still remain considerably exposed to financial risks.

Another conventional wisdom is that health systems don't get as much "value for money" from inpatient care as from preventive and primary care. Preventive and primary are viewed as the types of care that ultimately reduce mortality and morbidity at a lower cost. Some have wondered why in RSBY and the South India state insurance schemes, coverage has been offered mainly for hospital care and not primary and preventive services. Though it may be true that

primary/preventive care is more cost-effective, any country attempting to achieve universal health cannot ignore hospital care. Safe deliveries happen in hospitals. Road accidents and other trauma, treated in hospitals, are a leading cause of death. Some forms of surgery have also been found to be cost-effective (DCPP-2 chapter on surgery, Gawande's articles). So it may be best for India not to think about various types of care along the primary to tertiary continuum as "either/or".

However, on the issue of benefits packages, India may want to consider the following two questions: What is the right mix of government expenditures on various types of care? And what is the best way to cover different types of care?

On the first question, there appears to be some evidence that benefits packages that cover high-end hospital care have excessively skewed the mix of government health expenditures toward hospital/tertiary and away from primary/outpatient care (the Aarogyasri scheme in AP may be the best example). This mix should be investigated and significant consideration should be given to ensure that primary care is not neglected. There is much evidence that hospital-driven health systems (e.g., the US) lead to higher cost, not necessarily higher quality care.

On the second question, many of the RSBY design features may make it a reasonable way to cover inpatient care in India (leverages large existing supply of private providers; demand-side financing increases output and responsiveness; and case based payment--if well managed and if fraud is prevented--can help to limit, but not completely prevent, costs increases). A question is whether other benefits can feasibly or should be added to RSBY, or if other types of care should be covered through different mechanisms (e.g., universal access to public providers for preventive/primary care).In considering this question, the importance of establishing a fluid continuum of care should be noted. If hospital care is covered using completely different mechanisms than primary care and preventive care, there could be problems with coordination of care.

We recognize that inpatient care was also chosen as the benefit package for RSBY and the South India schemes for practical reasons. It could be very challenging to implement an RSBY-type system for primary care delivered to the poor through literally hundreds of thousands of outpatient clinics and qualified and less than fully qualified practitioners. The logistical challenges of accrediting, paying, and monitoring the performance of these primary care providers would be huge. Similarly, it would be hard to have RSBY reimburse pharmacies serving the millions of poor and others in each state, because of the sheer volume of transactions, the number of providers/retailers, and the difficulties of gauging quality. However, with ingenuity, persistence, and political backing, adapting RSBY to cover primary care is not out of the question for a dynamic country like India. Note that a number of other countries (most notably Thailand) have developed schemes that cover primary care through capitation payments to a mix of public and private primary health clinics.

Bottom Line: Don't switch away from hospital coverage, but complete a very thorough analysis of the current benefits packages, considering both health impact and financial protection impact of those packages. Consider whether additional benefits could/should be added (or if some tertiary

care should be removed from the package in favor of more secondary care). Address the issue of how care for individual patients will be coordinated if different parts of the care continuum are covered in different ways.

Feature 4: Demand-side financing approach – funds follow the patients to the provider of their choice

Demand side financing solves a fundamental problem that often plagues supply-side systems. Providers have an incentive to provide care, since they only get paid when they deliver. When demand-side financing is coupled with patient choice, providers have an additional incentive to be responsive to patients by providing what is viewed as high-quality service (which may be truly linked to quality and outcomes, or may be more about patients' perceptions of how they are being treated). Production and responsiveness to patients are only two goals of the health system, but they are important ones.

Downsides of demand-side financing are that it can lead to "supply-induced" demand or overprovision of services, which can increase cost and also potentially lower quality (recent reports in the US find an inverse correlation between cost and quality). This is especially true when the associated provider payment mechanism is fee-for-service (FFS). In many systems including Thailand and the UK, instead of FFS providers are paid capitation rates per person only when a patient registers with a particular provider. This can also be viewed as "demand-side" financing because payments are contingent on number of patients. Though there is less incentive to over-provide care, under-provision may become a problem. For hospital services, the incentive problems inherent in FFS (over supply) or fixed global budgets (under-provision, lower efficiency) can be somewhat attenuated using case based (or "DRG") bundled payment methods, which are now widely employed in the OECD countries and also in middle income countries such as Chile and Thailand. The use of case-rate payment systems in RSBY and other South India schemes is wise. However, implementation of these payment mechanisms may require refinement over time to be sure that the case bundles are appropriate, and that fraud and "upcoding" are minimized.

It is important to note that demand-side financing operates almost everywhere in the world through the "purchaser-provider split" (discussed in a companion paper to this one). It can be applied to purchasing of care from both public and private providers, though it is often used in systems where private providers are prominent such as India. Examples include countries as diverse as Canada, France, Germany, Korea, and Taiwan, and the UK.

Bottom line: Demand-side financing and the split between purchaser and providers may be viewed as positive features of RSBY. The provider payment system is critically important. India may wish to evaluate carefully how case based payments are being set and implemented in RSBY and the related South India schemes.

Feature 5: Delivery system = mix of private and public providers (emphasizing private), modest accreditation

In the context of India, which already has a large supply of private providers, choosing to incorporate the private delivery system in RSBY and the other state programs may make sense. The challenge is that it is unclear what the quality level is of these providers is, and current accreditation and quality monitoring efforts may not be sufficient (this is another area where more analysis and evaluations seem to be urgently needed). Moreover, when you pay a large number of providers, even on a new and relatively untested case basis, there may be in-built incentives for oversupply of care by hospitals or of mis-classification of cases in order to receive a higher payment (to say nothing of the risk of various kinds of possible fraud involving insurers and patients (false enrollment) or providers and patients (phony billing for services not rendered)) This is compounded by the fact that the care is free at the point of service, so both patients and providers have an incentive to consume.

There are some public providers who participate in RSBY, Arogyasri, Kalaignar, and Yeshasvini, but it is not clear how well they perform in terms of volume and quality of care (it would be good to learn more about this). At the same time, these public providers also continue to receive supply side payments (budgets). Thus the RSBY reimbursements serve as top-ups. This combined supply and demand-side financing needs to be seriously considered. There are some reports that this mixed model can be a good thing in some countries—public providers get extra needed resources and they have new incentives to be more responsive to patients. However, in some cases, facilities don't have the capacity (or even the authority) to manage new demand-side revenues, and they may be mismanaged, or the extra resources fail to act as incentives if the government hospitals are not allowed to keep the insurance reimbursements.

In general, India's delivery system appears to be quite fragmented, with lots of small scale providers and lack of integration across the care continuum from primary to tertiary. There is growing evidence internationally that reduced fragmentation of the delivery system lead to better outcomes and lower cost (Nordics, Kaiser Permanente and other similar models in the US). This is because larger scale providers can pool resources to conduct care management, develop medical protocols, and implement IT systems to ensure patients get the care they need at all points along the care continuum (for example, making sure a diabetic gets routine eye and foot screenings, delivering insulin, and coordinating any necessary hospital visits for out-of-control blood-sugar levels). In larger integrated systems, individual practitioners are also often paid on a salaried basis, with some performance-based incentives related to quality and production. These systems tend to be better at managing patient care, with hand-offs from primary physician to specialist to hospital happening much more smoothly.

Bottom line: Improve accreditation and quality reporting for all providers. In the case of public providers, consider how demand side payments will interact with supply-side payments. Search for opportunities to use the health financing system and the evolution of RSBY and the other schemes to promote more integration of the delivery system along the continuum of care.

Feature 6: Administrative structure – reliance on winner-take-all private insurance contracts in distinct geographies in each state, private insurers act as purchasers and bear financial risk, and are paid set premiums by the government

This is probably the most controversial aspect of RSBY, and for good reason. On the one hand, using private insurance firms to manage the risk pool funds and pay providers has been an effective way to scale the program to tens of millions of households in a short period of time. But the incentives facing insurers who bear total financial risk, are paid a capitated premium, and then make reimbursements to hospitals, are a cause for some concern. One would anticipate significant incentives for the private insurers to minimize payouts and keep the profits. Yet reports from the states suggest a mixed experience in the first few years of RSBY, with insurers paying out more than the funds allocated to them by the state governments (deficits) in some places, and with expenditures running far below the value of the contracts awarded by the governments (surpluses or profits) in other states. It is unclear to us exactly what is happening, or whether and how to fix the problems that may be arising.

The US has experience with similarly structured models for its Medicaid program. There are some horror stories, of insurance companies who basically "took the money and ran". Even in less egregious circumstances, there are questions of what value the intermediary insurers are providing and whether they are making "too much profit" or increasing total cost because they skim a profit. Often, they are expected to do "care management", coordinating the care of very sick patients and ensuring that people diagnosed with particular diseases are getting the right regimen of care. But this type of management is not always high quality, and it may not be in the financial interest of insurers to do it well.

For reasons such as these, India should think carefully before promoting the long-term use of private for-profit insurers as risk bearing managers of tax-funded insurance schemes for the bulk of the population. Their involvement in RSBY needs to be carefully evaluated, to appreciate the strengths and weaknesses, the benefits and costs of such an arrangement. It may be worth experimenting with different arrangements, including ones in which private companies serve as third party administrators, paid via competitive contracts for specific services rendered (e.g., claims processing), without asking these private firms to take on the financial risks that may incentivize them in unhelpful ways, e.g., by withholding care.

Bottom line: RSBY could conceivably be modified over time, such that states retain fiduciary responsibility for insurance funds and assume the associated financial risk. Administration/claims-processing could be carried out either by state agencies or by private companies serving as third party administrators.

Conclusions

RSBY, Arogyasri, Kalaignar, and Yeshasvini represent a set of bold and ambitious experiments in health financing, which have sprung up in India over the past few years. The rapid growth of these schemes has intrigued (even astonished) many health system experts around the world.

Based on a preliminary review of the limited evidence to date and our knowledge of relevant international experience, we can see several features of RSBY and the other schemes that may be both consistent with good practice and well adapted to conditions in India. These include efforts to cover hundreds of millions of persons, improving their access and reducing their out-of-pocket payments for unpredictable, high cost hospital services; the fact that eligible care is free at the point of service; the insurance funds are financed through tax revenues, at a time when India is also striving to increase government spending for health as a share of GDP; both public and private hospitals are able to participate in the schemes and receive reimbursement, provided they meet quality accreditation standards; patients are free to choose their provider, and money "follows the patient".

On the other hand, there are some less desirable or more questionable features of the current schemes, as we have also highlighted based on our initial analysis of RSBY and the other schemes, and our review of international experience. These include the fact that only hospital care is currently covered, while poor households incur substantial out of pocket expenditures for primary care services and outpatient drugs, neither of which are included in RSBY; the schemes as presently configured only cover poor households, exposing them to a long-run danger of being politically (and/or financially) marginalized; the focus on hospital care (exclusively tertiary care in the case of Arogyasri) makes it difficult to provide integrated care to patients; and the current use of private insurance companies as financial risk bearing intermediaries that compete for premiums and manage provider reimbursements creates problematic incentives for under-provision of care.

In our view, it would be worth exploring, both theoretically but also through more practical on-the-ground experiments, the potential to build upon and improve RSBY and other state schemes so that their current strengths are maximized and their more problematic features are addressed and possibly fixed through design changes. Given the creativity and energy of India, and the leadership present at central and state levels, such experimentation and learning by doing seems highly feasible and appropriate. If it turns out that some negative dimensions of RSBY and the other South Indian schemes are preventing the country from achieving its health goals, then more radical remedies may be needed.

At the same time, we suspect that much additional monitoring and evaluation of RSBY and the other schemes is urgently required, to answer a number of vital questions for which there are still no clear answers. We have highlighted some of these in this note, e.g., Are benefits packages appropriately designed to limit financial risk while also promoting health improvement? How well is the hospital accreditation system working? Is the case-rate payment system appropriately designed to minimize overprovision and fraud? Are private insurers contracted under the schemes making excessive profits or losing money? Are the participating public hospitals thriving under RSBY or experiencing difficulties? The results from such evaluations should be fed back into the debate and the search for the optimal design for India's future health financing and financial risk protection policies and programs.