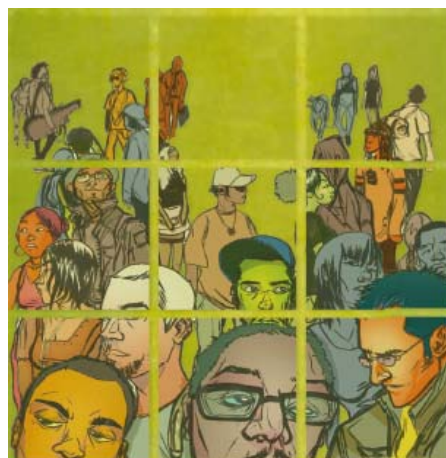




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**Varatharajan Durairaj, M. Murali Kannan,
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and P. Sankara Sarma**

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Lessons learned from a community-based *medisave* experiment among rural women in the Indian state of Karnataka

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Varatharajan Durairaj¹, M. Murali Kannan², Saji S. Gopalan³, C. Jayalakshmi⁴, Sr. Agnes Clare CSST⁵, Meera Shivalingiah⁶ and P. Sankara Sarma⁷

¹ Department of Health Systems Financing, World Health Organization, Geneva, Switzerland

² Vijaya Bank, Bangalore, Karnataka

³ Public Health Resource Network, Bhubaneswar, Orissa

⁴ Paripoorna Grameena Abhivruddi Mahila Seva Samsthe, Dharwar, Karnataka

⁵ Centre for Integral Social Action, Society of the Carmelite Sisters of St. Teresa, Byadygi Karnataka

⁶ S. B. Education Trust, Mandhya, Karnataka

⁷ Sree Chitra Tirunal Institute for Medical Sciences & Technology, Thiruvananthapuram, Kerala

1 Background

One of the major challenges of global health financing is to develop systems that protect people against the financial risks of obtaining health care - to allow them to seek needed care without the risks of financial catastrophe and impoverishment. This requires a multi-sectoral and multi-stakeholder partnership, as advocated by the World Health Report 2008 and the report of the Commission on Social Determinants of Health.¹⁻²

1.1 The need to streamline out-of-pocket spending

Household out-of-pocket spending (OOPs), made at the point of delivery of health care service, is the most unorganised form of health spending; yet, it is the predominant source of health financing in many low- and middle-income countries.³⁻¹⁶ Adversely affecting the poor, it forces them to use expensive and impoverishing coping mechanisms such as high-interest loans, distress selling of assets, and reducing consumption of food.^{3-4,17-18} An estimated 150 million people are affected each year and 100 million are pushed under the poverty line as a result of OOPs.¹⁹ In addition, a dominant section among the poorest is unable to seek care and suffer extended period of ill-health as a result. The prevalence of OOPs is very high in low- and low-middle-income countries although the financial catastrophe and impoverishment are not uncommon in middle- and high-income countries due to the existence of co-payments for health services in various forms (Table-1).

Table-1

Sources of health spending (2006)⁸

Countries	Total Health Expenditure (THE)		OOP (% of private expenditure)	External resources (% of THE)
	% of GDP	Govt. share (% of THE)		
Global	8.7	57.6	49.3	0.4
High-income	11.2	60.7	36.2	0.0
Upper middle-income	6.3	55.1	70.0	0.2
Lower middle-income	4.5	43.2	85.7	0.8
Low-income	4.3	36.2	85.4	16.9

1.2 Outpatient care financing

Outpatient care financing is central to health system strengthening based on primary health care and attainment of MDGs. Although outpatient care is a low-cost-high-probable health care event, it is a key constituent of primary health care, as it provides the first opportunity for the people to get linked with the formal health care system. Effective financing and provision of outpatient care facilitates early diagnosis and treatment of illnesses/conditions and thus prevents disease progression and minimizes the financial burden of illnesses. Outpatient care financing is also

crucial for the attainment of universal access to health care, sustainable health financing, prevention of financial catastrophe, and minimization of wage losses due to future illnesses. Household out-of-pocket spending on outpatient care, especially by poor women, produces poor health outcomes thus nullifying all the other health system development efforts.

Appropriate and affordable delivery of outpatient care means provision of basic essential health care services such as consultation, early diagnostics, and medicines. The estimated size of unmet health care needs among many disadvantaged populations indicates significant gaps in the provision of outpatient care and reiterates the need to strengthen it.²⁰ As against the stated policies of many governments that it is delivered free of cost to the disadvantaged populations and at the least cost to others, in reality, outpatient care is the most significant contributor to OOPs in many countries.^{14,21-24} Medicines, in particular, is a significant contributor to OOPs by consuming 50-80% of outpatient care spending.^{14,25-27} Expenditure on outpatient care comes in small increments, but gets accumulated annually to make it significant or even catastrophic.

1.2.1 Outpatient care spending in India

The trend in per capita health spending in India between 1996 and 2006 (Figure-1) indicates that OOPs contributed almost entirely to the increase in total health spending during this period.²⁸ Although OOPs has been a dominant feature of health financing in India for long, the scenario varies across states because health is a state subject. For instance, household contribution to total health spending, in 2003-04, ranged between 36.5% in Meghalaya and 91.7% in Nagaland (national average 68.8%);¹⁷ in fact, only two states reported OOPs share of less than 50%. Similarly, per capita OOPs ranged between US\$ 5.48^a in Meghalaya and US\$ 110.80 in Nagaland (national average US\$ 22.89).²⁹

Outpatient care, which includes services like antenatal care and postnatal care, immunization, and treatment for minor ailments, accounted for 46.2% of the rural household health spending in India.²⁹ Over two-third of the OOPs on outpatient care spending was borne by rural households; rural OOPs on outpatient care increased annually at 12.8% since 1995-96.

1.3 Recent health financing initiatives in India

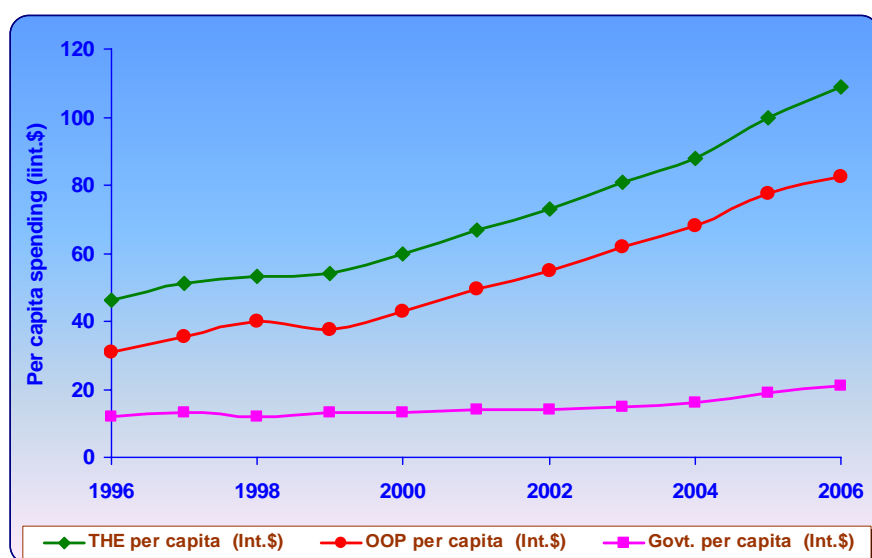
National and state governments in India have acknowledged the twin health financing dangers of low government and high out-of-pocket spending on health. As a result, many recent health financing initiatives in India such as the National Rural Health Mission (NRHM) target higher government spending and greater prepayment in both rural and urban areas.³⁰⁻³³ Their main emphasis is on strengthening the primary health care infrastructure through public funding. a three-fold increase in public health spending is the declared long-term goal of the national government.³⁴ Measures such as untied funds and maintenance grants to primary health care centres, establishment of health and patient welfare societies, provision of staff and client incentives, and public-civil society partnerships attempt 'architectural correction' and resource reallocation so as to help the needy states and populations.

^a 1 US\$ = Rs. 44.20 (2nd Jan. 2007) Source: http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=8313 (accessed on 12th August 2008)

Although prepayment is also given considerable attention, commercial prepayment initiatives in health such as private health insurance have not yielded desirable results so far; the estimated penetration^b of non-life insurance in 2007 was 0.6% (world average 3.1%) with the density^c of US\$ 6.20 (world average of US\$ 249.60).³⁵ Total value of insurance premiums generated in health by both public and private sector insurance companies in 2007-08 was about US\$ 640 million; public sector companies alone accounted for 69.4%. One of the reasons why private insurance companies are not very enthusiastic about health is the claims ratio of about 100%; it was 141% in 2006-07 before coming down to 107% in 2007-08. There are also numerous government initiated community based and targeted health financing schemes for the poor. Most of them are insurance-based prepayment schemes such as the *Rashtriya Swasthya Bima Yojana (RSBY)* or National Health Insurance Scheme, particularly targeting the spending on hospitalizations and deliveries; details of the scheme are provided in Box-1.³⁶

Figure-1

Health spending trend in India, 1996-2006²⁸



Overall approach of the national and state governments to prepayment appears to be a segmented one packaging insurance services separately for various sub-sections (for example, the poor) or occupation groups (weavers, truck drivers, construction workers, etc.) of the population. The most recent one focuses on the national government employees and pensioners based on the recommendations of the Sixth Central Pay Commission.³⁷ The proposed health insurance scheme for the employees is voluntary for the existing employees/pensioners subject to their paying prescribed contribution and compulsory for new employees joining after the introduction of the scheme.

^b Insurance penetration is measured as ratio (in per cent) of premium (in US Dollars) to GDP (in US Dollars)

^c Insurance density is measured as ratio of premium (in US Dollar) to total population

Box-1

Brief description of the RSBY Scheme³⁸⁻⁴⁰

The objective of the RSBY is to provide protection to BPL households from financial liabilities arising out of health shocks that involve hospitalization; it aims to cover all the Indian districts in a phased manner.

Funding

The scheme is funded by the national government with contributions from the state governments and the beneficiaries. The estimated annual premium is about Rs. 750 (US\$ 16) per family to be shared unequally by the national (75% subject to a maximum of Rs. 565 or US\$ 12) and the state (25%) governments; beneficiaries are required to pay only the annual registration fee of Rs. 30/- (US\$ 0.64). While the cost of smart cards is borne by the national government, administrative and other related costs are borne by the respective state governments.

Eligibility

Workers engaged in the unorganized sector and belonging to BPL category and their family members (head of household, spouse and up to three dependents) are eligible to become members with no age limit.

Benefits

The state governments determine benefits based on an area/people's requirement. However, they are advised to incorporate at least the following minimum benefits:

- Annual sum assured/per family for hospitalization coverage is Rs. 30,000/- (US\$ 638).
- Cashless attendance is provided to cover all covered ailments
- Hospitalization concerning most common illnesses is covered with few exclusions
- All pre-existing illnesses are covered
- Transportation cost (maximum limit/per visit US\$ 2.13; overall limit US\$ 21.28) is reimbursed.

Providers

RSBY Provides the participating BPL households with freedom of choice between public (including the existing Employees State Insurance Scheme facilities) and private hospitals. Hospitals have the incentive to provide treatment to large number of beneficiaries as it is paid per beneficiary treated. Even public hospitals have the incentive to treat beneficiaries as the money from the insurer will flow directly to the concerned public hospital which they can use for their own purposes. Insurers, in contrast, will monitor participating hospitals in order to prevent unnecessary procedures or fraud resulting in excessive claims.

Insurers

The main implementing agency is the respective state government, which selects the insurer through a competitive bidding process; the insurer is paid premium for each household enrolled for RSBY. Therefore, the insurer has the motivation to enroll as many households as possible from the BPL list. This will expectedly result in better coverage of target beneficiaries.

1.3.1 *Rashtriya Swasthya Bima Yojana (RSBY)*

A national health insurance scheme of particular interest to this paper is the *Rashtriya Swasthya Bima Yojana (RSBY)* launched by the Ministry of Labour and Employment, Government of India in April 2008 to provide health insurance coverage for Below Poverty Line (BPL) families. Five Indian states have started delivering the RSBY services to their enrollees while nine others have started the enrolment; 8 have initiated the tendering and Memorandum of Understanding processes (with Government of India).^{36,38-39} By the end of May 2009, about six million people were enrolled and 4.60 million smart cards were issued; Karnataka has initiated the RSBY process in 6 districts.

Gujarat was the first state to pilot the scheme in 5 districts covering a population of about 0.45 million;⁴¹ the premium was fixed at INR 634.84 (US\$ 13.50). During the first phase, 327,071 families were covered accounting for 58.1% of BPL families (562,042 families) in the chosen areas. In other words, an estimated total premium of US\$ 4.42 million was generated during the first phase. So far, claims worth US\$ 95,345 (per capita US\$ 120) were made by the enrollees; that is, less than 2.2% of the total premium value was claimed so far and only 0.24% of the enrollees have accessed health care using the NHIS.

1.3.2 State-level initiatives

Since health is a state subject in India, state governments initiate their own health financing schemes with or without central government participation. In the past, there were numerous state-level government sponsored health financing initiatives concerning the health financing functions viz., resource mobilization, risk protection and purchasing. Major resource mobilization measures were user fee (many states), contracting (many states), political decentralization (Himachal Pradesh, Karnataka, Kerala and Orissa), and industrial (philanthropic) participation (Tamil Nadu). Non-contributory state health insurance (Andhra Pradesh, Karnataka and West Bengal) and community-based health insurance were the key risk protection mechanisms employed by some states while establishment of a medical service corporation for medicine supply (Tamil Nadu followed by Andhra Pradesh, Orissa and Rajasthan), outsourcing (many states), and financial delegation (Gujarat and Tamil Nadu) were some instruments concerning the purchasing function.

All these measures, except the health insurance, covered outpatient care as well. Since many of them are recent measures, their impact is not yet known. Preliminary results indicated that states differed in their performance; utilization of primary health care facilities for outpatient care improved in places where these measures were well implemented.³²

1.4 Women's autonomy

Women's autonomy or lack of it is a crucial factor in determining the financial access to health care, particularly for the women. Lack of financial access is often cited as one of the dominant reasons for rural women not seeking antenatal care and treatment for minor (at times life threatening) ailments. It is estimated that lack of financial access prevented at least 26.9% of rural women from delivering in an institution, 20.7% from receiving antenatal care, and 21.7% from seeking treatment when sick.⁴² These figures, however, do not include women who received less-than-optimal antenatal care. While poverty is a major reason for financial hardship, lack of autonomy to seek health care and to spend money particularly limit women's health care options.

In India, only 26% of women had autonomy to seek health care and 40.9% had autonomy to spend money.

1.5 About this paper

While recent government initiatives produced mixed results, the performance pattern across the states indicates widening of health care inequality with already better-performing states performing even better and vice versa.³² Existing bottlenecks pulled many states down so much so that they were not able to utilize even the allocated funds. While outpatient care figured in some of the recent health financing models, their influence (reduction and streaming) on the OOPs is not known. The increasing or static OOPs trend in almost all states indicate that the effect of the state level measures seems to be either minimal or localized, not captured at the state or national level. Moreover, the introduction of user fee alongside many new measures meant that people would continue to incur OOPs even while accessing the government facilities. Other factors such as location and timing of facilities, transport, etc., particularly affecting the rural population, also influence the local health financing context. Lack or failure of health financing mechanisms to address outpatient care needs of the rural population necessitates the development of alternative outpatient care financing mechanisms suiting the rural milieu. Non-reproductive health care needs of the rural women need particular attention.

This paper discusses the health financing experiences of 600 rural women, who participated in a *medisave* experiment conducted during 2005-2007. They came from 27 villages (with a total population of about 35,000 or 7,000 households) in the Indian state of Karnataka. Results and experiences shared here are based on real-time health care financing and provision with a follow-up period of one year. They are an outcome of a fruitful partnership between the women, general physicians, local communities, women's NGOs, private hospitals, a government bank, an academic institution, and a national (public sector) health insurance company.

2 Health financing context in Karnataka

With an estimated population of 57.4 million in 2008, Karnataka is the ninth largest state in India accounting for 5.1% of the national population and 5.8% of national geographical area.⁴³⁻⁴⁵ About two-third of the state population live in rural areas and 20% are poor.

2.1 Socioeconomic and health context

Karnataka's human development indicators in 2001 were close to the national average.⁴⁵ Life expectancy at birth in 2009 is projected as 71.1 years for females (national average 68.1 years) and 66.5 years for males (national average 65.8 years).⁴⁶ Still, certain specific health indicators like infant mortality rate (43.2 per 1,000 live births in 2005-06) and under-5 mortality rate (54.7 per 1,000 live births) are better than the national average.⁴² Female literacy, in 2005-06, was 62.6% with the average number of completed school years for the women being 3.4 years. About 45% of households lived in unstable houses and 53.5% of them did not have toilet facility while 63.8% still used solid fuel for cooking; over 10% of households did not have access to improved source of water and electricity. About 27% of women, compared to 59.1% of men, were found to read newspapers or magazines at least once a week. Unemployment rate too was 53.7% among women compared to 9.6% among men.

2.2 Health care coverage

Government rural health care infrastructure in India comprises of three interlinked facilities viz., Community Health Centre (CHC), Primary Health Centre (PHC) and Sub-Centre. CHCs, each serving a population about 100,000, are the first referral units for specialist care including the C-Section deliveries. PHCs, each serving a population of about 25,000, prove to be the nucleus of the rural health care infrastructure; they are the first physician contact points for the rural population. They offer basic essential outpatient care services such as immunization, antenatal care, normal delivery, treatment for common ailments, routine health care check-up and health education. Sub-centres, each serving about 5,000 people; function as a door opener for the formal health care system wherein rural people come contact with a qualified health worker. People receive health care services like health education, routine healthcare check-up, antenatal care, and child care. Besides, health statistics concerning the neighbourhood population are produced and maintained here. In Karnataka, on the average, 20,780 rural people from 18 villages (about 111 sq. km area) depend on a PHC for their outpatient care needs.

Even though the basic rural health care infrastructure improved substantially in Karnataka between 1985 and 1996, it still falls short of the national norm in certain aspects (Table-2).⁴⁴ In addition, existing infrastructure lacks certain essential facilities like building space, workforce, diagnostics, medicines and supplies. However, all PHCs in Karnataka have proper approach

Table-2

Status of the government primary health care infrastructure in rural Karnataka (2006)⁴⁴

Health care infrastructure	Type of facility	Number Required ^d	Number in position	Shortage (%)
Community Health Centres (CHCs)	Number of CHCs	302	254	15.9
	Building	254	207	18.5
	Physicians	254	192	24.4
	Surgeons	254	168	33.9
	Paediatricians	254	116	54.3
	Obstetricians & Gynecologists	254	215	15.4
	Pharmacists	254	576	0.0
	Laboratory technicians	254	224	11.8
Primary Health Centres (PHCs)	Number of PHCs	1,211	1,679	0.0
	Building	1,679	1,531	8.8
	Physicians	1,679	2,041	0.0
	Pharmacists	1,679	1,304	22.3
	Laboratory technicians	1,679	1,227	26.9
	Female health worker	1,679	216	87.1
Sub-centres	Number of sub-centres	7,369	8,143	0.0
	Building	8,143	4,460	45.2
	Female health worker	8,143	8,328	0.0

^d As per 2001 population

roads, at least a physician, electricity, and regular water supply; 96% of them have telephone facility. Similarly, there is no shortage of multipurpose female health workers in sub-centres.

In Karnataka, 4.8% of rural women (4.1% for rural men and 4.2% for urban women) reported ailments at any point of time.⁴⁵ In 2005-06, 64% of households did not generally use government health care facilities; only 19.9% of women had any contact with a government health worker.⁴² Over 40% of rural deliveries occurred at home and 38.1% were not attended by a skilled personnel. Proportion of home delivery was particularly high among those who did not receive any antenatal care; 26.6% of rural women, with a livebirth in the three years preceding 2005-06 did not receive or received less-than-optimal (at least three visits) antenatal care. Overall, only 29.6% of pregnant women in Karnataka received all recommended types of antenatal care. Infant mortality rate was highest among the poorest quintile; only 24% of children from this quintile received all basic vaccinations compared to 71% from the wealthiest quintile. Similarly, families of 40% of rural under-5 children from the lowest quintile did not seek treatment for acute respiratory infections and fever.

2.3 Health financing

Health financing context in Karnataka is similar to the national context. The state health spending is dominated by OOPs to the extent of 70.4% (in 2003-04), the national average is 68.8%.^{14,29} Although the share of OOPs in total health expenditure is slightly higher in Karnataka than the national average, per capita OOPs (US\$ 14.33) is 30.6% less than the national average (US\$ 20.65). In other words, total health expenditure in general is low in Karnataka. The share of government health expenditure in GSDP (Gross State Domestic Product) marginally declined from 1% in 1990-91 to 0.88% in 2002-03.⁴⁵ This is similar to the national trend. Given the minimal share of rural health services in government health expenditure (3% compared to 44% for urban health services in 2002-03), only 25% of non-hospital ailments in rural Karnataka received care from government institutions.

Limited health care access concerning certain sections of the population and higher share of OOPs are real concerns for the state; they are duly acknowledged by the state government as well. As a follow up, the state government has initiated some health financing schemes like 'Yeshasvini', a novel health insurance programme for farmers (in cooperatives). There are also other recent attempts to provide health insurance cover to specific occupation groups such as the *auto rickshaw*^e drivers and for the urban poor. Microfinance too has added a new dimension to the health financing scenario in Karnataka. All these schemes are in addition to national level initiatives such as the RSBY.

2.3.1 Microfinance

Karnataka uses microfinance as an effective strategy to address the credit needs of the rural poor. Self-help groups (SHGs),^f initially known as 'credit management groups' in the mid 1980s, were first formed in December 1991.⁴⁵ Broad objectives of the SHGs are the following:

- To provide an opportunity and space to develop a vision/mission

^e Three-wheeler commercial vehicles commonly used for local transport.

^f SHG is a group of 20-25 rural women who meet routinely to conduct 'banking' business.

- To develop and maintain organizational and financial management systems
- To grow in confidence and skill to manage their lives and to promote their interests in the private and public domain
- To establish linkages required for an institution to function effectively and
- To support its members to become agents of social change.

In addition to numerous private SHG initiatives, government started its own (named '*Stree Shakti*' programme) in 2000 with an objective to empower rural women, particularly those

- Living below poverty line
- Belonging to Scheduled Caste (SC) and Scheduled Tribe (ST)
- Agricultural labourers with no ownership of land
- Living with alcoholic, drug addict or physically disabled persons

While the '*Stree Shakti*' programme focuses on curbing domestic violence and other social issues, SHGs promoted by financial institutions address economic issues like saving, credit and investment and those promoted by NGOs facilitate women's empowerment. At the end of 2004, there were 2 commercial banks, 20 District Cooperative Banks, 8 Regional Rural Banks, 561 NGOs, and 40,295 *Anganwadi* workers^g engaged in SHG promotion activities. Overall, an estimated 1,11,511 SHGs existed with a total enrolment of 16,64,824 members.⁴⁵ Total amount of savings generated by them was Rs. 2.15 billion (US\$ 48.6 million); 53.8% of the loans disbursed were repaid in 2002. By 2003, 80,457 (72.2%) SHGs were linked to bank credits; 58,046 (52.1%) were trained in credit management and 45,177 (40.5%) in social issues. Although SHGs are found to be financially successful, evidence on empowerment so far is limited. About 88% of the members joined SHGs mainly because they provided them an opportunity and motivation to save money regularly.

Average monthly saving by a SHG member in Karnataka was Rs. 175/- (USD 4.38) in 2003-04.⁴⁵ Health was the 5th major purpose for which loans were raised in the state accounting for 8,012 loans that were distributed during 2002 amounting to Rs. 10.36 million or US\$ 211,471 (Table-3); about 70% of the loans meant for health purpose were already repaid by the members.

3 Concepts and methods

Medical savings account, or *medisave* in brief, refers to individual saving account restricted to health or medical care spending. The key aspect of *medisave* is pooling of resources over time.^h Pooling over time essentially means accumulation of resources when healthy and spending them when ill; in the long run, it is based on a person's observed saving and health spending behaviour during his/her life-cycle.

^g *Anganwadi workers are government staff dealing with health and nutrition (also pre-school education needs) of 0-6 year old children, adolescent girls, pregnant women, and nursing mothers.*

^h *For a detailed discussion on medisave, refer to the discussion paper by Hanvoravongchai, http://www.who.int/health_financing/documents/dp_e_02_3-med_savings_accounts.pdf*

Table-3**Health under microfinance: purpose for which micro loans were raised in Karnataka (2002)⁴⁵**

Purpose	No. of loans	Amount	
		Indian Rs.	US\$
Food	40,354	65,099,160	1,328,554
Crop	26,842	45,683,839	932,323
Small business	12,574	41,468,598	846,298
Purchase of cattle	3,416	16,868,573	344,257
Health	8,012	10,362,055	211,471
House repair	1,338	4,897,626	99,952

3.1 Prior experience with *medisave*

Countries like China, Singapore, South Africa, and USA have introduced *medisave* in some form.⁴⁷ They, however, differ in terms of objectives, design, and target groups. Limited experience with *medisave* so far suggest that it cannot be employed as a major financing option for health. Its resource mobilization potential is minimal with the amount of funds accumulated and available are significantly higher for the advantaged than for the poor and disadvantaged; women's ability to accumulate funds is particularly limited. *Medisave* does not pool the financial risk across individuals; but, it pools resources over time. Its ability to contain costs is also found to be limited.

Given the experience, *medisave* could be employed as a supplementary health financing option along with tax financing and health insurance adequately complemented by some kind of safety net and government stewardship so as to safeguard the poor and disadvantaged. More specifically, it could be used as a prepayment option to streamline household out-of-pocket spending on outpatient care by pooling resources over time. It could work particularly well when there is not much demand on its funds during the saving cycle.

3.2 Applicability of *medisave* to rural areas

Knowledge on medical savings account, and its relevance to rural health care context in particular, is still limited. A vast majority of rural dwellers are engaged in informal sector works and are predominantly poor. They are, however, not a homogenous entity and so, a differential health financing tool need to be developed for the poor because low-income households tend to display varied financing ability.^{48,50} *Medisave* could be an option for those poor who already incur out-of-pocket spending on health particularly when they appear to be better aware of saving than insurance benefits in Karnataka.⁵⁰ However, saving by the poor often comes in such small increments that conventional banks are not prepared to offer services to them, either because the transaction costs are deemed unprofitable or because of other more lucrative investment opportunities. Women, in particular, played a very insignificant role in banking.⁵¹

The situation has changed following the development of microfinance instruments suiting low-income households. The literature provides some evidence of its positive contribution to health care financing through improved access to drugs, primary care, and even to more advanced

hospital care.⁵²⁻⁵⁴ Microfinance has demonstrated that the poor people are bankable and insurable and therefore, have widened the scope for new alternatives.⁵⁵⁻⁵⁶ With this, it is now realized that even the low-income households can make periodic contributions adding up to significant contributions for health care. Women, in particular, could be a major beneficiary group because they are more likely to use the saved funds for health care than men.⁵⁷

3.3 Willingness to save for health care

Household decision making processes are an important, but at times, could be inconsistent with the presuppositions of formal economic theory. For poorer households, seeking health care involves greater planning and patients, in this case, may be more pro-active in mobilizing resources before seeking care. Household assets such as the land and animals (chicken, goat, cow, etc.) provide safety nets to the poor households. However, landless households are deprived of any such assets acting as safety nets. User fee experience of many countries suggests that a majority of the poor are not willing and able to pay for health care, which is amply indicated by the decline in health care utilization after the introduction of user fee.⁵⁸⁻⁶⁰ At the same time, user fee contributions of some poor people indicate that willingness to pay may not depend on income.^{19,61}

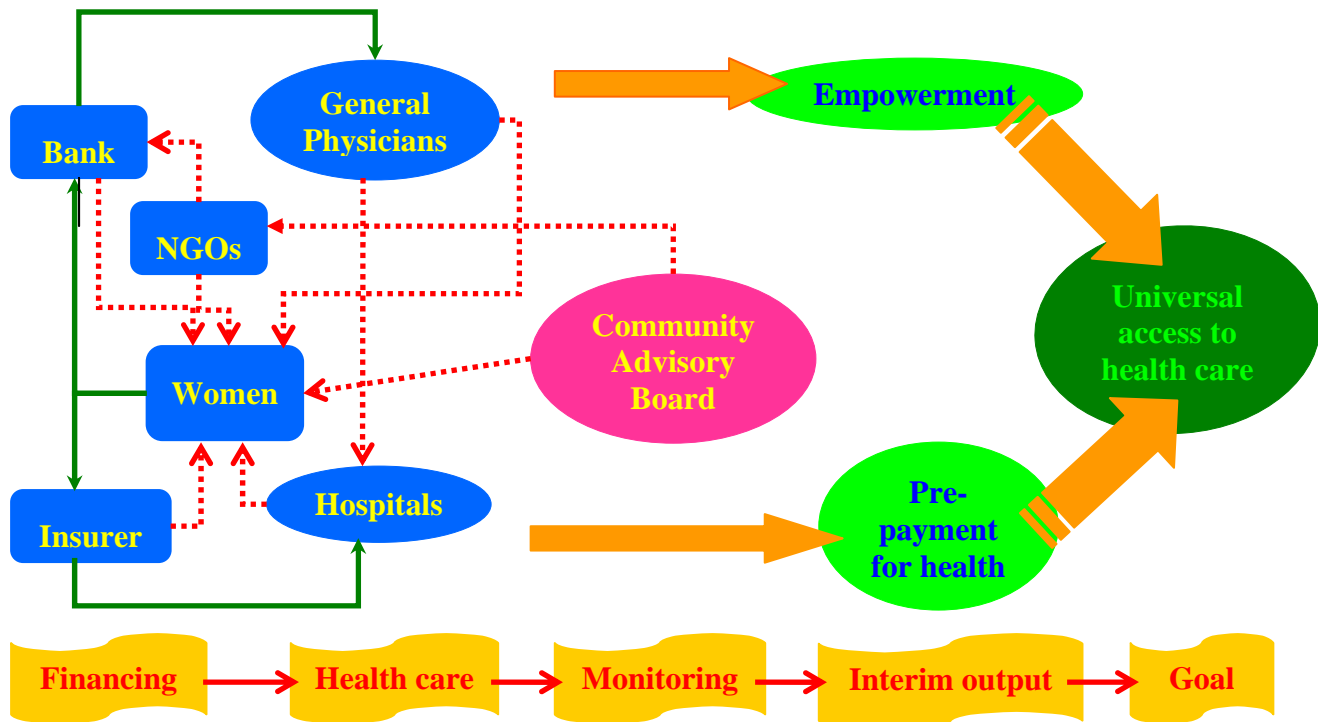
3.4 The conceptual approach behind the *medisave* experiment

The long term goal of the *medisave* experiment was the attainment of universal access to health care by reaching out to the most disadvantaged populations using two instruments viz., empowerment and prepayment. The objective was to extend the already prevalent (informal) saving habit to formal banking operations and to fine-tune the banking process to finance health care. The conceptual framework was devised in such a way that men did not use women as their fronts and women did not use the funds for purposes other than health care. The conceptual approach behind the experiment is explained in Figure-2; bold arrows represent money flow while dotted arrows indicate service flow. The model advocates a combination of banking (for outpatient care) and insurance (for inpatient care) to streamline and minimize the household out-of-pocket spending. It is possible through a reduced cost of finance/coping (due to streamlining) and of insurance once the rates of hospitalization (due to early diagnosis/treatment) and of claim per hospitalization (due to reduced severity) gradually decline.

In the *medisave* model described in Figure-2, four key service providers viz., bank, insurer, general physicians and hospitals are involved. While the bank receives and keeps women's savings, the insurer collects premiums and reimburse the cost of inpatient care based on certain conditions. General physicians provide outpatient care, when sought and get the (less-than-market) fee released from the women's bank accounts; they also facilitate the purchase of medicines and reimbursement of their cost. Hospitals provide inpatient care and get the cost reimbursed by the insurer. The NGOs liaison between all these four service providers and the women while the community advisory board functions as a monitoring and moderating agency. Therefore, this is a networking model involving seven major actors.

Figure-2

Medisave -The conceptual model



3.4.1 Medisave as a prepayment tool

The experiment was designed to facilitate provision of essential health care in a sustainable manner to the unbanked poor women in remote rural areas. Although it mixed non-insurance based prepayment (*medisave*) and insurance based risk pooling, it primarily targeted the outpatient care with the conceptual understanding that

'early diagnosis and treatment of minor ailments and timely and adequate ante/post natal care would essentially minimize the need for hospitalization and catastrophic expenditure. Similarly, improved financial security to seek outpatient care would phase out the unorganised health financing; eliminate impoverishment because of health care; and minimize unmet health care needs'.

Since outpatient care is a major contributor to OOPs, *medisave* served as a non-insurance prepayment tool to pool outpatient care resources over time; it complemented health insurance. Of course, in practice, the number of beneficiaries would be much more than those benefitting out of health insurance.

3.4.2 *Medisave* as a tool to empower women

The experiment also tried to empower women in the context of their lacking autonomy to seek health care and hold/spend financial resources. The hypothesis is that *medisave* empowers rural women (by enhancing their financial security); expands their health care access (by making financial resources available at the time of need); and minimises, or possibly eliminates, the financial catastrophe and impoverishment (by preventing distress loans and selling of assets).

3.5 Methods

The community-based experiment, results of which are discussed in the paper, included a series of actions viz., a population-based survey, women's enrolment with a bank, general physician and insurer, health care seeking in the event of illness, monitoring and evaluation of the health care seeking and financing processes. The surveyⁱ was carried out to estimate rural women's willingness to participate and pay for *medisave*. More importantly, it provided essential data for women's enrolment, choice of provider and follow up.

3.5.1 The partnership approach

The model required a partnership between nine major actors. First, the experiment was initiated and coordinated by an academic institution. Second, three local NGOs (one in each district) coordinated the district-level operations - coordination, management, community rapport building, data collection, enrolment, and house visits. Third, a government national bank was involved in the initial design, and creation and maintenance of *medisave* accounts; being a government bank widely prevalent, it also provided credibility to the experiment.

Fourth, a locally constituted Community Advisory Board monitored financing and health care processes; its members were the local NGO (ex-officio), a community leader, the bank manager, and a popular physician (other than the one designated as outpatient care provider). Formation of this board in each district was a significant step to ensure the smooth functioning of the experiment. The board provided the essential link between the women and the project team besides helping to oversee the functioning of the bank, providers and insurers. The constitution of the board required that at least one member was a woman. Outpatient and inpatient care providers and insurers were invited to the meetings as special invitees mainly to clear any doubts. When the board met for the first time, it was briefed by the partner NGOs about the project, its objectives and design. The meeting was periodically convened to assess the progress of the project and to discuss issues that emerged from time to time. Also, they were invited whenever the project team met the women.

Fifth, a government national insurer provided the health insurance service to the enrolled women; the insurance included services such as delivery, diagnostics, and hospitalization. Sixth, of course, the women, who were the subject of the experiment; their cooperation was extremely important for the experiment to succeed. Seventh, seven general physicians, as preferred by the women during the survey, provided outpatient care. Eighth, three hospitals provided cashless

ⁱ For the detailed description of the survey, refer Varatharajan et al. 2009. *Banking for better health: Medisave for rural women in Karnataka, India*. Thiruvananthapuram: Sree Chitra Tirunal Institute for Medical Sciences & Technology.

inpatient care including delivery; only those institutions identified by the women and capable of providing delivery care were shortlisted for this purpose. Ninth, two gender experts offered consultation on gender and women's health care issues.

3.5.2 Chosen areas for the experiment

The major task of the experiment was to bring socially and economically challenged rural women into the formal banking system and to inculcate a habit of savings exclusively for outpatient care expenses, which the beneficiaries never ever did in the past. Three districts, where development banking was a priority, were chosen for the experiment; their combined population was 4.8 million or 9% of the state population. As shown in Table-4, the districts had LOWER state income, life expectancy, health and human development indices, and HIGHER infant mortality rate. In the chosen districts, 30.3% of deliveries did not receive skilled assistance in 2005-06; 9.4% of pregnant women did not receive antenatal care; and 61% of them received only less-than-optimal antenatal care.⁴²⁻⁴⁵

Table-4

Human development profile of the chosen districts (2001-02)⁴⁵

Indicator	District			State average	Top ranked district
	Dharwad	Haveri	Mandhya		
Population (share in state total, %)	3.0	2.6	3.4		12.3
Rural population (%)	45.0	79.2	84.0	66.0	11.9
Share in state income (%)	2.9	1.9	2.6		22.5
Human development index	0.64	0.60	0.61	0.65	0.75
Health	0.62	0.62	0.63	0.68	0.75
Income	0.55	0.49	0.51	0.56	0.67
Education	0.76	0.70	0.68	0.71	0.89
Female life expectancy at birth (years)	62.4	63.2	63.9	67.0	69.3
IMR (per 1,000 live births)	69	66	62	55	44
Female literacy - rural (%)	47.7	54.5	47.7	48.0	73.0
Female work participation rate (%)	28.6	33.7	33.9	32.0	41.7

3.5.3 Choice of women

The experiment included a select group of 600 women (200 from each district) from among those who expressed their willingness to participate. Given that saving by the poor is likely to come in small increments, medical saving accounts specifically opened for the poor women allowed them to deposit money in small amounts for future use, without minimum balance requirements and use them for health care purpose as and when the need arises. The women were drawn from 27 villages identified as 'backward' on the basis of their backwardness measured in terms of banking intensity (number of bank accounts per 1,000 people).

Enrolment was based on the survey results and women's willingness to participate. Only women who expressed their willingness to participate were considered for enrolment. For the purpose of making the spread of enrolees more representative of the population, women were grouped into 48 socio-economic sub-groups based on their social class, level of poverty, literacy, and health care decision-making. Within each sub-group, the choice of women enrolee was based on

additional criteria such as employment status, income, ability to spend money, access to television, and nutrition intake so that the chosen women truly represented the community to which they belonged. Before seeking their consent, women (who expressed their willingness to participate), their families and community members were met in groups to explain the purpose and the implementation process.

3.5.4 The enrolment process

Once women were identified based on their socio-economic status, they were individually contacted for enrolment. A matched substitute was kept ready for each potential enrollee in case the first identified woman changed her mind. In some cases, we had to go for a second substitute because the first two either changed their mind or were not allowed to join. The enrolment required opening of a bank account in each woman's name with the local branch of the government national bank. Besides, informed consent to enrol, a separate authorization letter was obtained from each woman authorizing the local NGO to recommend deduction of health care expenses of the woman from her account on a monthly basis. Each month, the NGOs collected the bills from the physicians and recommended a deduction from the respective women's accounts. The sum accrued was passed to the respective physician.

The enrollees were regularly met individually and in groups to explain the experiment features, banking and health care processes, and to share their experiences. These unbanked or bank-illiterate women were also taught to read various entries, particularly the balance, in their passbooks. Enrolees enthusiastically participated in such meetings and learnt about various features and processes. In fact, this empowerment was one of the major long term outcomes of the experiment. Figure-3 provides the snapshot of enrollees participating in one such routine review meeting. The meetings were usually organized in temples. Spouses of these women too came along with them in the beginning, but they stopped coming once confidence was established.

Enrolees, on their part, gathered together in groups every month to collect and consolidate the deposits of the enrollees and took turns to deposit the sums in the respective bank accounts so as to reduce the transport cost. Since the women were taught to read the passbook, they checked the entries in their respective passbooks once the care taker woman returned.

3.5.5 Financial resources

Each of 600 women, without a bank account, opened an individual savings account in her name. In order to freeze the account for other purposes than health and as an incentive to participate, each deposit was matched by an equal sum not exceeding US\$ 2 per month. Hence, financing sources for outpatient care were women's own savings and the matching incentives provided from the research grant. A separate arrangement was made with an insurance company to provide cashless group insurance (benefit up to US\$ 250) to the enrolled woman, her husband and two children.

In order to estimate women's actual savings, bank records in three local branches of a government national bank were tracked periodically. Bank records separately provided details of the women's deposits and the matching grant deposited into their accounts. They also detailed the withdrawals, which were only health care purpose indicating the money used by the women for health care purpose.

Figure-3

Enrolees in review meeting



3.5.6 Health care provision

Preferred providers, as voted by women during the survey, were met individually to ascertain their qualification and willingness. Seven (six non-government and one government) outpatient care providers were chosen from the same village to service about 85 women each. In some areas, it was difficult to find a qualified physician and so, the one from a neighbouring village was chosen. For inpatient care, three hospitals (one in each district) qualified as insurance providers were chosen.

Each woman was required to use only her chosen provider when in need and each provider was given the list of women enrolled with him/her. A notebook carrying the woman's name, age, address, photo, and the provider's name was given to each woman. Women were not required to pay at the point of delivery of service so long as the bank balance (deposit, matching sum and interest) exceeded the treatment cost; providers were given an updated balance every month. A fee (50% of market price) of US\$ 0.25 was agreed to be deducted for each consultation. Providers wrote the treatment cost (with break-up) in the notebooks and it was reimbursed monthly. Inpatient care was provided cashless and the insurer reimbursed up to the benefit ceiling.

3.5.7 Monitoring and evaluation

The community advisory board in each district regularly met and discussed about the progress, disputes and problems. It tried to find immediate local solutions for problems and disputes. In addition to notebooks detailing care seeking, each woman was visited periodically by NGOs to record her well-being and care seeking. After one year, a resurvey of 1,800 women (600 enrolees and 1200 matched non-enrolees) was carried out to assess the impact. Advisory board minutes, note books and NGOs' ledgers, provided valuable inputs for evaluation. In addition, independent evaluations were done by health system development teams and local NGOs to check whether the experiment empowered women and enhanced their healthcare access.

3.5.8 Ethical considerations

There was no open risk for the community/women. Since it was a research-cum-action experiment, there were benefits like empowerment, bank account, incentive, and improved healthcare access. Purpose and potential benefits/risks were clearly explained and those unwilling were excluded. Participants were also allowed to withdraw without any penalty and details of local contact persons were given to them. Separate informed consent was taken for survey and enrolment. The proposal was also subjected to ethical review and was cleared by an Institute Ethics Committee.

4 Major findings

The experiment was carried out in an intense manner with all possible checks and balances built in internally. Areas and people were carefully chosen to make them representative of the districts. The chosen were socially and economically backward; banking and human development were low too. Although the chosen areas were backward, people from all social and economic classes were included to make it truly representative of the population in full. So, it was not a targeted approach and the idea was to include all sections of the people to observe differences, if any, in their saving and health care seeking behaviours.

4.1 Willingness to save

The survey indicated an average willingness to save of INR 38.26 (US\$ 0.87) per month or 2.2% of household income; regular news readers were willing to save 39.7% more and widowed/divorced women were willing to save 10.5% less. Poverty did not seem to have any impact on willingness to save; poor women (below the poverty line) were willing to save US\$ 0.83 or 2.4% of their monthly household income while the non-poor expressed their willingness to save US\$ 1.08 or 1.9% of their household income. In other words, poor women were willing to save more in relative terms. Provision of the matching grant increased the willingness to save by 92% from US\$ 0.87 to US\$ 1.67. Maximum WTP for a community-based insurance in the same population was as Rs. 163.48 (US \$ 4.49)^j yielding a monthly average of US \$ 0.37 (range US \$ 0.27 - 1.37).⁵⁰

4.2 Socioeconomic profile of the enrolled women

Six hundred out of 4,601 women, who expressed their willingness to participate, were recruited for the *medisave* experiment. The enrolment was designed in such a way that they represented their respective population sub-groups. In other words, the group of women enrolled included women from all socio-economic sections - poor and non-poor, literates and illiterates, highest and lowest social class, autonomous and non-autonomous, etc.

^j 1 US \$ = Rs. 36.40 (as on 31st October 1997).

Socio-economic profile of the enrolled women is given in Table-5. The extreme top left cell in the table indicates the most disadvantaged women - lowest social class, poor, illiterate, and lacked autonomy to seek health care; they accounted for 6.9% of enrolees. On the other hand, the bottom right extreme cell represents the relatively advantaged women - highest social class, non-poor, literate and enjoyed autonomy to seek health care; they were 1.3% of enrolees. In other words, enrolees represented the entire socioeconomic spectrum. In rural context, however, lines separating various socio-economic sub-groups are often thin although extremes are clearly distinguishable.

Table-5

Socio-economic profile of the enrolled women (no. of women)

Social class	Literacy	Economic profile						Total
		Decision making on own health care						
		Below Poverty Line			Above Poverty Line			
		Others	Joint	Self	Others	Joint	Self	
Scheduled Caste/Tribe	Illiterate	41 (6.9)*	19 (3.2)	27 (4.5)	4 (0.6)	3 (0.5)	2 (0.3)	96 (16.0)
	Literate	8 (1.4)	5 (0.8)	5 (0.8)	3 (0.5)	2 (0.3)	1 (0.2)	24 (4.0)
Most Backward Community	Illiterate	16 (2.7)	14 (2.4)	12 (2.0)	4 (0.6)	2 (0.3)	0 (0.0)	48 (8.0)
	Literate	4 (0.6)	3 (0.5)	1 (0.2)	3 (0.5)	1 (0.2)	0 (0.0)	12 (2.0)
Backward Community	Illiterate	59 (9.9)	21 (3.5)	51 (8.5)	16 (2.7)	4 (0.6)	4 (0.6)	155 (25.8)
	Literate	33 (5.5)	9 (1.5)	24 (4.0)	9 (1.5)	3 (0.5)	3 (0.5)	81 (13.5)
Forward Community	Illiterate	33 (5.5)	30 (5.0)	19 (3.2)	17 (2.9)	11 (1.8)	5 (0.8)	115 (19.2)
	Literate	19 (3.2)	14 (2.4)	8 (1.3)	11 (1.8)	9 (1.5)	8 (1.3)	69 (11.5)
Total		213	115	147	66	36	23	600

** Figures in parentheses are percentage to total (600)*

As against 60% of poverty in the overall context in the study areas, the rate of poverty among the enrolees was 79.2%. Similarly, 69.3% of them came from lower social classes as against the population average of 65.1%. In other words, more proportion of poor and socially backward women were enrolled compared to their representation in the population. On the other hand, proportion of illiterate women exactly matched with the local population figures. However, proportion of women having autonomy to seek health care was higher (53.5%) for enrolees than others.

4.3 Resource mobilization potential

In one year, 599^k women together saved INR 274,297 (US\$ 6,206); average saving per woman was INR 458 (US\$ 10.36) or 2.3% of their annual household income. All the women, except 17.7% of them, visited the bank at least twice and 19.7% at least 10 times during the year to deposit money. Together with the financial incentive (US\$ 9.57) and the bank interest (US\$ 0.41), total money available for outpatient care per woman per annum was US\$ 20.34 (range US\$ 0.48 - 46.49) or 4.5% of their annual household income; the financial incentive did not seem to have influenced the saving behaviour much because only 44.2% of the allocated financial incentive was used. Given the cost of outpatient care among those who availed the facility (US\$ 1.92 per episode for consultation and medicines), the accumulated money would be sufficient to treat about 11 episodes per woman per year. Average number of illness episodes reported among these women was 2.1 per annum indicating that their savings alone would be sufficient to finance all their outpatient care needs.

Pearson chi-square test results indicated that social and employment status were not a major determinant of annual savings (Table-6). In fact, socially backward and unemployed women saved more than the socially forward and employed women; the former contributed 40.5% to total saving. Multinomial logistic regression results showed an Odds Ratio of 1.948 (CI 95%) in favour of the socially backward class women in comparison to the socially forward class (Table-7). Similarly, the Odds Ratio for the employed is found to be 0.554 indicating that the unemployed were more likely to save than the employed. Similarly, age, literacy, autonomy and poverty did not influence annual saving.

4.3.1 Willingness Vs ability to save

For these group of women, their actual saving more or less matched with their willingness to save; their average annual saving was US\$ 10.36 while their average willingness was US\$ 10.44. However, actual savings exceeded their willingness in the case of 330 (55.1%) women while it fell below 25% for 75 (12.5%) women. Although the range of actual annual contributions (US\$ 0.23 - 23.76) fell within the willingness to pay range (US\$ 0.11 - 27.27), there was no direct influence of willingness to pay on actual contribution. This was true for all the socioeconomic groups including the literates and those who had financial and health care autonomy.

^k One woman died after the enrolment

Table-6

Aggregate annual savings by socioeconomic status, age and autonomy: Pearson chi-square test results

Socioeconomic group	No. of women	Average annual saving		Share in total saving (%)	P value
		INR	US\$		
Social status					
Forward	180	436.21	9.91	28.6	0.001*
Backward	232	478.36	10.87	40.5	
Most Backward	49	489.80	11.13	8.8	
Scheduled Caste/Tribe	139	437.41	9.94	22.1	
Literacy					
Literate	192	455.12	10.34	32.1	0.809
Non-literate	408	457.16	10.39	67.9	
Poverty					
Non-poor	115	442.91	10.07	18.6	0.151
Poor	485	460.64	10.49	81.4	
Health care autonomy					
Autonomous	142	428.29	9.73	22.2	0.314
Non-autonomous	458	466.13	10.59	77.8	
Financial autonomy					
Autonomous	112	456.21	10.39	18.6	0.239
Non-autonomous	488	457.38	10.40	81.4	
Employment					
Employed	458	442.94	10.07	74.0	0.043*
Unemployed	142	503.04	11.43	26.0	
Age (years)					
18-30	250	478.17	10.87	43.6	0.373
31-45	255	435.63	9.90	40.5	
46-60	85	464.82	10.56	14.4	
60 ⁺	10	416.00	9.46	1.5	

* Statistically significant

Table-7

Social class, income earning and *medisave*: Multinomial logistic regression results

Variable	Reference group	OR	95% Confidence Interval	P value
Socially backward class	Forward class	1.948	0.242 - 0.056	0.004*
Income earner	Non-earner	0.554	0.272 - 0.530	0.001*

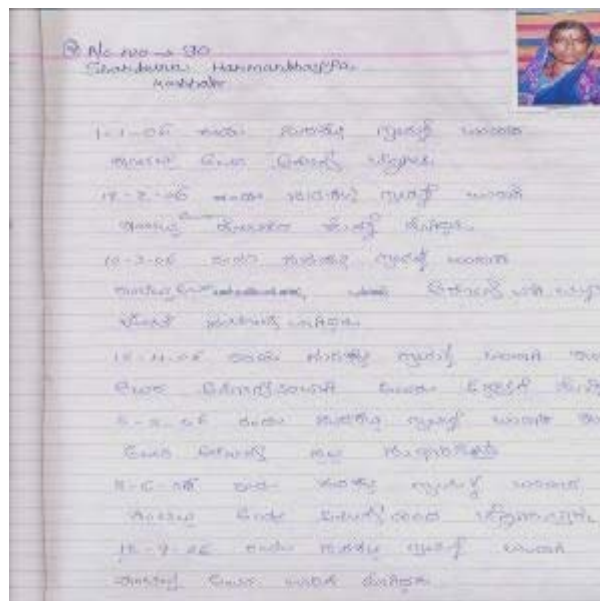
* Statistically significant

4.4 Resource use for outpatient care

Ledgers maintained by the NGOs captured the health status and health care seeking behaviour of the enrolled women; figure-4 shows one of the ledger pages. Periodic (every two weeks) documentation of their health care utilization (or non-utilization) revealed that there were a total of 1,256 illness episodes (2.1 per woman) reported by the enrolled women; 31.2% of them did not report any illness in one year. Out of these, 55.6% of the episodes received treatment; the designated physicians accounted for 61.2% of them. That is, *medisave* financed about 61.2% of the women's annual outpatient care bills; it could be even more because the cost of care was low elsewhere (government facilities or less than fully qualified practitioners). Over 70% of the women sought care when ill and 38.3% of the ill went to the designated physicians; rest of them received care from government facilities or less than full qualified private practitioners. Overall, 21.8% of the enrolled women (38.3% of the sick women) actually used the *medisave* financing facility.

Figure-4

A page from a ledger of a woman enrolee



Reasons for their outpatient care visits (designated physicians or others) were cold, cough or mild fever (21.4%), body pain (17.9%), antenatal care (14.3%), and reproductive health problems (10.7%). Most cited reason for non-treatment was non-serious illness (requiring just home remedies). Women bypassed the designated physicians due to their inconvenient timings or because the alternative was free (government facilities) or cheap (less than fully qualified practitioners).

A total sum of Rs. 36,278 (US\$ 821) or 13.2% of their annual saving was spent on outpatient care consultation and medicines); overall, 6.8% of the total available balance (savings + matching grant + interest) was used in one year. Average outpatient care spending per woman was US\$ 2. Average cost per episode was estimated as US\$ 1.92.

4.4.1 Health insurance for inpatient care

Women or their family members sought inpatient care for accident-related surgery, other surgery, delivery (normal or C-section) and other hospitalisations. Only less than 5% of the enrolees or their family members availed health insurance benefits in each district. Total claim by each enrolee ranged between US\$ 90 and US\$ 225. However, the experience with health insurance was not pleasant for them mainly because many claims were related to the pre-existing illnesses not covered by the insurance. Similarly, some deliveries were not covered for the same reason. Although stated to them prior to the enrolment, they did not comprehend the term 'pre-existing conditions'.

4.5 Straight from the field

In addition to quantitative details concerning health status and health care seeking, the ledgers also captured some qualitative observations. Besides, independent evaluations were sought from another women's NGO not involved in the study and a gender expert. Some of their key observations are quoted here.

4.5.1 Enrolee observations

Enrolees were generally found to be very enthusiastic about the experiment and made some positive observations about their experience with *medisave*. Many enrolees repeated similar observations and we quote some of them.

"Because of mediseva,¹ I am regularly going for antenatal care visiting the same doctor. Or else, I would have skipped some visits and visited different doctors for different visits"

- Ms. Rajeshwari (22 years), *Kalkotti* village, Haveri district

"Now, I have money in my account and hereafter I don't have to run around for money when I fall ill."

- Ms. Gauramma (28 years), *Thyloor* village, Mandhya district

"We are happy about mediseva. It is a new type with rich benefits for the BPL (Below Poverty Line) families."

"Some of us have not seen a bank before. Now, through this experiment, we are getting an opportunity to know about a bank and its operations. We can take advantage of it and utilize bank services hereafter."

"We have learnt to save money for future health purpose."

- Participants in a routine enrolee meeting, *Gangigatti* village, Dharwar district

¹ *Medisave* was called as *mediseva* by the local community.

4.5.2 Non-enrollee views

Some non-enrollees too expressed their views on *medisave* during some public meetings organized to explain *medisave* features and progress. We quote some of them as observed by both women and men.

"Mediseva helps us to save before we are ill. Hence, I would like to join".

- Ms. Thangamma (40 years), Kalkotti village, Haveri district

"From my village alone, another 100 people are willing to join this. Unlike SHGs, which promotes savings and investment, mediseva is the only one for health purpose".

- Ms. Manjula (30 years), Thyloor village, Mandhya district

"We are seeing the beneficiaries going to hospital although they are poor. These are the people who never visited a hospital before. They have demonstrated that we could also do so if we join mediseva".

- Mr. Kampaya (60 years), Thyloor village, Mandhya district

4.5.3 Evaluation by a gender expert

A public health expert with gender specialization carried out an independent evaluation of the experiment. Her comments presented during the dissemination workshop are presented here. She observed and we quote,

"An earlier study in Karnataka has clearly demonstrated that people, even those from low-income and low-literacy levels, are able to make 'rational' choices in health. Building upon those efforts, this experiment attempts to overcome one of the shortfalls experienced in most SHGs - women are never able to use the resources that they garner for their own health purposes. By bringing formal sector banking facilities closer to individual women, this initiative attempts to help women to move closer to the monetized global economy. It also extends the understanding of socially responsible banking beyond the present opening of rural branches and loan schemes for farmers".

Another evaluation was also carried out by a health economist. He brought the development dimension of *medisave*, particularly its potential to create economic opportunity for the women and its link with their health care seeking. He observed that the prevailing SHG environment was conducive for the success and scaling up of the *medisave* experiment.

4.5.4 Evaluation by a women's NGO

In order to secure an external opinion on the progress and achievement of the experiment, an evaluation was carried by a women's NGO. This NGO operates in the neighbourhood of

Mandhya district and its evaluation was carried out in Mandhya district. Here are the main observations.

"Medisave tries to develop a contribution model and has identified the real-needy beneficiaries. With all enthusiasm, the local NGO and Bank functionaries have motivated the poor to start banking for better health. The bank, Insurance Company, the local NGO, health care providers, women beneficiaries, non-beneficiaries, and everybody are enthusiastic and expressed satisfaction about its functioning and desired that it should continue for some more time as they feel the gestation time to utilize the benefits is short. The District (Health System) Commission has also expressed its willingness to recommend the model to the government of Karnataka for replication. The enrolees are acting as change agents and motivators for the rest of the community to think and act on their participation in the experiment".

Local health system development teams also visited two of the experiment sites in two districts and met the enrolee women.

5 Can *medisave* be a sustainable option for financing outpatient care? Lessons learned from the *medisave* experiment

The basic conceptual model behind the *medisave* experiment advocated a combination of savings and insurance to finance health care. The overarching goal was to streamline and, to some extent, minimize the household out-of-pocket spending on health. The experiment combined women's empowerment and banking approaches to do that. Women's empowerment and rural banking have already received considerable attention in India following the advent of microfinance. However, non-insurance mechanisms, fairly successful in other sectors, are weak in health sector. So, the experiment was new and challenging to this extent.

When the experiment was planned, certain basic doubts cropped up about its value addition and relevance to the local health financing context, particularly concerning the poor women. Such doubts can be summarized under the following six broad headings:

- Women's willingness and ability to participate
- *Medisave's* resource potential
- Health care seeking and resource utilization
- Ethical issues concerning banking and health care
- Health insurance as a complementary option
- Sustainability

The major concern was about the feasibility of such an experiment in a resource-poor settings where gender power relations, particularly concerning health care and finance, are unfavourable to women. Here, we analyse the lessons under these six broad headings.

5.1 Women's willingness and ability to participate

5.1.1 Willingness to participate

Willingness to participate, in reality, carries two different connotations viz., hypothetical and real. When the women were given a well explained hypothetical *medisave* situation and asked whether they would consider joining, the reply was quick and straight forward; 53% expressed their willingness to join and 47% declined. Later on, it was clear to us that a mere expression of willingness in a survey context was different from actual willingness to join. Even those who expressed their willingness to participate during the survey declined to enrol; the rejection rate was near 100% in some places. The willingness rate of 53%, expressed during the survey, probably declined to about 30% at the time of enrolment. Even the promise of a financial incentive in the form of a matching grant did not help; in fact, it made them to think that the intention was to 'cheat' them. In some places, although initial willingness was many times higher than the required number to enrol, we did not have adequate number of women to join and we had to approach those women who expressed their unwillingness during the survey; they agreed too.

The decline in willingness was mainly due to their ignorance about the banking process. Since money was involved and the fact that they were predominantly poor, women simply refused to part with their hard earned money even if it was a deposit with a government bank. In some cases, men took the position that women from their household expressed their willingness without consulting them since it was only a survey. They did not allow the women to join; they did not even allow the enrolment team to meet the women to seek their consent. It required several rounds of group meetings with men and women separately and together to explain the concept of *medisave*. The formation of a community advisory board with a prominent community leader, physician and the bank manger finally helped the cause.

The initial rate of willingness to participate (53%) itself was relatively low compared to the rate expressed in an earlier survey on willingness to pay for a community-based health insurance in the same population. This may be due to the complexity of the term '*medisave*' compared to the term 'insurance', which was already known to the rural population because life insurance has been in use for nearly four decades.

After six months of *medisave*'s introduction in the area, the willingness rate shot up very high, probably to reach about 80%. Those who declined to join after expressing their willingness during the survey came back to ask whether they could participate. The women who expressed their unwillingness during the survey too came and said that they did not thought that their opinion would count in the actual enrolment. Their negative reply, they said, was mainly due to the reason that they were not able to consult men or seniors in the household at the time of the survey. Meetings held by two high profile government health system teams on this project also increased the awareness about *medisave* and built confidence about the experiment among the population.

Lesson-1: Willingness to save/pay based on a population survey has its limitations to serve as a programme planning tool. The rate of willingness tends to be high in an entirely hypothetical situation, wherein no programme is planned or explained. The rate declines in a quasi

experimental situation, wherein the willingness is estimated for a particular programme with clear description. It further declines in a real programme context, wherein the willingness is sought to actually enrol into a programme. Demonstration of benefits, however, boosts the rate of willingness. In this experiment, the key message delivered was 'save before the illness strikes'.

5.1.2 Ability to participate

Since *medisave* meant two entirely new aspects - banking and formal health care - for many women, it took a while and some efforts before the women actually participated (making deposit when possible and seeking care when needed). After the enrolment, enrolees were met individually and collectively to make them aware of the banking, health care and financing processes. They were taught about the 'know-how' of a bank passbook, particularly to verify various entries such as the deposit, matching sum, and the interest. Also, they were informed about the notebooks (in which the physician entered the treatment and cost of care details) and the need to carry them with them. The initial hurdle in the banking process was the required mandatory minimum balance of about US\$ 5, which was a big sum for the rural women to 'lock up'. Several months of saving was required to accumulate just the minimum balance because they saved in small increments of, say, US\$ 0.20 - 1.00. The bank finally agreed to keep the minimum balance down to US\$ 0.20 for these women. Another constraint was that the women did not have any photograph of their own and the bank required their photographs. In some rural areas, women were not allowed to be photographed due to cultural reasons. All these hurdles had to be overcome before they opened their accounts.

After the opening of their accounts, many women did not initially turn up to the bank to deposit money for about two months because they wanted to wait for others to make the first move. Since they did not fully understand how the banks operated, they were hesitant to deposit money without knowing what would happen to their deposits. The visit of a government health system development team to explain about the experiment served as an assurance and the enrolees started making deposits periodically. Only three women out of 599 actually deposited during all the twelve months.

Some villages were hard-to-reach places and lacked frequent public transport. Since the bank was located in another village and the women would lose wages (besides transport cost) if they attempted to go the bank, the women had to make alternative arrangement to deposit the money. In such cases, the enrolees formed a group and on each occasion, one woman collected the deposit from others and travelled to the bank to deposit the money into the individual accounts. Since the women were taught to read the passbook, they checked the deposit and the balance after the every deposit was made.

The women required about a week to accumulate even a small amount of US\$ 0.20. They make 'local' savings of very small amounts to build it considerable enough for a bank deposit. They kept their local savings underneath their pillow, if they had one, or inside an earthen pot. These were thought to be 'safe' places within the household. There were instances of other household members, mostly men, 'stealing' such small savings before reaching the bank. However, the women felt that such instances of men taking away money from them were reduced because of *medisave*. Some men did not allow their household women to make 'dead' investments because they were not allowed to withdraw the deposit for any other purpose than health.

Lesson-2: There exist knowledge and infrastructure bottlenecks slowing down the implementation process of programmes that target empowerment and full participation. There are household barriers too while accumulating enough savings to make a deposit.

5.2 *Medisave*'s resource potential

Average annual domestic saving (without the matching sum and bank interest) per woman was US\$ 10.36. This is equivalent to 72.3% of the annual per capita OOPs (US\$ 14.33) in Karnataka. If the incentive and the bank interest are added to the domestic savings, then the total sum available for health care through *medisave* was US\$ 20.29 per woman or 141.6% of the estimated OOPs per capita. In other words, per capita saving may be just adequate to finance outpatient care needs of the women in rural Karnataka.

Initial apprehension was that the women might save an amount adequate enough to grab the financial incentive (matching grant) of US\$ 2 per month. However, average monthly saving of a woman was US\$ 0.86 or 47.5% of the matching grant; only 43.7% of the matched grant was actually used. On the other hand, average monthly saving of some women was about US\$ 4 or 221% of the matching grant. Therefore, women's savings were not primarily driven by the financial incentive.

However, the same level of saving may not be achievable without the financial incentive and a close monitoring of the saving, health care and financing. About 20% of the women dropped out of *medisave* after the financial incentive was withdrawn. So, it is difficult to speculate about the resource generation potential of *medisave* although it may be safe to say that a per capita saving of about US\$ 5 -10 per annum is achievable in the rural Indian context. Given that Karnataka's per capita health spending is lower than the Indian average, the achievable amount may be slightly higher in other Indian states with higher per capita health spending.

Lesson-3: Under certain conditions, domestic savings could generate sufficient resources for financing health care, particularly outpatient care, in some rural contexts.

Lesson-4: Financial incentive in the form of a matching sum may not boost the amount saved beyond a point. However, it is possible to generate full-proof financial incentive if it is routed through a well-developed formal transfer mechanism; in our case, it was a bank.

5.3 Health care seeking and resource utilization

One major effort as part of the experiment was to link the rural women with qualified health care practitioners. The use of less-than-fully qualified (LTFQ) practitioners was so high that it was even difficult to find qualified physicians in some villages. The population survey sought the women's preferred choice of health care providers in the area and they were asked to list three. In many cases, all the three providers happened to be the LTFQs. In this experiment, at least 61.2% of the health care was provided by qualified physicians indicating that the proportion relying on the LTFQs might have come down. Many women stated that they went to qualified physicians for the first time and some pregnant women mentioned that they had completed full course of antenatal care mainly due to *medisave*. Deliveries, which otherwise would have occurred at home, were attended by qualified gynaecologists in well-equipped institutions. Of course, this was facilitated by health insurance, not *medisave*. The flip side, however, is that 44.4% of the illness episodes were left untreated either because they were non-serious or were 'treated' at home.

Similarly, 38.8% of episodes received treatment from other sources due to their suddenness, and availability of 'close' substitutes.

Some women used the formal health care system for the first time and demonstrated to other comparable women that quality health care, including delivery care, was affordable. *Medisave* also helped to institutionalize some deliveries, which otherwise would have occurred at home. Less than fully qualified providers were still a source of outpatient care for minor ailments due to their proximity to the local population, low fee and flexible timing.

Lesson-5: It is possible to create conditions to enable the rural women to access formal health care, where it exists.

5.3.1 Resource utilization

Resource utilization was less than 7% of the total available resources and 13.2% of the total saving. Low resource utilization was partly due to the time gap between the saving and resource requirement. Another reason was that over one-third of the women did not require treatment as they were healthy. Only concern was about 40% of the women who were affected by some illnesses, but did not use *medisave* resources. Of course, it was not possible to verify how many of them really required treatment.

An *a priori* concern was that women might treat this experiment purely as a saving model and therefore, might not use the saving for health care. This was proved wrong in the end because 61.2% of treated episodes were financed by *medisave*.

Another apprehension was that the women might indulge in fraudulent practices by using the resources for men and others. Although about 80% of the women were very poor, no dispute concerning misappropriation of money was reported from any one of the 27 villages. Moreover, the design was such that it was not possible to misuse the resources. The physician in the community advisory board was in a position to verify any misappropriation. But, she/he was not required to do because there was no such incident.

Lesson-6: Due to relatively low cost of formal health care in rural areas, resource requirement may be kept low, if the resources are prepaid. In this case, saving was used a prepayment mechanism. Additional cost in the form of high-interest loans is reduced.

Lesson-7: Resource saving and spending follow different time and cyclical trend. Since the average age of the enrolees was 37 years, they probably were in the saving side of the life cycle.

Lesson-8: *Medisave*, if collectively organized, could be used as a collective bargaining tool to reduce the consultation fee and medicine prices.

5.4 Medisave as a prepayment option to streamline OOPs

One of the main objectives of the experiment was to streamline, if not reduce, the household out-of-pocket spending. As stated earlier, *medisave* apparently served as a prepayment option for financing outpatient care and women's own saving alone helped to streamline OOPs to the extent of 72.3%. It also brought additional resources into health because saving plus incentive exceeded the state per capita OOPs by 41.6%. Considering low per capita rural health spending, especially

by the women, and the fact that the saving was meant for only outpatient care, the real increase would have been still higher.

A significant contribution of *medisave* was felt in the purchase of medicines. In this experiment, as part of the design, physicians were required to have an agreement with pharmacists for a reduced margin as well as delayed payment of medical bills. This really helped because medicines consumed the highest share (77.6%) of *medisave* resources.

While the saving potential was demonstrated through *medisave*, women still incurred some OOPs to the extent of 38.8%. In other words, OOPs can not be totally eradicated even through a close experiment such as this. Some level of OOPs will still persist due to various reasons. Moreover, streamlining of OOPs through banks requires wide existence of banks and their willingness to 'tolerate' the slow saving process involving numerous small non-periodic increments of savings from the rural women and very small amount of funds collected.

Lesson-9: Under certain conditions and with appropriate incentives, *medisave* could be a prepayment mechanism for streamlining OOPs. However, in the short run, it cannot generate adequate resources to meet catastrophic expenditures. Also, it cannot eradicate OOPs completely.

Lesson-10: Medicines, particularly used in the outpatient setting, are generally not reimbursed even by health insurance. *Medisave* could be an appropriate funding mechanism to finance medicines, even in rural and outpatient care settings.

5.5 Ethical issues concerning banking and health care

Replication of this model requires cooperation and support from banks and health care providers. In some settings, it is possible to commit fraud in banking and provision of health care. Small depositors may not be respected and it might discourage them from using the bank. Also, if the banking process is too time consuming, rural people relying heavily on subsistence wage may not be interested in banking. Similarly, good physician behaviour is crucial for the success of this kind of experiment. In this experiment, they were required to wait for a month to receive the payment due to them even though the fee itself was below the market rate. Our physicians were extremely cooperative and supportive so that the entire affair was very smooth. The same may not exist in other resource-poor settings.

Lesson-11: Working of this model requires a fair partnership between various stakeholders. In this experiment, it was mediated by an academic institution. Similar mediation may required to make a cost-effective and equitable model of health care financing.

5.6 Health insurance as a complementary option

The initial understanding was that health insurance would play a major part. In fact, health insurance was used as a door opener in the case of some women to attract them towards *medisave* experiment. In the end, experience with health insurance was bitter for many women who wanted to avail health care using health insurance. As poor women, they had some unmet health care needs, which they wanted to address through health insurance. But, health insurance rules did not permit them to avail. Women simply could not comprehend the term such as 'pre-existing illness'. Even delivery was treated as pre-existing when the women was pregnant at the time of enrolment. This is perfectly fine with an insurance point of view, but was difficult to explain to the rural

women. As a result, many women even demanded the premium back. From the initial position of door opener, health insurance slipped to an unwanted element.

Lesson-12: Some insurance terminologies such as the pre-existing conditions, solidarity and pooling are not understood by rural people. In certain contexts, people may prefer mechanisms that pay the money back when not used. *Medisave* was seen as one such mechanism.

5.7 Sustainability of *medisave* in the rural context

Average monthly saving per woman was US\$ 0.86. It was comparable with average monthly saving (US\$ 4.38) of a self-help group (SHG) member in Karnataka for multiple purposes;⁴⁵ SHG members' saving for health could be estimated as US\$ 0.22 or 5% of their total saving. The financial incentive offered as part of *medisave* might have boosted the saving by some percentage. Hence, saving for health created by this experiment is sustainable, which can be gauged from the fact that about 80% of the enrolled women continued to save even months after the withdrawal of the financial incentive. In fact, a saving culture was created among the rural women including non-enrolees from the same and other villages. SHG experience has shown that women saved more with experience.

While the amount of saving and the utterances of women indicate that the model is sustainable, this tight model may not be practicable if we want to scale it up at the state or national level. It requires some fine-tuning before it can be scaled up. Our observation is that women may continue with *medisave*, but not health insurance. The empowerment approach applied by the experiment, its strongest point, really enhanced the likelihood of its continuance by these rural women. Even after more than one year of the withdrawal of the financial incentive, a vast majority of women are still continuing with their bank accounts.

Lesson-13: Sustainability of a mechanism such as this requires certain pre-conditions. In this case, self-help approach already existed in the rural community. Also, rural banking is well developed in India. Where banks don't exist, post offices may be used as 'fund holders'.

Conclusion

The purpose of this experiment was not to promote *medisave* as a resource generation mechanism. Main drawbacks of *medisave* as a resource generation tool are:

- It shifts health care responsibility to individuals
- It cannot pool resources - across the rich and the poor or across the healthy and the sick
- It does not reduce the reliance on OOPs; it only makes it somewhat predictable.
- It is not equitable because it facilitates health care only according to the ability pay.

The experiment merely demonstrated that *medisave* could be used as a prepayment mechanism to streamline OOPs, where it exists and where other alternatives failed. It can be employed only as a transitory tool before a pooled and equitable health financing mechanism is fully developed or as a supplementary tool to finance certain inputs such as medicines that are not covered by pooled mechanisms such as tax funding or insurance.

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