BREAKTHROUGHS IN AFFORDABLE HEALTH CARE:

What 'Health Diaries' tell us about managing health care and costs among women in West Bengal and Jharkhand

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Aikyatan Development Society (ADS)

Aikyatan Development Society is a nonprofit development organization engaged in the self-help group (SHG) movement, health care and livelihoods to address the poverty of poor families in the district of Burdwan in West Bengal, India. ADS's sanitation program with the state government is the largest program of ADS and it is well known for effective linkages with the public health system and SHG strengthening. It was conceived in 1999 with active support of CARE India and became a partner of Freedom from Hunger and Freedom from Hunger India Trust in 2014. Through this partnership, ADS has reached 2,000 SHGs (women's savings and credit groups) with health education in WASH, Nutrition and Anemia prevention.

Bandhan Konnagar (Bandhan)

Bandhan Konnagar (BK) is a nonprofit entity registered under the West Bengal Societies Registration Act 1961. Its main thrust is to alleviate poverty and help bring about women's empowerment. It was founded in 2001 as a pro-poor organization, catering to more than 1 million households across 11 states. Bandhan Konnagar offers an entire suite of development programs in the areas of education, health, securing of livelihood, market linkage, skill development and financial literacy — all focused on turning the lives of the underprivileged around. In 2007, BK started its health initiatives in collaboration with Freedom from Hunger and at present its operation spreads to 7 states. It has reached out to more than 1 million households mainly with mother and child health care issues besides water and sanitation. At present, in partnership with Freedom from Hunger India Trust, Bandhan Konnagar is implementing a project called 'Safe Motherhood Initiative through Linkages and Education (SMILE)' where the study on `Prevent anemia for better health' was conducted.

Freedom from Hunger India Trust

Established in 2012, Freedom from Hunger India Trust (FFHIT) is an independent Indian nonprofit organization based in New Delhi with an office in West Bengal. The technical staff of FFHIT oversee health, nutrition, financial inclusion, vulnerable youth and savings group methodologies and provide expert advice on learner-centered curriculum design. FFHIT's goal is to achieve nutrition and food security, reduce poverty and improve economic and social status of poor and marginalized women and their families through increased integration of financial services with other essential services such as health, nutrition and livelihood opportunities. FFHIT is also an active member of National Coalition of Food and Nutrition Security.

Grameen Foundation

Grameen Foundation is a global nonprofit organization that helps the world's poorest people achieve their full potential by providing access to essential financial services and information on health and agriculture that can transform their lives. In 2016, Grameen Foundation and the global nonprofit Freedom from Hunger decided to join forces under the banner of Grameen Foundation. The integration of the two organizations brings together Grameen Foundation's expertise in digital innovation to end poverty and Freedom from Hunger's focus on providing the world's poorest women with self-help tools to reduce hunger and poverty. Grameen Foundation is headquartered in Washington, D.C., with offices in the U.S., Asia, Africa and Latin America. For more information, please visit www.grameenfoundation.org or follow us on Twitter: @GrameenFdn.

RESULTS Educational Fund

RESULTS Educational Fund (a US-based nonprofit 501(c)(3)) is an advocacy organization working in the United States and around the world on projects focused on three key pillars in the fight to end poverty: 1) health, 2) education and 3) economic opportunity. RESULTS Educational Fund performs cutting-edge research and oversight in these three areas; educates and mobilizes the public, policymakers and the media; and supports powerful citizenship by training volunteers in public speaking, generating media and educating their communities and elected officials on issues of poverty. In May 2016, the Microcredit Summit Campaign merged its structure and operations with those of its parent organization, RESULTS Educational Fund. For more information, please see www.results.org.

Community of Practice for Health and Microfinance

The Community of Practice for Health and Microfinance (COPHAM) in India is an experiment to bring together stakeholders in the health and microfinance sectors to promote universal health care coverage. COPHAM members learn from each others' experience and create strategic partnerships to leverage their complementary strengths. The COPHAM is facilitated in collaboration by RESULTS Educational Fund, the ACTION global health advocacy partnership, Freedom from Hunger India Trust and Grameen Foundation. Aikyatan Development Society (ADS) and Bandhan, whose data is presented in this report, are both active members of the COPHAM. For more information, please see http://healthandmicrofinance.org.

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Acronyms

ADS	Aikyatan Development Society
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWW	Angan Wadi Worker
AYUSH	Ayurveda, Yoga & Naturoathy, Unani, Sidda, and Homeopathy
CHC	Community Health Center
CPI	Consumer Price Index
HSC	Health Sub-Centre
INR	Indian Rupee
IPL	International Poverty Line
JSY	Janani Suraksha Yojana
MASS	Maa aur Shishu Swasthya (Mother and Child Health) Program
MMU	Mobile Medical Unit
NFHS-4	National Family Health Survey 4
PHC	Primary Health Center
PPI	Poverty Probability Index
RSBY	Rashtriya Swasthya Bima Yojana
SHG	Self-help Groups
UFWC	Urban Health and Family Welfare Center
UHC	Urban Health Center
UMPCE	Usual Monthly Per Capita Consumer Expenditure
USD	U.S. Dollars

Background

Despite national efforts to make health care accessible and affordable, and in many cases free, 86 percent of the rural population of India are not covered under any program of health expenditure support.[1] In fact, 69 percent of total health care expenditures are out-of-pocket patient fees charged by private health care providers and in some cases public providers.[2] Health care costs are attributed to more than 63 million people in India being pushed into to poverty every year.[3]

This research brief will present results from a series of "Health Diaries" — or frequent surveyor-administered surveys — conducted with 45 women in West Bengal and Jharkhand, India and will focus on key findings related to treatment seeking behavior, access to services and insurance, how out-of-pocket costs are managed and who makes the decisions in the household regarding health care and how to pay for it.

In 2015, Freedom from Hunger India Trust, Grameen Foundation,[a] and RESULTS Educational Fund launched a collaborative effort called the *Maa aur Shishu Swasthya* (Mother and Child Health) program (*hereafter*: MASS), implemented across West Bengal and Jharkhand with two key financial service partners, Aikyatan Development Society (ADS) and Bandhan. As part of MASS, members of self-help groups (SHGs) served by ADS and village bank clients and community members served by Bandhan-Konnagar (Bandhan Bank's development program arm) participated in an integrated package of financial services, health education sessions and linkages to local health services aiming to improve health outcomes of women and their families.

At ADS, SHGs were also encouraged to save for health expenses utilizing a health savings methodology that mimics Grameen Foundation's *Saving for Change*[b] methodology in addition to their regular savings and loan activities. With the health savings methodology, women first deposit savings into their general group "account" and then repeat the savings process earmarking savings specifically for health. By December 2017, 170,000 women were estimated to have participated in education on health topics such as anemia, healthy pregnancies, menstruation and acute respiratory infections. As of January 2018, 1,555 ADS self-help groups were noted to be saving for health in addition to their regular SHG activities (accounting for approximately 15,550 women who have access to health loans and an annual savings payout earmarked for health expenses).

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[a] Freedom from Hunger, which started this program, merged with Grameen Foundation in 2017. Going forward, the combined organization will be known as Grameen Foundation.

[b] *Saving for Change* is a methodology jointly developed by Freedom from Hunger, Oxfam America and Strømme Foundation for self-managed savings and lending groups integrated with simple trainings in health, business and money management.

Methods

Under MASS, research and evaluation activities have played a key role in helping the partners to understand changes in knowledge, attitudes and practices associated with the health programming as well as to uncover how households planned for and experienced pregnancy and childbirth. Several pre- and post-test studies have assessed outcomes related to education sessions and health provider linkages associated with anemia, healthy pregnancy and menstruation and learning games for girls. This research brief will focus on a research activity known as the Health Diaries and content related to seeking and obtaining health care and its associated costs.

Between May 2017 and December 2017, the Health Diaries, or a series of frequent household surveys were administered by a research firm located in West Bengal, AG Consultancy, with approximately 45 women. The 45 women were purposefully selected so as to capture a range of experiences related to pregnancy. For this reason, pregnant women, women with young children and mothers or mothers-in-law of pregnant women were selected to participate. Fifteen women were tracked among ADS members; 30 among Bandhan clients. The Bandhan clients were split up between Jharkhand (n=15) and West Bengal (n=15).

A total of 10 surveys were conducted every three to four weeks to capture health events (tracking illnesses, accidents, etc.) experienced by the woman or others in her household, how they responded to these events with treatment, how much these events cost the household, how they covered these costs and the perceived burden of the costs. Each of the 10 surveys also had a special theme that focused on a topic of interest that was assumed to influence how households made decisions related to health care. These topics included: household demographics, health preferences, pregnancy and childbirth experiences, income generation, food security, attitudes and perception, gender and intra-household decision-making, education, financial services and program participation experiences.

While this study relies on a small sample size and therefore does not allow for extrapolation or assumptions to be made about microfinance groups or self-help groups, or generalizations about women in Jharkhand or West Bengal, attempts have been made to incorporate similar data from the latest national survey to provide benchmarks to help set this data into the overall context.

Results

Demographics

The average woman who participated in the Health Diary project was between 30 and 45 years old, Muslim and attended school until the 8th standard. She was likely to be married and her husband was the head of the household which had an average of seven members. Someone in her household was likely living with a chronic illness (liver, asthma, leukemia, etc.) and she reported feeling that this illness was affecting her both emotionally and financially. However, over the course of the health diary surveys, she would have reported, on average, that the

general health of her household was "very good." She defined the "good life" as providing a good education to her children, having a source of income, a home and regular food consumption. However, on average, she reported that she would not achieve the "good life" because of a lack of a reliable source of income. Of the 45 women interviewed, 40 percent were found to be chronically food insecure.

What health expenditure support is available and how is it used?

India is working to achieve universal health coverage for the entire population. This means that, in theory, all citizens have access to free comprehensive primary health care services for "all aspects of reproductive, maternal, child and adolescent health and for the most prevalent communicable, non-communicable and occupational diseases in the population."[4]

In reality, at government facilities where this care is given, severe shortages of staff, medicines and supplies limit access to quality medical care and force households to seek private care. This results in devastatingly high out-of-pocket expenses — particularly for those in rural areas. Health care costs are attributed to more than 63 million people in India being pushed into to poverty every year.[5] According to the National Family Health Survey, just 36.1 percent of households in rural West Bengal reported that at least one household member is covered by health insurance. The results are even starker for rural Jharkhand with only 13.2 percent reporting coverage. (Shown in table 1.)

Table 1. Source of health care and health insurance coverage[6]

	Rural Jharkhand	Rural West Bengal
Source of Health care		
Public Health Sector	28.1%	56.7%
Private Health Sector	59.0%	30.0%
Other	12.6%	13.0%
Health Insurance Coverage		
At least one household member covered	13.2%	36.1%
Type of Health Insurance Coverage		
RSBY	93.2%	95.4%
State Health Insurance	2.7%	0%

For those living below the national poverty line and other categories of unorganized workers, the Government of India provides a Rashtriya Swasthya Bima Yojana (RSBY) card. This is cashless insurance for an INR 30 (Indian Rupee) annual registration fee that provides benefits

at accredited government and private hospitals. Coverage is limited to give members of the family INR 30,000 per year for hospitalization and INR 1,000 annual transport expenses. Registration requires travel to an enrollment station and identity verification.[7]

The India Ministry of Health and Family Welfare has voiced concerns about the low awareness of who qualifies for the RSBY card and the lack of understanding in how and when to use it. To complicate the issue further, there have also been reports of denial of services by private hospitals and incidences of fraud.[8]

The health diary data appears to validate the concerns of the Indian Government that beneficiaries lack awareness and understanding of available insurance options. Several of the 10 health diary surveys contained questions regarding health insurance coverage. The results were somewhat varied and contradicted data from prior surveys, which may indicate uncertainty or lack of awareness of available insurance or coverage status. For instance, when asked "does anyone in your household have any health insurance," 58 percent responded "yes." And in another survey, when respondents were asked "does your household have any kind of health insurance like RSBY or Swasthaya Sathi," 59 percent responded that they *did not have* insurance. When asked "if you don't have health insurance, why not?", 62 percent said it was because they were not aware of insurance available and 38 percent responded that they were not eligible.

Health Diary Data:

Does anyone in your household have health insurance?

Most reported no coverage:

- Survey 2 (on health preferences) indicated no coverage for 42%
- Survey 7 (on financial services) indicated no coverage for 63%
- Survey 10 (on program participation) indicated no coverage for 59%

If you don't have health insurance, why not?

Most reported not aware:

- 62% responded that they are not aware of health insurance
- 38% responded that they are not eligible
- 8% responded "other"

Every woman who reported having health insurance said that she had an RSBY card. Regardless, it is clear that the majority of the women reported that they have no health insurance coverage or were not aware of a health insurance option.

Of the women who reported that they did have insurance coverage, 42 percent reported having a Swasthyasathi card. This is a state implemented program in West Bengal that provides a cashless smart card for basic health care for secondary and tertiary care. Coverage is up INR 1,500 Lakh per year. Unfortunately this insurance requires on-line registration which may represent an enrollment barrier for many of the women interviewed in the health diaries.[9]

In the final survey, the women were asked how they would like Bandhan and ADS to support them going forward, a few women, particularly in Jharkhand, mentioned the desire to receive more education on the government schemes that are meant to support them: *"if they tell us about the government schemes then we can get advantages from them."*

Two women who reported that they had health insurance, said that they participated in Samaj Sathi, another state implemented program in West Bengal but rather than health insurance, this program provides personal accident insurance coverage to self-help group members. And finally, one woman reported three forms of health insurance coverage, RSBY, Swasthyasathi and RuPay. RuPay is a government program for electronic payments and again rather than health insurance, this program provides accident insurance up to INR 1 Lakh.

In response to some of the issues with the national health insurance programs listed above, the Government of India established The National Rural Health Mission which is responsible for the following:[10]

- The deployment of Accredited Social Health Activists (ASHAs), community health volunteers who work to link the community to public services, support the improved utilization of services and promote health-seeking behaviors
- Cash transfers to pregnant women for treatment in government facilities under the Janani Suraksha Yojana (JSY) program. Under JSY, low-income women utilize a JSY card to receive cash assistance provided by the medical facility after birth in a maximum amount of INR 2,000 as well as antenatal care and a micro birth plan that helps health workers monitor the care of the woman through her pregnancy and post-natal care

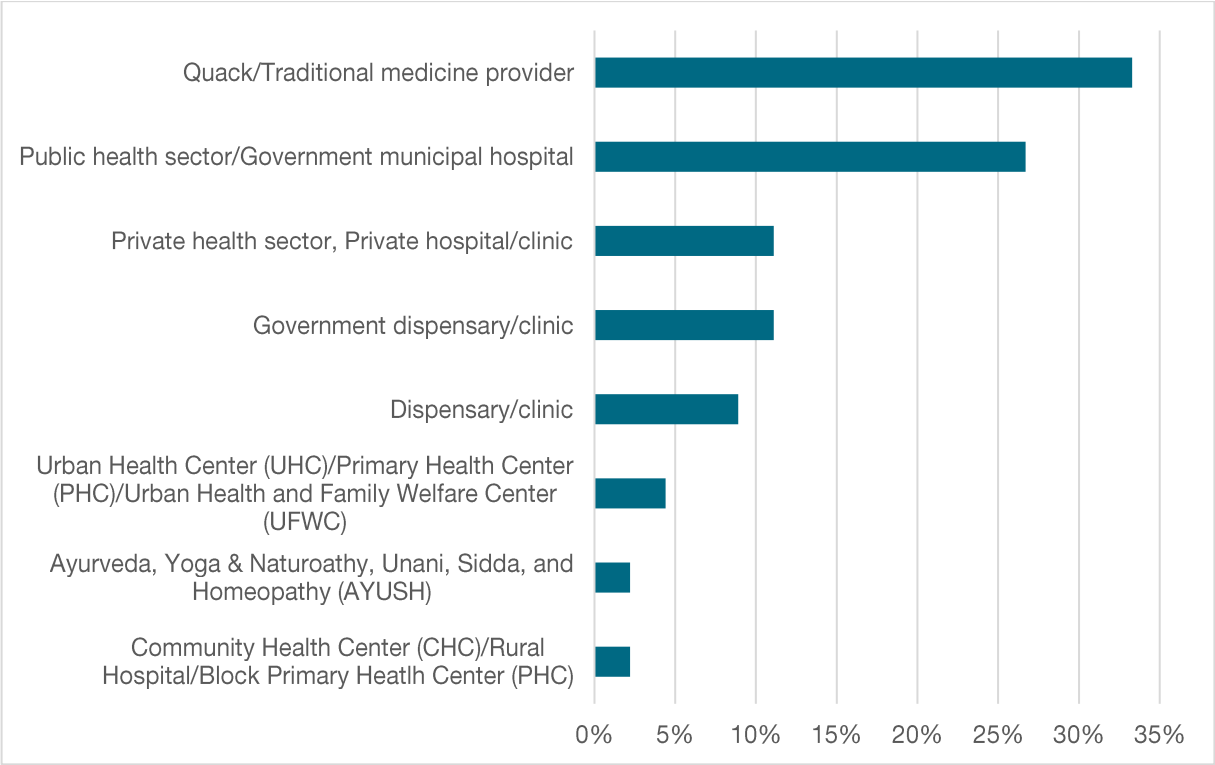
One woman, from West Bengal, shared she went four times to the health center to inquire about her JSY benefit and the auxiliary nurse midwife (ANM) indicated there was no check. She finally gave up. While JSY benefits are supposed to be provided to the woman at the medical facility after the delivery, this does not appear to happen in practice for everyone.

Unfortunately, gaps in achievement of these programs are high. This has been attributed to lack of appropriate budgetary support, inefficiencies in utilizing available funds, poor governance and leakage.[11] Approximately 18 percent of the women interviewed had accessed JSY benefits for childbirth. Of those who did not access JSY and could have, they indicated that due to giving birth at home, they did not qualify to receive this benefit or that someone in their family, mainly their own parents, had given financial support to cover the costs of the birth. Of the eight women who received JSY benefits, seven of them received INR 1,000 and one woman received INR 1,200. When these amounts are compared to the average costs incurred by the women interviewed, the JSY benefit may cover only half of the costs incurred, at best.[12]

Health preferences — place of treatment

Women were asked which place of treatment they used most often. Treatment was most often sought from local unqualified medical providers such as quacks or a traditional medicine providers (33 percent) followed by the public health sector or government hospital (27 percent). The results are found in chart 1.

Chart 1: Place of treatment, survey 2 (on health preferences)



Several women commented on the availability and proximity of a quack in the village:

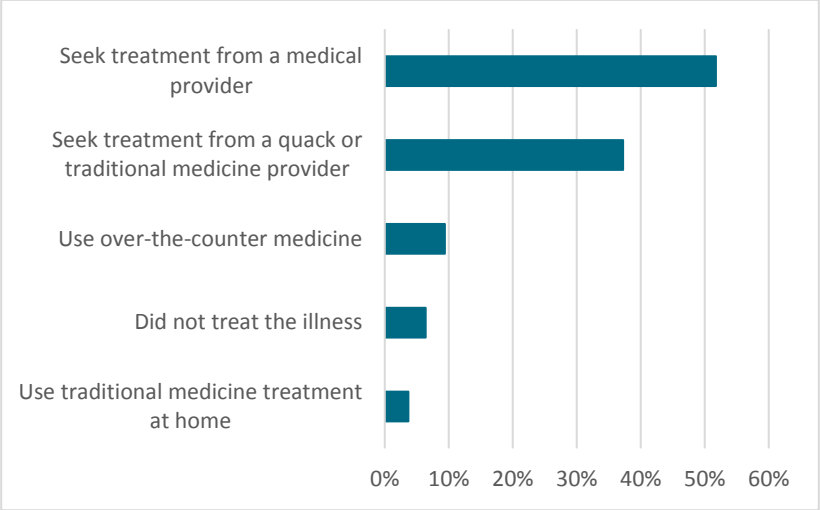
"If we go to this [quack], it costs less money for medical care. He does not go away."

"The [quack] is near at home. Time is lost when traveling to another place, travel costs. We are well treated by the doctor."

"The [quack] is available all the time, medicine cost is very low and I can't go far with kids all the time so we come here."

The two preferred places of treatment stay consistent across all 10 surveys, which ask how they responded to the most severe illness that their household experienced in the previous three weeks. More than one source of treatment was given by many of the women, but more than half (52 percent) reported seeking care from a medical provider; followed by 37 percent seeking help from a quack or traditional medical provider; followed by accessing over-the-counter medicines (9 percent); not treating the illness (6 percent); and using traditional medicine at home (4 percent). These results are found in chart 2.

Chart 2: All surveys, treatment-seeking behavior (multiple answer)



Women were also asked why they sought care where they did. Slightly more than half reported that the choice was made because of quality (53 percent). Whether the place of treatment was not preferred but convenient or whether the place of treatment was not preferred but it cost less were responded to with equal frequency (29 percent).

Health Diary Data, survey 2 (on health preferences):

When asked why these places were preferred when seeking treatment:*

- 53% answered that it was because of quality
- 29% said that the place of treatment was not preferred, but it was convenient
- 29% said that it was not preferred but it cost less

*multiple answer

Looking across all surveys, more than 80 percent of the women reported seeking treatment within two days of the onset of the illness; however, the reported difficulties in seeking treatment may shed light on why the women sought treatment where they did. The majority, or 58 percent, reported that they experienced problems obtaining medicine and 44 percent reported problems with the availability of a health care provider and in obtaining money for treatment.

Health Diary Data, survey 2 (on health preferences):

What difficulties were experienced in seeking treatment?

- 58% reported it was because drugs weren't available
- 44% reported that the healthcare provider wasn't available
- 44% reported that it was because getting the money for the treatment was difficult

Overall, the surveys reveal that the women seek out medical care that they perceive as consistent in both quality and sheer availability of a health care provider along with convenience and affordability.

The burden of out-of-pocket health costs

According to the Ministry of Health and Family Welfare, the share of out-of-pocket health care costs as a proportion of total household monthly per capita expenditure was 6.9 percent in rural areas.[13] However, according to the data collected in the health diary surveys, the burden of health care costs for ADS and Bandhan clients may be much greater. Catastrophic household health care expenditures are defined as health expenditures exceeding 10 percent of total monthly consumption expenditures or 40 percent of monthly non-food consumption expenditures and are unacceptable.[14]

The average medical expenditure and non-medical expenditure for hospitalization in Jharkhand is INR 12,578 and INR 12,841 for West Bengal (2014 INR) as shown in table 2.

Table 2: Average medical expenditure and non-medical expenditure on account of hospitalization per hospitalization case (2014 INR).[15]

	Rural Jharkhand (2014 INR)	Rural West Bengal (2014 INR)
Average medical expenditure during stay at hospital	10,351	11,327
Average non-medical expenditure during stay at hospital	2,227	1,514
Average total expenditure during stay at hospital	**12,578**	**12,841**

Average costs for non-hospital medical expenditures per person suffering from only one ailment over a 15-day period totaled INR 569 for rural areas, and INR 685 for urban areas, with the highest spending occurring at private hospitals as shown in table 3. The average of these

costs is INR 627, which translates to a daily cost of INR 42 (2014 INR). It is important to remember that these costs represent direct medical expenses only, for one person and for one ailment.

Table 3: Average total non-hospital medical expenditure per ailing person suffering from only one ailment for a 15 day reference period[16]

	Rural (2014 INR)	Urban (2014 INR)
Health Sub-Centers (HSC), Primary Health Centers (PHC) & others*	311	366
Public Hospital	456	391
Private doctor/clinic	580	659
Private Hospital	791	958
All	**569**	**685**

*includes Auxiliary Nurse Midwives (ANM)/Accredited Social Health Activist (ASHA)/Angan Wadi Worker (AWW)/dispensary/Community Health Center (CHC)/Mobile Medical Unit (MMU)

In all but the first survey the women were asked "what is the most significant health issue that you or someone in your household experienced in the past three weeks?" The objective in asking this question was to get an idea of the cost of the most expensive health issue that the household experienced. In some cases, these episodes may have been minor, such as for a mild illness or a relatively major issue such as surgery, injury or birth of a child. The total costs were estimated according to costs incurred directly such as money paid to a doctor, or other provider, and medicine; and costs that were incurred indirectly such as travel costs, money spent on food, or time lost from work to cover the health issue.

On average, the *direct costs* reported for a three week period totaled INR 1,401 (INR 68 per day) and *indirect* costs totaled INR 324 (INR 15 per day), for a grand total of INR 1,725. This translates to an average cost of INR 82 per day in 2017 as shown in table 4.

Examples of reported illnesses experienced in the previous three weeks:

"I have anemia disease."

"My son fell from the bicycle and got a hand injury."

"My father-in-law fell from the roof of the staircase. The whole body was injured."

"My mother-in-law has cancer for two years."

Table 4: All surveys, average out-of-pocket medical costs for previous three weeks

	ADS West Bengal (2017 INR)	Bandhan West Bengal (2017 INR)	Bandhan Jharkhand (2017 INR)	Average (2017 INR)
Direct Costs	1,560	1,432	1,226	1,401
Indirect Costs	362	500	178	324
Grand Total	**1,922**	**1,932**	**1,404**	**1,725**

The national data shown in tables 2 and 3 above are useful to *generally* benchmark the health cost data collected in the health diaries, but several limitations should be noted. First, the national data in table 3 captures average medical costs per non-hospitalized treatment per

ailing person suffering from one ailment in 2014. Alternatively, the health diary data captures the most significant medical *and* non-medical costs suffered over a three-week period in 2017. The out-of-pocket costs reported by the women include hospitalization and non-hospitalization costs and offer a broad picture of the average burden of health costs incurred by each household. In addition, it is important to remember that health costs rise much more sharply on an annual basis than general inflation. In fact, health costs in India rose 11.3 percent in 2017 alone[17] compared to an average inflation rate of 2.4 percent for the country in 2017.[18] The important finding that the health diaries reveals is that average costs incurred across all nine surveys remained above INR 886, or a daily outlay of INR 42. This finding may reflect, in part, the ongoing costs for chronic illnesses that some of these households face, and has important implications for how these households can better manage and cope with health costs.

The Poverty Probability Index (PPI®)[c] suggests that approximately 9 percent of the ADS and Bandhan participants in this study live below the $1.90 international poverty line, 35 percent live below the national poverty line and 46 percent live below the $3.10 international poverty line (table 5). Despite this small sample size, at least for ADS, these estimates are very similar to a pre- and post-test assessment that conducted across ADS' key program areas in 2017 with a sample size of 266 members.[19] The poverty rates are higher in Jharkhand, which is to be expected. The state-level benchmarks are also provided in table 5 as a reference and suggest that the findings from this study are not far from the state-level poverty rates.

Using the INR equivalents for expenditures per person for the three poverty rates[20], the monthly household expenditures are calculated using the average household size for the women in this study (5.5 for West Bengal and 8.0 for Jharkhand) and adjusted household expenditures estimated in 2011 using PPI documentation for 2017 U.S. Dollars (USD) (applying a consumer price index factor (CPI) of 1.4).[21] This monthly expenditure estimate can be used to determine how much of a burden the out-of-pocket medical care expenses are for a household if they were to fall below any of the poverty rates provided. Medical expenses are considered catastrophic if they result in more than 10 percent of household income.[22]

The results suggest that all average medical expenses could be considered catastrophic for women living below any of the three poverty lines and among any of the women being served by ADS and Bandhan in West Bengal and Jharkhand. The average medical expenses for members of ADS and Bandhan were 57 percent of monthly household expenses if the woman's household lived below the $1.90 poverty line, 39 percent if she lived below the national poverty line and roughly 35 percent if she lived below the $3.10 poverty line. Contrasted to these are the expenses incurred by women being served by Bandhan in

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[c] The International Poverty Line (IPL) $1.90/day, IPL $3.10/day and national poverty line indices were constructed using values from the *India Progress out of Poverty Index: Scorecard.* Raw values were generated based on responses, summed, and then matched with probability ranges using PPI documentation. A limitation of this research is that the sample size of the survey is very small and as a result, the results of the PPI analysis are simply suggestive of a likely poverty rate for the respondents. A defined level of confidence in the likelihood that the survey respondents live below various poverty lines would require a much larger sample size.

Jharkhand whose expenses were 29 percent of monthly household expenses if the woman's household lived below the $1.90 poverty line, 20 percent if she lived below the national poverty line and 18 percent if she lived below the $3.10 poverty line.

Table 5: Poverty rate and catastrophic medical expense estimates

	PPI $1.90	National	PPI $3.10
Total	9%	35%	46%
ADS	4%	23%	33%
All Bandhan	11%	41%	52%
Bandhan West Bengal	5%	25%	36%
Bandhan Jharkhand	16%	56%	69%
Household Poverty rate for West Bengal state (rural)	3.5%	26.9%	41.7%
Household Poverty rate for Jharkhand state (rural)	9.3%	41.3%	60.2%
Monthly household expenditures for West Bengal (INR) Daily expenditures per person in INR West Bengal (rural) * Average household size (5.5) * 30 days* CPI (1.4)	**INR 4,887** (21.16/day*5.5 = 116.38)*30 days*1.4	**INR 7,094** (30.71/day*5.5 = 168.91)*30 days*1.4	**INR 7,900** (34.2/day*5.5 = 188.10)*30 days*1.4
Monthly household expenditures for Jharkhand (INR) Daily expenditures per person in INR Jharkhand (rural) * Average household size (8.0) * 30 days* CPI (1.4)	**INR 6,915** (20.58/day*8.0 = 164.64)*30 days*1.4	**INR 9,986** (29.72/day*8.0 = 237.76)*30 days*1.4	**INR 11,226** (33.41/day*8.0= 267.28)*30 days*1.4
ADS West Bengal Medical Expense Burden (Average monthly medical expense/ monthly household expenditure)	**57%** (INR 2,786/4,887)	**39%** (INR 2,786/7,094)	**35%** (INR 2,786/7,900)
Bandhan West Bengal Medical Expense Burden (Average monthly medical expense/ monthly household expenditure)	**57%** (INR 2,800/4,887)	**39%** (INR 2,800/7,094)	**35%** (INR 2,800/7,900)
Bandhan Jharkhand Medical Expense Burden (Average monthly medical expense/monthly household expenditure)	**29%** (INR 2,035/6,915)	**20%** (INR 2,035/9,986)	**18%** (INR 2,035/11,226)

The catastrophic health cost burden reported by the 45 women who participated in the health diaries is in stark contrast to the to 6.9 percent proportion of total household monthly per

capita expenditure as reported by the Ministry of Health and Family Welfare for rural areas in India. This begs the question, do the women themselves feel that their health costs are a burden?

Across all of the surveys, the women were asked about the impact of their reported health costs on their household. Thirty-eight percent reported that they were a significant burden, 20 percent reported that they were somewhat of a burden and 42 percent reported that they were not a burden at all. This suggests that 58 percent of the women felt that their health costs were a burden.

Health Diary Data, across all surveys
The impact of health costs on the household were reported as:

- A significant burden for 38%
- Somewhat of a burden for 20%
- Not a burden at all for 42%

Examples of why costs felt or did not feel like a burden:

"There was some pressure. Because the 600 rupees were kept for buying things in the family. Suddenly the money was spent."

"Not a burden at all because the money was saving at home."

"A lot of money was spent for treatment so the financial pressure increased. If the money could have been saved, then we may have eaten better food."

If most feel that health costs are a burden, how high would the costs need to be to feel like somewhat of a burden or a significant burden? A sample of two surveys paint two different pictures.

First, in survey 1, the average costs incurred during the last year that felt like a significant burden were INR 17,767. Average costs incurred during the last year that felt like somewhat of a burden were INR 3,962. (See table 6.)

Table 6: Average cost of most significant health issue in past year with associated reported burden, survey 1 (on demographics)

	Significant burden (INR)	Somewhat of a burden (INR)	Not a burden at all (INR)	Average (INR)
ADS	18,000	n/a	9,000	15,750
Bandhan West Bengal	32,210	1,325	1,485	18,519
Bandhan Jharkhand	10,475	6,600	n/a	9,829
Grand Total	**17,767**	**3,962**	**3,990**	**13,905**

Second, in survey 10, average costs incurred during the previous three weeks that felt like a significant burden were INR 5,449. Average costs incurred during the previous three weeks that felt like somewhat of a burden were INR 1,756 — interestingly just slightly over the average cost of health care expenses across all the surveys. (See table 7.)

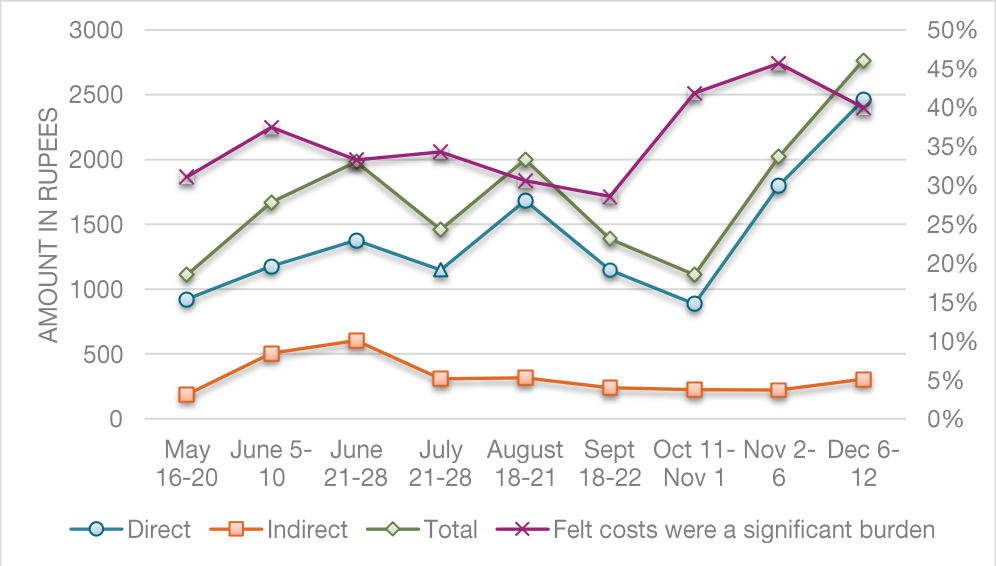
Table 7: Average cost of most significant health issue in previous three weeks with associated reported burden, survey 10 (on program participation)

	Significant Burden (INR)	Somewhat of a burden (INR)	Not a burden at all (INR)	Average (INR)
ADS	1,980	5,800	600	2,298
Bandhan West Bengal	19,125	437	412	4,165
Bandhan Jharkhand	4,358	350	518	2,140
Grand Total	**5,449**	**1,756**	**504**	**2,768**

For Bandhan West Bengal in survey 10, there was a woman who estimated her costs were INR 35,000, which pulls up the average. She shared that during the prior three weeks, she had a breast problem and her son had dengue fever. She said, *"My family was under tremendous pressure for this expenditure. I borrowed the full amount of money. Now there is going to be a trouble on family to pay the lender… I had to borrow for my son's treatment and for the purchase of medicine…My son in-law helped me during my son's illness."* Also, *"income in the last two weeks was very low."* And because of the dengue, *"my son did not work or my husband as he went to the hospital with my son, so his work was stopped so that the income was reduced."*

Severe flooding occurred in September and October of 2017 in both West Bengal and Jharkhand. During this time, work was stopped for at least two weeks. One woman reported *"floods occurred in September, October. At that time the work was stopped for 10—15 days. Some money was kept in cash 3—4 months before the start of the monsoon."* The health diary data may reflect the health seeking behavior and the related perceived financial burden of these costs during this disaster. As shown in chart 3, during October and November, health care costs dropped, which may signal a decrease in spending; in contrast, it was reported that these costs felt like a significant burden. These findings have implications for the importance of preparing for health costs that may be incurred during times of crisis.

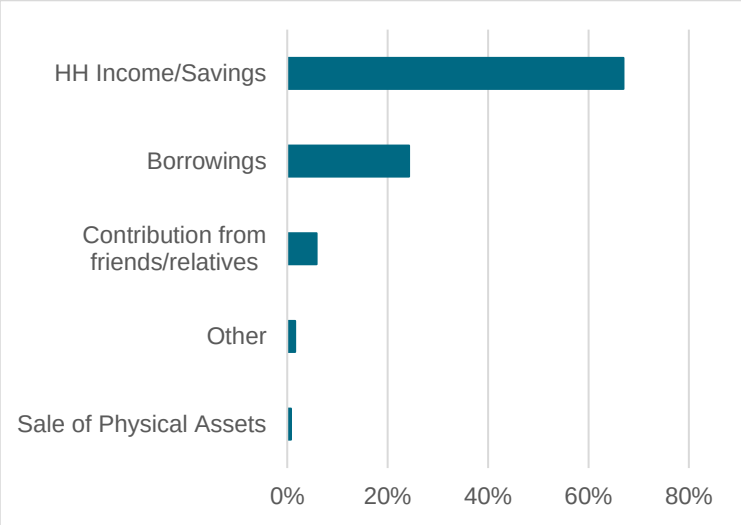
Chart 3: All surveys, total health costs and reported cost burden



Coping strategies for out-of-pocket health costs

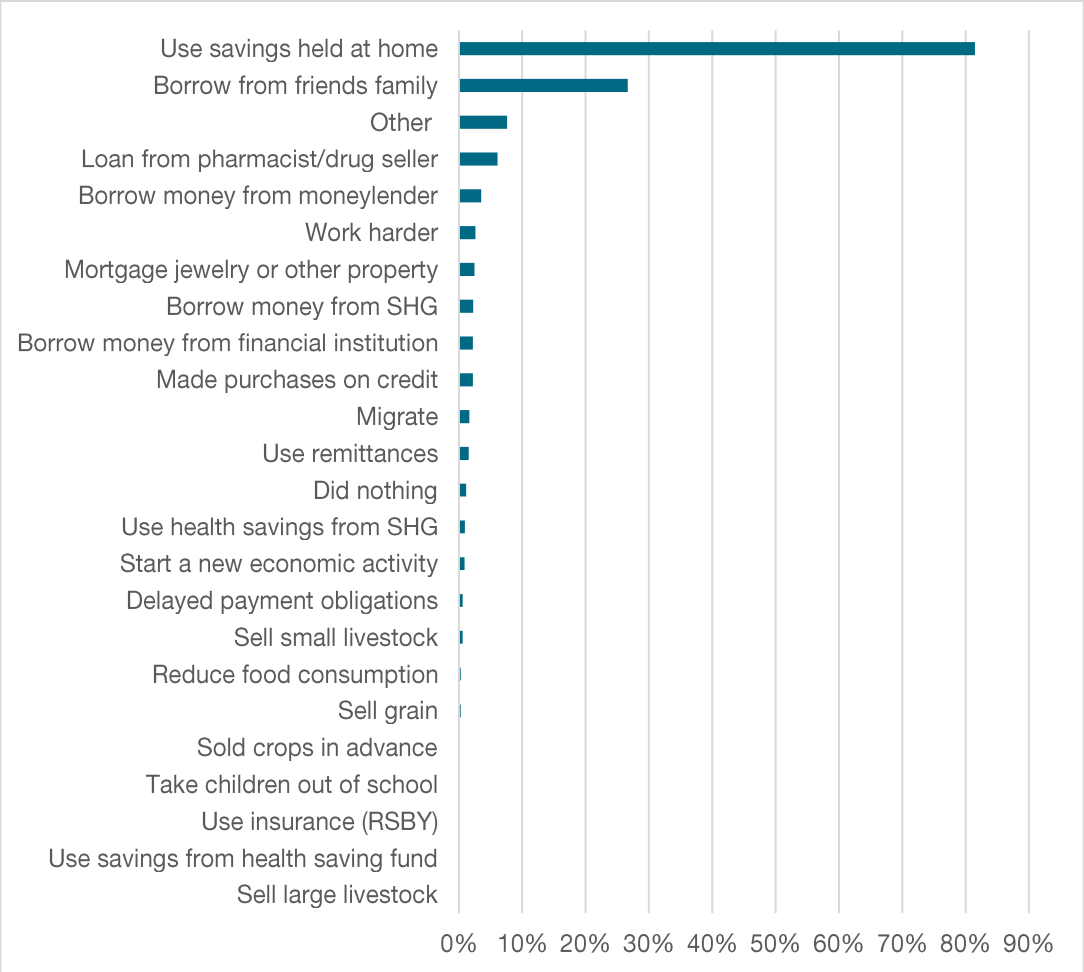
An overarching theme across all the health diaries is a strong preference for, and actual use of, household income and savings to pay for health costs, as opposed to savings held outside of the home or borrowing. This finding is consistent with national data which shows that the major sources of health financing for hospitalization expenditures across India is household income and savings for those in the lowest quintile Usual Monthly Per Capita Consumer Expenditure (UMPCE) as shown in Chart 4 below.

Chart 4: Major source of finance for hospitalization expenditure, lowest quintile of (UMPCE), Government of India[23]



All surveys across the health diaries show remarkably similar findings to sources of financing in the national data. Overwhelmingly, when women were asked how they responded to the most severe illness that their household experienced in the previous three weeks, the most commonly reported financial coping strategy used was savings held at home. This was followed by borrowing from friends and family members, which was a strategy used more frequently than borrowing from all other possible sources mentioned in the survey combined. (See chart 5.)

Chart 5: All surveys, coping strategies for out-of-pocket health costs (multiple answer)



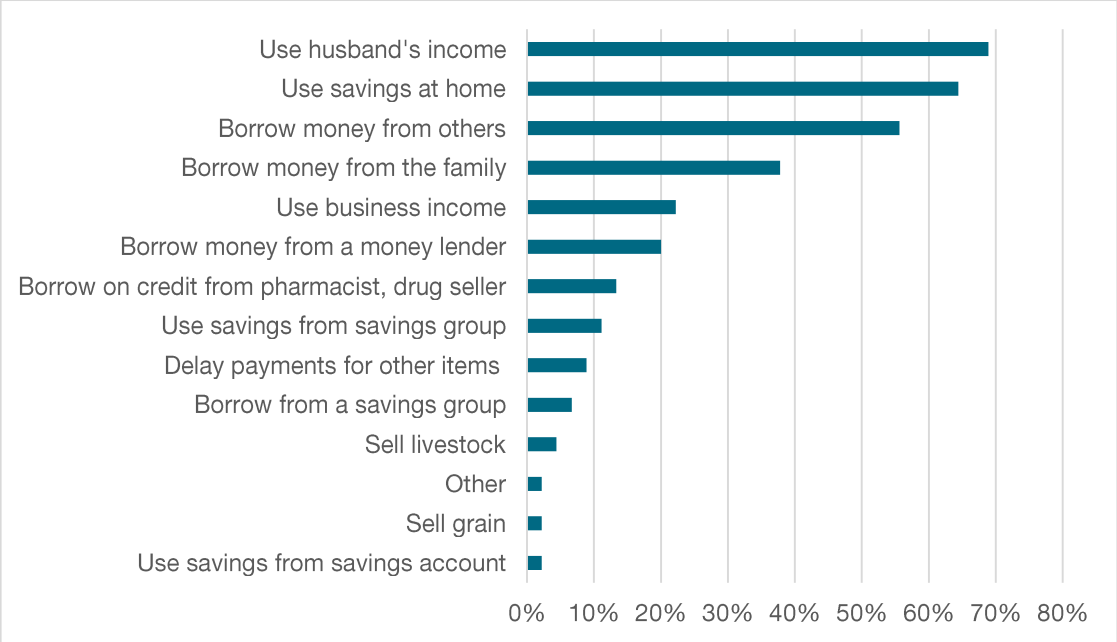
According to the Global Findex database, people across India turn to borrowing from family or friends for emergency funds more than any other source — including savings, money from working, borrowing from a bank, selling assets or other means.[24] Understanding this borrowing behavior and the social aspects that may be driving it have implications for how to best support low-income households in preparing for out-of-pocket health costs.

It should be noted that managing out-of-pocket health costs through borrowing from an SHG, and using health savings from an SHG were reported as very infrequent coping strategies and no one reported using savings from a health savings fund as a coping strategy. These results may relate to the fact that in part, at least for ADS clients, the health savings feature of the ADS SHG was established after health survey data collection had begun. Since this was a relatively new concept, and interest had yet to be accrued on any money actually saved, the women may have not had an opportunity to consider it as an alternative.

To explore coping strategies further, the women were asked to imagine that they or one of their children got sick and to describe how they would manage their health costs. (See chart 6.)

The results were not significantly different from how they reported that they actually managed health costs. The women reported that, in this "imaginary scenario," they would first use their husband's income and then savings readily available at home, followed by borrowing from others. Using savings from a savings group, borrowing from a savings group or using savings from a savings account were reported as management strategies only after four other lending strategies were mentioned and even after delaying payments for other items.

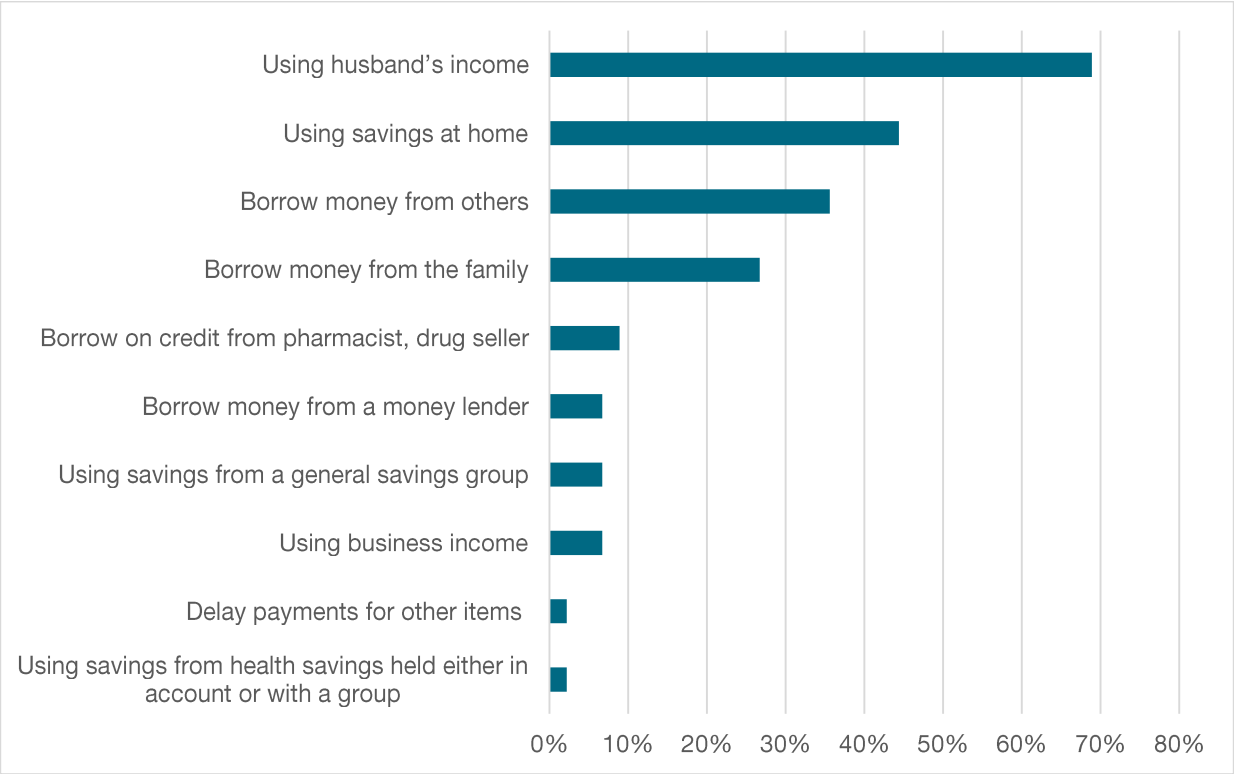
Chart 6: Ways of managing the expenses of treatment of the respondent or any of her children, survey 2 (on health preferences)



Preferences for covering out-of-pocket health costs

The women were also asked to note the most *preferred* two ways of managing costs for treatment. Once again, the findings were consistent — with using their husband's income first, then savings held at home and borrowing from others. (See chart 7.)

Chart 7: Most preferred two ways of managing costs, survey 2 (on health preferences)



An important observation in how these coping strategies were reported is that "using husband's income" and "using savings at home" may actually be considered the same thing by some women. In fact, the Government of India combines these "financing strategies" into one category as "household income/savings" shown in chart 4. Additionally, and probably most importantly, the actual health savings behavior reported in the interviews reveals that 76 percent of the women reported that they do not save at all for health costs. This suggests that "using savings" as reported in the charts above may not reflect money set aside and "saved" for health it may simply reflect cash income that was used at the time the cost was incurred.

Reasons for not saving money for health expenses:

"We have RSBY and Swasthyasathi card so we can't save money in separate place."

"The money is very low in living expenses. So we do not save separately for health costs."

"I have no money so how can I save money? I have a RSBY card, I will use that."

"Do not have money, how to save? There are lots of lenders."

Health Diary Data, survey 10 (on program participation)

When asked if money is saved specifically for health expenses:

- 76% reported no
- 24% reported yes

When asked how much was saved for health:

- 71% reported zero
- 9% reported less than INR 500
- 2% reported between INR 500-1,000
- 9% reported between INR 1,000-5,000
- 9% reported INR 5,000 and above

Of the 24 percent that said they *do* save for health, there were varying reports of amounts saved and where the money was kept. Examples include the following:

"I save 10 rupees every day in my house." She reports that she currently has 1,000 rupees

"The money is kept at home." She reports that she currently has 200 rupees

"I always save money in my bag. Money is not available on time in the bank. If the money is kept at home, then I'm getting money anytime." She reports that she has 500 rupees

"When income is high, then there is money left out of the cost. Keep that money in the bank." She reports that she has 5,000 rupees

"I save 30 rupees every day in my purse. I use that money for sudden medical expenses. If I keep the money in the bank then during emergency, it will be difficult to get the money quickly, as bank may be closed or I can't go to the bank." She reports that she has 2,000 rupees

"I save 100 rupees per month in the group for bearing medical expenses. Panchayat provides 25 rupees, and I keep 25 rupees every month." She reports that she has 3,000 rupees

"Jharkhand State Livelihood promotion society —weekly 10 rupees." She reports that she has 350 rupees

The women were asked "if you could design a financial product, such as a savings, loan or insurance product, that would help you best meet the needs of your household in covering health costs, how would you describe it?" Borrowing was the most frequent answer given overall, but savings was the most desired first choice. Insurance was mentioned third overall followed by mortgaging and "other." (See table 8.)

What stands out is the fact that of all borrowing options mentioned, group loans were mentioned the most often. In addition, women only mentioned borrowing from friends, family

or others once, which contrasts to how many of them reported that they rely on family, friends and neighbors as the third most common coping strategy.

Table 8: Health financing preferences, survey 2 (on health preferences)

	1st	2nd	3rd	4th	TOTAL	
					n	%
BORROWING	12	12	8	0	32	31%
SHG loan	*4*	*7*	*6*	*0*	17	16%
Loan (generic)	*5*	*4*	*1*	*0*	10	10%
Moneylender	*2*	*1*	*1*	*0*	4	4%
Borrow from family	*1*	*0*	*0*	*0*	1	1%
SAVING	20	8	0	0	28	27%
Save money in house	*1*	*0*	*0*	*0*	*1*	1%
Saving (generic)	*19*	*8*	*0*	*0*	*27*	26%
INSURANCE	12	9	1	0	22	21%
Insurance (generic)	*7*	*6*	*0*	*0*	*13*	13%
Insurance (government)	*5*	*3*	*1*	*0*	*9*	9%
Insurance (private)	*0*	*0*	*0*	*0*	*0*	0%
MORTGAGING	1	4	10	5	20	19%
Mortgage land/house	*1*	*2*	*5*	*2*	10	10%
Mortgage smaller assets (jewelry, livestock)	*0*	*2*	*5*	*3*	10	10%
Other	2	0	0	0	2	2%

Examples of how the women responded illustrate why they prioritized their ideas about financial products the way they did:

"1. Savings —first I will spend money from savings. 2. Insurance —then I will use RSBY card for treatment. 3. Loan —otherwise take a loan from group. But, to get the money (loan), it is too late, so sometimes I got annoyed and there is also tension of repaying the money."

"I will insure health. Because the loan is not immediately available if the money is needed suddenly, then medical treatment is delayed. Medical insurance cannot be a problem for treatment."

"For the cost of treatment, you will save some money every month. Save at home because the money is not available at all in the bank."

"For the medical expenses, take the loan from the SHG group. Because interest is low. There is no difficulty in getting money."

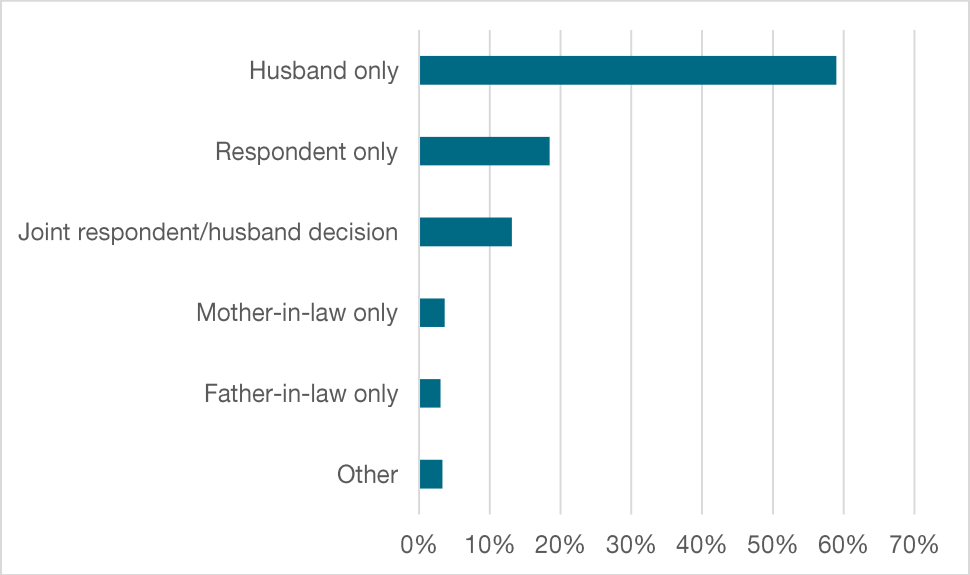
Somewhat similar results were found when the women were given an opportunity to specifically think about a financial product to help them plan for childbirth. In that case, savings were mentioned as the first strategy (84 percent), which is consistent with the fact that the vast majority reported saving for childbirth expenses — followed by borrowing (70 percent), mortgaging assets (43 percent) — and insurance products were mentioned the least often (30

percent). Saving at home accounted for most mentions of saving. Among borrowing, borrowing through use of a group loan was most often mentioned.[25]

Decision-making power

It is clear that the health diary women both use and prefer to use savings held at home or their husband's income before other methods in managing health costs. But who is actually making decisions about health costs? Consistently, across all the surveys, the women overwhelming reported that their husband has the only and final say regarding health costs. (See chart 8.)

Chart 8: All surveys, household member with final say regarding health costs



When asked if they would like to have more decision-making power in the household about when and how to cover medical treatment, 67 percent said no. Understanding this dynamic and that husbands most often reportedly have the final say regarding how the household meets health costs, has important implications for how health financing products are designed for women. For example, while health savings is encouraged by ADS and is targeted to their women SHG members, she may be a vehicle for accessing a health loan on behalf of her husband.[26] This would be an important area for additional research in order to understand how husbands make decisions regarding health since they play a core role in the decisions made. The prioritization of use of financial tools revealed by the health diaries has important implications for the design of such products as well as the group health savings that ADS has been implementing with their SHGs.

Discussion and Implications

The government of India has reported concerns with low awareness of national insurance schemes, and a lack of understanding in how and when to use them. The health diary data validates these concerns. Most women in the surveys reported that they had no insurance coverage and were not aware of available health insurance. This finding has implications for the importance of supporting low-income women with education and awareness of these programs and how they work.

Enrollment itself may be a barrier for some women. This is particularly true in the case of the West Bengal Swasthyasathi scheme, which requires on-line registration. Even in the case of the national RSBY program, registration requires travel to an enrollment station and identity verification. Additionally, in the final survey, the women were asked how they would like Bandhan and ADS to support them going forward; a few women, particularly in Jharkhand, mentioned the desire to receive more education on the government schemes that are meant to support them: *"if they tell us about the government schemes then we can get advantages from them."*

Barriers may exist for low-income women in understanding and registering for national programs, but they face additional barriers when they actually attempt to use these benefits and seek care from government facilities. Shortages of staff, medicine and supplies limit access and quality care. When the women were asked about the difficulties they experienced in seeking medical treatment, they responded first that it was the lack of available medicines followed by the lack of an available doctor and the lack of funds to pay for it. When asked about what they would like to share about how organizations like Bandhan/ADS could better meet their needs, most women reported that medicines should be made available at a low cost or free, followed by the availability and proximity of a doctor close to home.

Most of the women interviewed indicated that quality was the first criteria in determining where to seek medical care. Convenience and cost were also reported as priorities. When the women were asked which place of treatment they used the most, the most common response was a quack or traditional medicine provider. When the women were asked how they responded to the most severe illness in the previous three weeks, women reported most frequently that they sought help from a medical provider, followed by help from a quack or traditional medical provider. Quacks are utilized because they are regularly available, located close or within the community and perceived to have low costs.

Across all the surveys, the women reported spending, on average, INR 1,725 per three week period on out-of-pocket medical expenses. This translates to out-of-pocket expenses of INR 82 per day or INR 2,500 per month. Over half of the women interviewed across all of the surveys felt that these costs were a burden for the household. On average, their monthly out-of-pocket expenses well exceeded the 10 percent of income threshold for all three poverty lines assessed, suggesting that the costs could be catastrophic for low-income households.

Women reported managing these costs primarily by using savings at home or their husband's income. When asked about how they would *prefer* to pay for these costs, they reported using their husband's income first, then savings held at home. In reality, it appears that these strategies may be one and the same for some women — simply using what cash is available at home to provide for these costs. The reported savings behavior across all the surveys may

validate this suggestion in that women consistently report that they *do not* save for health, except in the case of pregnancy and childbirth.

When asked which financial products they would like to have for preparing for childbirth costs, most women said borrowing, but preferred using savings as a first option. Borrowing was preferred next, with borrowing from a SHG mentioned most frequently, followed by insurance, and mortgaging assets. What is interesting to note is in the case describing financial tools to use for both health costs and pregnancy costs, the women did not specify borrowing from friends, family or others as often, which contrasts to how many of them actually handle health costs by relying on family, friends and neighbors.

This prioritization of use of financial tools has important implications for the design of such products as the group health savings that ADS has been implementing with their SHGs. Women in the ADS SHGs first save and then borrow their group funds which are directed toward business or other household investments. They then save in a second round specifically for health, and these funds are kept in a lock-box with the group, so that the funds are more easily accessible by the members. To gain access to the funds prior to the annual pay-out, women can request a loan from the available funds in the box. This requires that the group members meet and decide on who can take health loans at any given meeting.

As of January 2018, the majority of ADS groups (1555 out of 2060 SHGs, accounting for 75 percent of their groups) had chosen to save for health in addition to their regular savings. Almost 91 percent of those saving for health had yet cross the one year mark, meaning most had yet reached the annual payout period where the women would receive their full savings back plus any additional interest or fees that would have accumulated on those savings. Given only 69 loans had been given, this means very few groups were likely accumulating any interest because it is the interest on the loans that provides that "interest" on the total savings at pay-out time. The average loan size was approximately INR 475 (USD 7), which given the average costs reported above for prenatal care, represents a small fraction of the costs incurred. This is likely resulting in women depleting whatever savings at home first, followed by taking the health loan with the group. This alone may not be a poor strategy, but it is important to note the preference for having money that is quickly accessible for health costs, which the health savings may not necessarily provide, making it more of a secondary strategy than a primary one for covering health costs.

In conclusion, the health diaries research suggests the following for how households are managing health costs among low-income women in West Bengal and Jharkhand:

1. **Low-income households may lack awareness and understanding of how to use and enroll in insurance programs for which they may be eligible.**
2. **Low-income households are incurring possibly catastrophic out-of-pocket health expenses, despite available government programs meant to mitigate these costs.**
3. **Households seek care most often from quacks, followed by the public health sector; however, for the most severe illnesses, they report that they seek treatment from medical providers followed by quacks.**
4. **Financial products designed to assist women in preparing for and covering health costs will have to be designed in such a way that they respond to the urgency in which women feel they have to respond to these costs**. Most prefer to use any savings they have that they keep at home because, in their words, *"I keep money at*

home, because when I need money, I get it instantly." While ADS' health savings are quite new and active use of the health savings may grow over time, it is important to note the preferences women have in responding to health costs, which suggest that the health savings may not be actively used if 1) they have to wait until the group meets to request a health loan, and 2) the amount of the health loan is not sufficient to cover the remaining gap a woman has in covering a particular health cost. It is just as easy, and likely preferable, to get a "no-interest" loan from family and friends if the amount is not significant.

The sample size for this study is quite small; however, the results provide interesting and important insights into the costs incurred by low-income households in West Bengal and Jharkhand. Given the reported health seeking behavior is similar to those captured by the National Family Health Survey – 4, there can be some added confidence that what has been reflected here is likely representative of other similar households. Most of the women interviewed were members of SHGs or village banks which means that these women are in a position to save and have mechanisms to do so, but this does not fully remove their vulnerability to the significant costs they incur for out-of-pocket health care expenses.

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