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DEPARTMENT OF HEALTH & FAMILY WELFARE
GOVERNMENT OF ORISSA

OUT of POCKET SPENDING on Health in ODISHA – CURRENT STATUS and SOME RECOMENDATIONS

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EXECUTIVE SUMMARY

I. Background

A health shock often implies an enormous burden of treatment to an affected household consequently leading to significant erosion of its pre-shock endowment. Globally, an estimated 100 million people are plunged into poverty every year because they have to directly pay for the health services they use at the point of delivery. The scenario is particularly bleak in India where market regulation is weak and social protection measures are inadequate. One conservative estimate shows that, in India, about 11.8 million or at least six households in a hundred are silently marching towards poverty every year due to medical care.

The present brief presents some recent evidences on the incidence of catastrophic financial shocks experienced especially by the users of public hospitals in Orissa, one of the eastern Indian states. The scenario is especially interesting in Orissa, where public sector plays a dominant role in providing health care. As the evidences show, despite remarkable increase in public subsidies and a series of initiatives to make public health services affordable and accessible to common people in the state, the strong presence of public sector is still an inadequate instrument for financial protection. Based on recent evidences on Out of Pocket Spending (OOPS) on medical care in the state, the brief intends to highlight the urgency of addressing the problem and bring forth a set of policy options.

II. Recent Evidences

Based on the NSSO's 60th round data, the Government of India has presented a set of estimates related to OOPS in medical care for all Indian states in its recent report on National Health Accounts. The key estimates for Orissa and India (for 2004-05) are:

- Total estimated OOPS on all types of medical care in Orissa was ` 27.55 billion. This was roughly 80% of total health expenditure – much higher than national average of about 71%.

- Medicines account for the major share of OOPS in public hospitals (72.6% in rural and 77% in urban areas). This is also much higher than national average (66.5% and 62% respectively).

- About two-third (65.4%) of total OOPS in the state (i.e., ` 27.55 billion) was attributable to Outpatient care, followed by 27% to inpatient care, and about 3.4% to birth deliveries. The ratios were more or less the same for all states taken together.

Based on these results, it is estimated that about 5% of all households in the state fell below the poverty line due to health care OOPS seriously challenging the poverty-mitigating and development initiatives of the state.

A recent study conducted on the beneficiaries of public health facilities in 8 districts of Orissa (PHBS, 2010) reconfirmed the continuing economic burden of medical care in the state. For example, as the study shows, a hospitalization episode in a public hospital would make a patient pay out of pocket more than ` 1000 per day and more than ` 4000 for total stay. Similarly, a visit to an outpatient department of these facilities would cost him/ her ` 180 and even more in districts with relatively higher Human Development Index, such as Balasore, Jagatsinghpur, and Sundargarh. It is also interesting to note that delivering birth at public institutions is also costly (` 800 per delivery). The

burden, however, is much less on the poorer households implying probable success in JSY financing to BPL families for institutional birth delivery.

III. Key Issues

The recent evidences (PHBS, 2010) also pulled out the following key issues related to OOPS in Orissa.

1. The burden of OOPS is disproportionately higher on users of higher-tier facilities and non-communicable diseases

The burden of OOPS on medical care was found far higher on the users of higher-tiers facilities like District Hospitals (DH) than lower-tier facilities (such as, CHC and PHC) for treating the same types of ailments. For example, a person, who sought inpatient care from a DH, would spend about ` 400 less had he/she received the treatment from a lower level facility for the same ailment. The reason behind such cost differential is that the user of a DH is compelled to buy more drugs from private pharmacies and he/she would spend more on travel costs in comparison to a user of a CHC or a PHC. The additional burden on the users of higher-tier facility for treating common ailments is a product of a weak referral system where the district level secondary hospitals often serve as first points of contact for preventive and basic curative services.

2. Despite increasing public subsidy on drugs, OOPS on drugs is substantially high

Table 1: Share (%) of Spending on Medicines in Total OOPS and Average Burden of OOPS for Medicines, Orissa, 2010

Type	Share of medicines	Average Burden of OOPS on medicines, `
OOPS till Date on Hospitalization	53%	1,618
OOPS per Non-Hospitalized Treatment	48%	210
OOPS per Childbirth	54%	491

Source: Public Health Beneficiary Survey, 2010

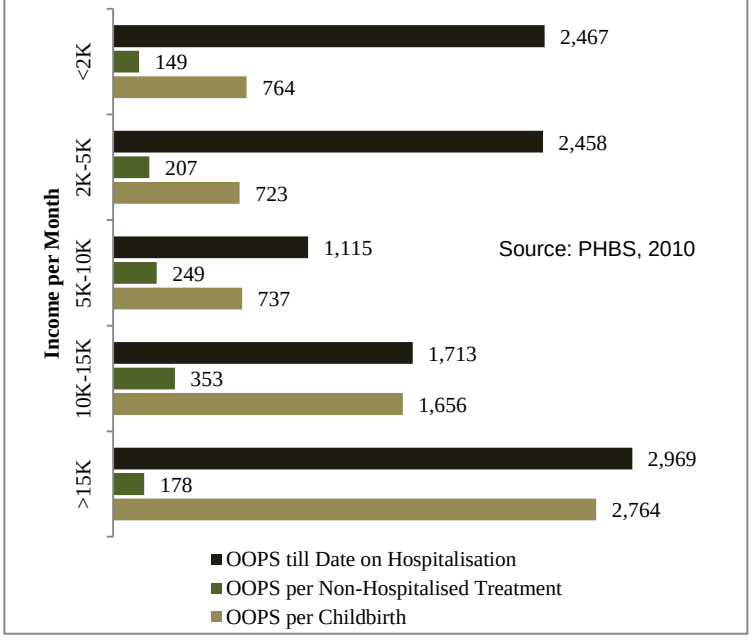
The PHBs, 2010 data showed that more than half of the total burden of OOPS incurred on hospitalized treatment and childbirth under the public system went for purchasing medicines. For outdoor care, this share was just below the half-way mark (Table 1). Spending so high on medicines by the users of government facilities, where medicines could be obtained without cost, indicates that they had to purchase all or some of the prescribed medicines from private pharmacies. For example, out of all currently admitted patients, 86% had purchased medicines from the market. On the other hand 68% of the outpatients stated the same. Also, when asked about the reason of this private purchase, most of them - 53% of the hospitalized patients and 41% of the outpatients had indicated that the prescribed medicines were out of stock in the pharmacies. Further, the OOPS on medicines was conspicuously high for the users of higher tier facilities, partly because of higher load of complicated cases (which need more medicines) but also possibly due to higher incidence of supplier-induced demand (i.e., doctors prescribing more branded and expensive medicines) in the urban-based district hospitals.

3. OOPS has significant poverty and equity implications

As Figure 1 shows, the burden of OOPS in birth delivery is equitable since the poorer people pay proportionately much less than their richer counterparts. For example, OOPS incurred during delivery of a child in a public health facility by the lowest income category was 72% lower than the same incurred by the highest income group. Perhaps, targeted intervention like JSY – a conditional cash

transfer scheme to encourage institutional delivery - especially among the rural poor - are showing positive signs and poor families are availing cheap but safer routes of institutional deliveries.

Figure 1: Average OOPS on Hospitalised Treatment (till date), Outdoor Consultation, and Child Delivery under Public Health System by Income Categories, Orissa, 2010, `, Current Prices



But the scenario was just the opposite for the hospitalised cases or outpatient treatment. In both cases, the users spend about the same across all income categories, indicating a serious equity problem – the poorer people are spending much higher percentage of their income compared to their richer counterparts, making OOPS highly regressive. The consequence could be disastrous especially when a major illness suddenly attacks a member of the household who does not have any protection from risk. A huge portion of household income drains out and the household slips into deeper poverty.

4. The cumulative shocks to chronic and acute OPD cases are often more catastrophic

An OPD case imposes relatively lighter burden on a household compared to a case of hospitalization. However, high prevalence and frequent occurrence of common ailments make the cumulative financial burden of OPD treatment much erosive than total cost incurred on hospitalized care which affects only a small percentage of households in a year. This is especially notable for chronic patients who do not require hospitalization but have to depend on regular treatment procedure and are extremely vulnerable to OOPS-induced poverty. A case in point is Sickle cell disease which is a major health problem especially in the western part of the state and among tribal population. A case of such disease may invite economic disaster to a family.

IV. Policy Options

The state's health policy, launched in 2002, came up with serious concerns about rising OOPS in the region. However, despite the past and recent reform measures undertaken by the Government of Orissa to invest more in the health sector and to strengthen the service delivery system especially at the public health facilities, the issues related to financial protection of the people from catastrophic OOPS on health care remain largely unaddressed. As mentioned earlier, the recent cash transfer schemes under NRHM, such as JSY, have demonstrated promising progress in this direction; however, the policies regarding OOPS in general inpatient and outpatient care (not related to pregnancy or neonatal care) still remain blurry and unfocused. The only scheme which comes close to address the financial protection issues for general medical care – and that is also only for inpatient care – is RSBY, a centrally sponsored medical insurance scheme for BPL families implemented by the Department of Labour and Employment.

Given this backdrop, it is important to refocus the issue of financial protection of the users of health care in the state. The urgency of the situation is taken into account by many Indian states with a few visible policy steps. The following part of this brief lists several policy options for Orissa with the understanding that some of them are already initiated in a small scale. The options are categorized into following four broad groups.

A. Making medicines effectively affordable for public clients

The purpose of this option is to strengthen and supplement the existing drug distribution system at government facilities through some innovative measures. This may be done through:

i. Speeding up the process of State sponsored or supported commercial pharmacies at government health facilities, similar to the Lifeline Fluid Stores in Rajasthan, or Jan Aushadhi Stores which is already been implemented in Orissa at a small scale.

ii. Streamlining governance of drug procurement and distribution system, similar to Tamil Nadu Medical Services Corporation Ltd. (TNMSCL) which was set up with the primary objective of ensuring ready availability of all essential drugs and medicines in the government medical institutions throughout the State by adopting a streamlined procedure for their procurement, storage and distribution. The innovative measures to streamline drug procurement helped in dramatically bringing down drug prices in Tamil Nadu.

iii. Pubic Private Partnership (PPP) in establishing pharmacies for public users which implies engaging civil societies (NGOs, self-help groups, cooperatives etc.) in parallel procurement and distribution of drugs. In this context, it would be useful to note the most recent initiatives by the Government of Rajasthan to make drugs absolutely free for all outpatient users of government hospitals from October 2 this year. Under this scheme, the drugs will be provided free to newly established medicine distribution centres by the government at various government hospitals and selected cooperative institutions will manage these centres.

B. Using Rogi Kalyan Samiti more effectively for financial protection

The formal guidelines for the Rogi Kalyan Samiti (RKS) clearly suggest the ways a RKS can use its resources which also include sharing or subsidizing OOPS (e.g., transportation or medicine costs) of poor users from whom lack of money could pose serious problem during service delivery. For example, it can launch voucher schemes for the poorest users to partially or totally pay for referral transports and medicines which are unavailable in the hospital's pharmacy, subject to its financial capacity. Adequate flexibilities should be introduced to the fund approval system to help the local manager take spot decision in urgent cases.

C. ***Social protection measures for the poor to complement Rastriya Swasthya Bima Yojana***

There are few deficiencies in the Rastriya Swasthya Bima Yojana (RSBY) scheme which makes it inadequate: (1) the families, which are not BPL but bear the risk of falling BPL due to catastrophic expenses, remain unprotected; (2) the scheme covers only inpatient users leaving the risk of gradual impoverishment due to chronic and outpatient care unprotected; (3) since the scheme is managed by commercial insurance companies based on voluntary enrolment, cream skimming or adverse selection may follow implying that the really unhealthy families/ persons may not get enrolled; and, (4) without

innovative marketing strategy and active outreach services for registration, the scheme may not reach the poor and uninformed families.

These deficiencies of RSBY may be supplemented with additional initiatives based on experiences from other states, such as Akshaya Kendras cheme of Kerala to enrol APL families for the Comprehensive Health Insurance Scheme (CHIS). In this scheme APL families can enrol by paying ` 464 in addition to the RSBY registration fee of ` 30. The enrolment facility is available at over 2000 Akshaya centres across Kerala. Some other states, such as Karnataka and Haryana, are on the way to implement similar initiatives.

The state can also launch its own health insurance scheme following some successful models such as Aarogyasri scheme of Andhra Pradesh (AP) . In order to facilitate the effective implementation of the scheme, the State Government of AP has set up the Aarogyasri Health Care Trust under the chairmanship of the Chief Minister. The trust, in consultation with the specialists in the field of insurance and medical professionals, runs the scheme. The scheme is totally financed by the government of AP costing about ` 92.5 billion to the exchequer.

D. Improving oversight

Many policy analysts argue, correction of the systemic deficiency may be more effective and sustainable than compensating the consumers' OOPS through additional subsidies on pre- or post-payment. The most important element in this strategy is to improve oversight at the service delivery level to ensure that: (1) the providers do not induce unnecessary or irrational demand of the users; and (2) the leakage and misuse of public resources, especially those which are directly committed to benefit poor, are controlled.

The concrete step to implement the first element is to frame appropriate regulatory mechanisms to control irrational drug prescriptions at the facilities. The regulation system may be initiated by establishing a task force in the Department of Health and Family Welfare (DoHFW) which would collect data on prescribed drugs in randomly selected government facilities in the state, develop a computerized system to feed the data, analyze them on a regular basis, and provide the key policy actors with evidences. It is also to be noted that the Central Government has recently embarked on designing a National Policy for Containment of Anti-microbial Resistance which contains several directions for monitoring prescription behaviour at the facility level. The state can design a state level policy which would align to the national policy and establish an appropriate regulatory framework for the state.

1. Introduction

Out of pocket spending (OOPS) is the major health financing mechanism across most of Asia and other developing countries, often raising serious concerns about efficiency, equity, and sustainability of their health financing systems. Evidence shows that countries with high out-of-pocket spending as a proportion of total health expenditure are more likely to have a high proportion of households facing catastrophic health expenditure. Catastrophic spending pushes families into poverty or deeper into poverty. Moreover, the impact of these out-of-pocket payments for health care goes beyond catastrophic spending alone. Many people may decide not to use services, simply because they cannot afford either the direct costs, such as for consultations, medicines and laboratory tests, or the indirect costs, such as for transport and special food. Poor households are likely to sink even further into poverty because of the adverse effects of illness on their earnings and general welfare.

Although there is no complete consensus on definition of catastrophic payments for health care, most agree that it should be measured in relation to a household's capacity to pay which is proxied by a simple ratio of health expenditure to income or consumption expenditure. WHO suggests that catastrophic spending occurs when a household spends greater than or equal to 40% of its non-food income on health costs. Other measures of catastrophic spending are also used by governments and in the international literature, this includes (a) more than 10% of household consumption expenditure on health, and (b) more than 25% of non-food consumption expenditure on health[1]. Among them, the threshold of 10% is commonly used with the rationale that above this the household may be forced to sacrifice other basic needs, sell productive assets, incur debt or become impoverished.

The issues related to OOPS and consequent catastrophic shocks to affected households have long been under the scanner of global policy analysts and researchers. A comprehensive global scenario is presented at the recent World Health Report, which analyzed data from 89 countries and showed that a 100 million people are pushed into poverty and 150 million people face financial hardship because they have to pay directly for the health services they use at the point of delivery[2]. In some countries, up to 11% of people suffer this type of severe financial hardship each year and up to 5% are forced into poverty because they must pay for health services at the time they receive them. Recent studies show that these out-of-pocket health payments pushed many African countries to distress; for example, 100,000 households in both Kenya and Senegal fell below the poverty line in a single year due to high OOPS for medical care. About 290,000 experienced the same fate in South Africa. In Asia, except Thailand, Sri Lanka, and Malaysia, almost all countries – especially India, China, Bangladesh, and Vietnam - stand out in relying heavily on OOP financing, having a high prevalence of catastrophic payments and a large poverty impact of these payments[3].

Indian story is equally, if not more, bleak. Due to weak presence of any social protection or risk-pooling mechanism and a rapid marketisation process in the health sector under the

[1] Xu K., Evans D.B., Kawabata K., Zeramdini R., Klavus J., Murray C.J.L., 2003, "Household catastrophic health expenditure: a multicountry analysis", *Lancet* 362:111-117.
[2] *Health System Financing: The path to Universal Coverage,* Annual World Health Report (2010), WHO
[3] Doorslaer E V, et al., 2005, "Paying out of pocket for health care in Asia: catastrophic and poverty impact". Equitap Project, Working paper # 2.

neo-liberal regime, almost all of the private cost of treatment is shifted to the users pushing India to the highest-ranked category in terms of the share of OOPS in total health expenditure (about 76 percent). The burden of OOPS is high even in heavily subsidised government facilities although it is disproportionately much higher in private hospitals; for example, in 2004, on average a hospitalized case would have required a rural user of a private hospital to spend Rs. 7408 which is more than double a user of a public hospital would have spent (` 3238)[4]. The drift is much more prominent in urban areas where a private client would have spent about three times than a public client (` 3877 and ` 11,533). Given that the share of private hospitals has further increased and the cost of treatment has multiplied since 2004, the market poses a significant, and sometimes catastrophic, impact on the economy of a large number of Indian households. The numbers of households falling below poverty line (BPL) due to medical care, as found in a recent paper by Berman et al[5], is astoundingly high (11.8 million or 6.2% of households) implying that at least six households in a hundred are silently marching towards poverty every year due to medical care. Most of these households are expected to be users of private hospitals since, as a recent study shows, about 48 percent of private users spent catastrophically high OOPS compared to only 15 percent of public users[6].

The present status paper attempts to focus on the issues related to OOPS in the context of Odisha' health care system. Its relevance and genesis may be traced back to one of the key concerns expressed in the state's health policy of 2002 brought out by the Department of Health and Family Welfare (DoHFW), Government of Odisha (GoO):

> *High out-of-pocket expenditure on treatment incurred by all sections of the community, as is evident from a variety of investigations in Odisha, leads to the conclusion that unless the State takes adequate care to protect the poor and the vulnerable from the adverse economic effects of diseases, any serious effort at sustainable socio-economic development will have no long-standing and favourable impact (Odisha State Integrated Health Policy- 2002).*

Therefore, as the policy pledges, "In view of (a) the large proportion of out of pocket expenses as part of health expenditure and its adverse consequences on the poor; b) the linkages of chronic ill-health or hospitalization with indebtedness and poverty, and c) the rising costs of medical care, the State will take proactive initiatives in health care financing." Subsequently, the policy guided the state government to embark on several reform measures to strengthen its health delivery system, with protection of its citizens from financial catastrophe as one of the goals, based on its own resources and with support from several development partners and the national schemes, such as National Rural Health Mission (NRHM). However, as the recent evidences reveal, medical care even in government health facilities still remains conspicuously expensive (see Section 3).

Clearly, India's recent push towards universal coverage of health care is irreconcilable with a situation where high OOPS pushes a large section of population to poverty. The situation, therefore, calls for an urgent action to chain the process of medical impoverishment. The

[4] NSSO (2004)

[5] Berman, P., Ahuja, R. and Bhandari, L. (2010). 'The impoverishing effect of healthcare payments in India: New methodology and findings'. *Economic and Political Weekly*: XLV(16): 65-71.

[6] Future Health System (2008) "Catastrophic health care payment: how much protected are the users of public hospitals". Working Paper # 4, IIHMR, Jaipur.

status paper intends to highlight the urgency of the situation in the context of Odisha's health sector. More specifically, it has two purposes: (1) inform the state's policy makers with recent evidences of the gravity of the situations arising out of OOPS, and (2) drawing upon a few national and international experiences, suggest a few policy options to reduce the growing burden of OOPS and help the state achieve fairness in financing. The overarching aim of the paper is to generate dialogues amongst the key policy actors and help the DoHFW draw an action plan regarding this very important issue.

The paper is organized in the following way: the next section (Section 2) presents an overview of Odisha's current health status, its health care system, and the major health financing mechanisms. Section 3 focuses on the current situation with respect to OOPS in the state and highlights a few key issues which have significant policy implications. Section 4 proposes several policy options and outlines a few steps towards drawing an action plan to address these issues.

2. Health and Health Care System in Odisha: An overview

2.1. An overview of the state's current status of health

Performance under various health indicators shows a mixed bag experience on health status in Odisha. For example, the state has made considerable progress over the decades in reducing Total Fertility Rate (TFR) and Crude Birth Rate (CBR). The 2005-06 data of the National Family Health Survey (NFHS)[7] pegged that TFR in Odisha at 2.4 births per woman, which was slightly lower than all-India average of 2.7. Similarly, the CBR was 21 per 1000 population as per the 2009 Sample Registration Survey (SRS)[8] data, whereas the country average was 22.5. As per the Annual Health Survey (AHS) 2010-11, the CBR for Odisha has further declined to 20.0 per 1000 population. The low values of CBR and TFR indicate that Odisha is approaching towards the replacement level.

Despite remarkable records in CBR and TFR, Odisha lags far behind the country in terms of Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR). Though there has been a rapid decline over the years, the state's IMR at 65 per 1,000 live births fell well short of country's average IMR of 50 per 1000 live births (SRS, 2009). The SRS 2009 data further shows that the State continued to be the second highest in India after Madhya Pradesh in terms of IMR. On a positive note, the AHS 2010-11 showed further decline in the IMR – 62 per 1,000 live births. The state's MMR at 258 per 100,000 live births in 2007-09 has improved from 303 per 100,000 live births in 2004-06; but it is still way above the national average of 212 per 100,000 live births.[9]

Odisha also has a high prevalence of malnutrition among children and women. According to NFHS 2005-06 data, 47% of children under age five years were stunted, too short for their age indicating chronic malnutrition, while 21% were wasted, too thin for their height indicating acute malnutrition, in rural Odisha. Data from the recently conducted the Nutrition

[7] Round 3, National Family Health Survey (NFHS), 2005-06.
[8] SRS Bulletin, Office Register General of India, January 2011.
[9] Special Bulletin on Maternal Mortality in India 2007-09, Office of Register General of India, June 2001.

Baseline Survey[10] (NBLS) in 2010 across 25 districts of Odisha puts the current estimates of stunting and wasting among children under five years of age at 44% and 23% respectively. Furthermore, the NFHS 2005-06 data on Odisha also shows that 41% of the ever-married women in the age group of 15-49 years had been suffering from malnutrition[11]. Anaemia is another major health problem in the state. About 74% of the children in 6-59 months age group were anaemic; and among women, age 15-49, 61% had anaemia (NFHS, 2005-06).

Malaria is the foremost public health problem of Odisha. The state contributes maximum to the malaria burden of the nation. In 2007, nearly 22% of malaria cases and 20% of malaria deaths were reported from Odisha[12]. Though most of the districts show Falciparum variety of malaria, the problem is very severe in the southern and the western districts of Odisha, which are predominantly tribal.

2.2. Health care system in Odisha

In Odisha, public health care services are provided by the Department of Health and Family Welfare (DoHFW), which functions through Secretariat, six Directorates[13], and Drugs Controller Administration. Underneath this administrative structure is an extremely complex landscape of health care service delivery. Public sector facilities in the state range from urban hospitals (32 District hospitals and 3 state-owned medical colleges) with highly specialised physicians to about 6700 small sub-centres at the village level staffed by Multi-purpose Workers (MPWs). Within this range there exist various types of public facilities – 26 sub-district hospitals (SDH), 79 other Hospitals, 377 Community Health Centres (CHC), and 1228 Primary Health Centres (PHC) - arranged in order of secondary to primary levels of care. In addition, there are 200 Mobile Health Units (MHU) for providing services in inaccessible areas and difficult terrains. The state also has 8 Ayurvedic hospitals (5 state owned and 3 private colleges) and 619 Ayurvedic dispensaries; 6 Homeopathic hospitals (4 state owned colleges and 2 private colleges) and 560 Homeopathic dispensaries; and 9 Unani dispensaries.

Due to poor records in maternal and child health (MCH) status, that state has had special focus on MCH care. The increasing focus on mother and child health, manifested in the NRHM programme, has recently triggered these initiatives. For example, 185 health units – 163 CHCs, 20 area hospitals, and 2 SDHs – have been converted into 24x7 service facilities and another 150 units are proposed to be up-graded to 24x7 service facilities. Besides, 81 units are functioning as First Referral Units (FRUs) and 64 more units are proposed to be converted into the same.

[10] Nutrition Baseline Survey (NBLS) was conducted in 25 districts of Orissa under the guidance of Technical Management Support Team (TMST), a Department for International Development (DFID), Government of United Kingdom (UK) funded initiative to support the Department of Health and Family Welfare (DHFW) and Department of Women and Child Development (DWCD), Government of Orissa.
[11] Malnutrition is measured as % of women whose Body Mass Index (BMI) is below normal.
[12] Annual Programme Implementation Plan (PIP), 2009-10, Orissa.
[13] These Directorates are: Directorate of Health Services; Directorate of Family Welfare; Directorate of Medical Education, Training & Research; Directorate of Indian Systems of Medicine and Homeopathy; NRHM Mission Directorate; and State Institute of Health & Family Welfare.

The uniqueness of Odisha's health care system remains in the overwhelming dominance of public sector in health care provision, which has remained unchallenged for a long time despite steady growth of the private sector. For instance, 51% of outpatient cases and 79% of inpatient cases in the rural areas, compared respectively with the all-India average of 22% and 42%, are treated by the public providers[14]. For patients below the 'poverty line', the public sector in Odisha provides 96% of inpatient bed days[15]. Quite naturally, the high rates of utilization of public services impose more complex challenges and extra burden of people's expectation on the public service delivery mechanism in comparison to many other major states where only a small percentage of population use public health services.

The service delivery system, despite its remarkable reformation through a series of measures undertaken by the DoHFW in the last decade, is still handicapped by many accounts. For example, about half of the sub-centres do not have their own buildings and operate in extremely adverse conditions. There is acute shortage of several critical inputs at the ground level[16] – such as, medical and other frontline workers, infrastructure, and equipment – keeping the gulf between Odisha and other progressive states of India quite wide.

2.3. Health care financing in Odisha: an overview

Similar to other India states, the public financing of health in Odisha is primarily routed through the DoHFW. Some other line departments, like Department of Works (DoW), Department of Housing and Urban Development (DoHUD), Department of Rural Development (DoRD), and Department of Women and Child Development (DWCD), also make budgetary provisions for health, though in smaller amount. In total, public health expenditure in Odisha has increased phenomenally in the recent period. In 2007-08, health expenditure was ` 9.38 billion which increased to ` 21.66 billion (Budget Estimate) by the end of 2010-11, reflecting an impressive annual growth of 26%. However, despite such impressive increase, the share of public health expenditure in the state's GDP remains around 1% level for the last few years with slight variations. This is far below than the National Health Policy's target of 2-3% of GDP.

The budget for the current fiscal year 2011-12 is set at ` 2,229 Cr, which includes funding support of ` 693 Cr (31% percent of the total budget) under the NRHM, a large part of which is the *off-budget* allocation. And the share of *on-budget* health allocation (` 1,498 crores) in the total expenditure of the state stands at 3.3%, down from 3.4% percent in 2007-08. As a result of significant increase in health budget allocations, per capita health expenditure in Odisha jumped from ` 238 in 2007-08 to ` 539 in 2010-11. If the allocation for the NRHM in 2011-12 is fully utilized, per capita health expenditure will increase further to ` 554, at par with the all-India average.

The health expenditure in the state has not only increased in nominal terms[17] but real[18] spends also shown a significant growth. The real expenditure on health has increased from `

[14] NSSO (2004), 60th round
[15] Peters DH, Yazbeck AS, Sharma RR et al.(2002). Better health systems for India's poor: findings, analysis and options. Washington, DC: The World Bank.
[16] For details, see Chapter IX, India Report on DLHS-3 (2007-08), Ministry of Health & FW, GOI, 2010.
[17] i.e. At *Current Prices*

376 Cr (` 97 per capita) in 2005-06 to ` 898 Cr (INR 225 per capita) in 2008-09, posting an annual growth 32%. For the current fiscal year, real budget is slated at ` 1,325 crores (` 330 per capita).

The inadequacy of public investment is reflected also from other viewpoints. For example, despite that the public health expenditure in Odisha has increased phenomenally over the years, per capita health budget of ` 554 or US $ 11 still falls well short of the minimum per capita amount of US $ 34 as estimated by World Health Organization (WHO) for providing a package of essential health interventions[19]. To raise per capita health expenditure of the state to WHO's recommended level, current public outlay needs to be scaled up from ` 22 billion to ` 68 billion.

The huge gaps in public financing in health are currently filled in by private expenditure, almost all of which comes from users' pockets. Unfortunately, data on private health expenditure is largely outdated, especially for Odisha primarily because huge resources required conducting sizable household survey at the national level. The National Health Accounts division of Government of India (GoI) has estimated state-wise household health expenditure for year 2004-05. Using this and the fact that 98% of the health care expenditure of the families financed on their own[20], the share of private expenditure works out to about 80% of total health expenditure.

3. OOPS on health care in Odisha

3.1. How much people in Odisha spend on medical care?

A reliable source of information on the extent of OOPS incurred on health care in Odisha and the country as whole is the recurring surveys conducted by the National Sample Survey Organization (NSSO), GoI. Two such latest available NSS rounds are NSS 52nd Round (July 1995-June 1996), and NSS 60th Round (January-June 2004)[21], where information on OOPS on different types of health care was collected from the households using various recall periods[22].

Based on the NSSO's 60th round data, the Government of India has presented a set of estimates related to OOPS in medical care for all Indian states in its recent report on National Health Accounts[23]. The key estimates for Odisha and India (for 2004-05) are:

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[18] i.e. at *Constant Prices*

[19] The Commission on Macroeconomics and Health (CMH) , WHO calculated that health expenditures of at least US $ 34 per person per year by 2007 (and US $ 38 by 2015) would be necessary to provide a package of essential health interventions. The CMH report also mentions that most of the minimum expenditure will have to come through public outlays to cover public goods where individuals lack the incentive on their own to take the necessary protective actions and to ensure access for the poor, who lack adequate household funding. *See*: "Tough Choices: Investing in Health for Development", WHO, 2006

[20] National Health Accounts, 2001-02.

[21] NSS 52nd and 60th rounds were conducted to collect information from households on "Modbidity, Health Care, and Treatment of Ailment". In the NSS 60th round 'Condition of the Aged' was included as an additional sub-topic for the first time.

[22] Recall period is defined as the period of reference during which the data on out of pocket expenditure on health care and other consumption items are collected from the respondents on the date of the interview. Example: last 15 days, last 30 days, last 365 days, etc.

[23] Nation Health Accounts, 2004-05. Ministry of Health & Family Welfare, GoI.

- Total estimated OOPS on all types of medical care in Odisha was ` 27.55 billion. This was roughly 80% of total health expenditure – much higher than national average of about 71%.

- Medicines account for the major share of OOPS in public hospitals (72.6% in rural and 77% in urban areas). This is also much higher than national average of medicines' share in total OOPS (66.5% and 62% respectively).

- About two-third (65.4%) of total OOPS in the state (i.e. ` 27.55 billion) was attributable to Outpatient care, followed by 27% to inpatient care, and about 3.4% to birth deliveries. The ratios were more or less the same for all states taken together.

The estimates of OOPS on per case basis in Odisha and India from two consecutive NSS surveys (1996 and 2004) are given below (Table 3.1). For comparative purposes we have also given values of OOPSs in constant prices after adjusting for changes in cost of living. When compared with the levels – at constant prices – in 1996, it is revealed that OOPS on outpatient[24] health care had gone up by 14% in rural areas. And the same for urban areas had increased by 37%. Noticeably, during the same period levels of OOPS in the country as a whole has gone up at almost same pace in the countryside, while in urban areas there was not much change. A starker picture is revealed while looking at the values of OOPS on hospitalised treatment. In 2004, people spent close to ` 5,000 in rural areas and more than ` 7,000 in urban areas respectively as indoor[25] patients in Odisha from their own pocket. Most

Table 3.1: Average Out of Pocket Spending (OOPS) on Health Care, Odisha and India, 1996 and 2004, `

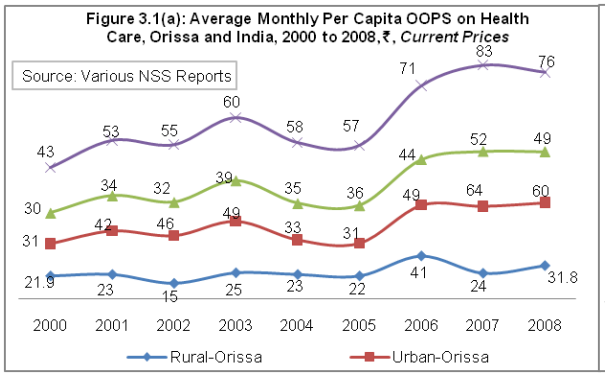
Type of Health Care	Location	Current Prices				Constant Prices			
		Rural		Urban		Rural		Urban	
		1996	2004	1996	2004	1996	2004	1996	2004
per Non-hospitalised Treatment	Odisha	147	238	136	313	61	70	53	72
	India	176	285	194	326	73	83	75	75
per Hospitalisation	Odisha	1,641	4,625	3,868	7,294	684	1,352	1,493	1,673
	India	3,202	6,225	3,921	9,367	1,334	1,820	1,514	2,148
Immunisation per Child	Odisha	-	6	-	46	-	2	-	11
	India	-	20	-	113	-	6	-	26
Antenatal Care per Woman	Odisha	-	284	-	649	-	83	-	149
	India	-	499	-	905	-	146	-	208
Post-natal Care per Woman	Odisha	-	304	-	373	-	89	-	86
	India	-	402	-	595	-	118	-	136
per Childbirth	Odisha	-	609	-	1,475	-	178	-	338
	India	-	1,169	-	2,806	-	342	-	644

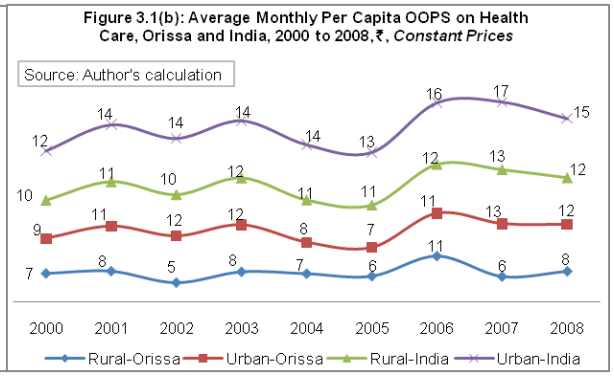
Source: (i) for *1996 Current Prices*– "Report No 441: Morbidity and Treatment of Ailments, July 1995-June 1996"; (ii) for *2004 Current Prices* – "Report No 507: Morbidity, Health Care and the Condition of the Aged, Jan.-June, 2004" *Note*: for *Constant Prices* – Cost of living adjustments are done on the OOPS values in current prices using Consumer Prices Indices (CPI) – CPI for Agricultural Labour (CPI-AL) for rural areas and CPI for Urban Non-Manual Employee (CPI-UNME) for urban areas respectively.

[24] Outdoor health care, non-hospitalised treatment, non-institutional medical care, etc. are used synonymously in this document.
[25] Indoor health care or indoor patient, hospitalised treatment, institutional medical care, etc. are used synonymously in this document.

interestingly, when compared with the values OOPS on hospitalised care in 1996, a phenomenal increase of 98% was noticed in rural areas, far higher than the increase in the country as a whole. In contrast rise of OOPS on indoor care in urban Odisha was quite modest, only 12%. Table 3.1 also highlights another important issue. It shows the extent of OOPS incurred on health care services like immunisation and maternal care, and during delivery of a child. One must note that dependence of public on public provisions for these types of services, which is provided at highly subsidised rate, if not free of cost, is quite high in Odisha, especially in the rural areas. The high values of OOPS – for example close to ` 300 for various types of maternal care, and ` 600 or more on child delivery in rural areas in 2004 – for these types of health care services challenges the popular perception of *health care at free of cost.*

Another useful but not so widely used source of information of OOPS on health care is the recurrent household Consumer Expenditure Surveys (CES) conducted by the NSSO. In the household CES rounds information on expenditure on non-institutional medical care in last 30 days and expenses on institutional medical care in last 365 days are collected; thereafter aggregate Monthly Per Capita Expenditure (MPCE) on health care are estimated for families. This particular way of estimation of OOPS on health care is known as *mixed recall period* (MPP) method. Clearly, estimates produced using MRP method is not exactly comparable to the estimates from the health-specific NSS rounds, where different recalls are used for different types of health care. However, as CESs are conducted every year – very large size sample surveys in every 5 years like NSS 55th Round (July 1999-June 2000) and NSS 61st Round (July 2004-June 2005), and annual relatively small size sample surveys like NSS 64th Round (July 2007-June 2008) – it is the best source of a continuous time series data on OOPS on health care. In Figure 3.1(a) and (b), we have shown the status of monthly





per capita OOPS on health care in Odisha and the country as a whole. These figure show that between 2000 and 2008 per capita average monthly OOPS on health care has increased from ` 22 to ` 32 in current prices, an annual increase of 5%. At constant prices increase in the same was quite modest. It can also be seen that per capita OOPS on health care in a month in urban areas has almost doubled from ` 31 and to ` 60 at current prices, an annual increase of 9%. At constant prices the same has gone up at the rate of 4% annually. It is interesting to note in the 2000s, share of OOPS on health care in total household consumption expenditure in rural Odisha has remained unchanged, around 6%. However, the same for urban Odisha has dipped marginally – from 5% in 2000 to 4% in 2008. It means that even after implementation of focused interventions like NRHM, which aims to improve

the access and quality of health care for the rural masses, OOPS on health care still occupies a significant position in the household budget.

The NSSO evidences, presented above are further corroborated from the information collated from a recent survey on the beneficiaries of the public health system conducted in 8 districts of Odisha for the use of DoHFW, GoO.[26] This survey – from this section onwards will be termed as Public Health Beneficiary Survey, 2010 (PHBS, 2010) – collected information on OOPS incurred by the people while availing various types of services under the public health system or from a Public Health Facility (PHF). Aggregate results of OOPS incurred on indoor care, outdoor treatment and delivery cases across 8 districts are presented in Table 3.2, and district-wise results are given in Annex 2. Though the survey results do not give estimates of OOPS on health care for the whole state using a scientific sample weighing mechanism and may not produce results as robust as a household survey does, the estimates may be considered as a snap shot of the situation across the 8 districts.

Table 3.2: Average Out of Pocket Spending (OOPS) on Health Care availed from Public Health System, Odisha, 2010, `

Type	Category	Current Prices	Constant Prices
OOPS per Hospitalisation: for *those who were currently admitted in a PHF*	OOPS per Day	1,145	345
	OOPS till Date	2,376	716
	Projected OOPS till Release	4,161	1,253
OOPS per Non-hospitalised Treatment: for *those who had consultation in the outdoor section of a PHF*		180	54
OOPS per Childbirth: for *JSY beneficiaries who had delivered in the last 6 months in a PHF*	OOPS per Day	544	164
	Gross OOPS	809	244

Source: Public Health Beneficiary Survey, 2010 (PHBS, 2010). ***Note***: (a) *OOPS per Hospitalisation* – (i) Information was collected through interviews with the patients, who were currently admitted in a public health facility, and attendants present with them. (ii) *OOPS till date = Per Day OOPS X # Days already stayed*. (iii) *Projected OOPS till Release = Per Day OOPS X Expected total duration of stay, including days already stayed*. (b) *OOPS per Non-hospitalised Treatment* – Information was collected through exit interviews with persons who just had consultation in the outdoor department of a public health facility. (c) *OOPS per Childbirth* – Information was collected through household level interviews with JSY Beneficiaries, and other informed household members, who had a child birth in the last 6 months prior to the date of interview. The JSY beneficiaries were selected through random sampling using facility records, during the visit to various public health facilities. (d) JSY – Janani Suraksha Yojana (the Safe Motherhood Campaign), where mothers were provided with cash incentives to safe delivery mechanism and availing requisite maternal care. (e) *Constant Prices* – Author's estimate using CPI-AL (base: 1986-87) for Rural areas..

The results show that an average hospitalised patient was spending more than ` 1,000 per day from their own pocket. Moreover, the projected total average expense for the current bout of hospitalisation was calculated to be more than ` 4,000. The OOPS was

[26] This survey was conducted, as part of the study Public Expenditure Review (PER) of Health in Orissa, in the 8 districts, such as Balasore, Jagatsinghpur, Jharsuguda, Kandhamal, Keonjhar, Nabarangpur, Nuapada, and Sundargarh – in the month of July and August, 2010. The data collection was done by Mott Macdonald India. A total of 30 currently hospitalised patients in PHFs, 30 non-hospitalised beneficiaries who had outdoor consultation from PHFs on the day of the interview, and 20 mothers who had given birth in the last 6 months in PHFs and beneficiaries of Janani Suraksha Yojana (JSY) were interviewed in each of the 8 survey districts. A total of 243 hospitalised patients, 241 non-hospitalised beneficiaries, and 162 mothers were covered in the survey.

comparatively higher in Balasore, Jharsuguda, and Sundargarh. On the other hand average OOPS incurred on outdoor consultation across the 8 districts worked out to ` 180 which was comparatively higher in Jagatsinghpur, Balasore, and Sundargarh. The PHBS, 2010 also showed that on average it would cost a woman more than ` 800 to deliver a child in a public facility. The probability of spending more would be higher if the child is delivered in a public facility in Kandhamal, Jharsuguda, and Jagatsinghpur.

3.2. Key issues related to OOPS in Odisha

The analysis below highlights a few key issues related to situation arising out of OOPS in Odisha. The issues are based primarily on the recent evidences produced by the PHBS 2010.

3.2.1 Burden of OOPS is disproportionately higher on users of higher-tier facilities and non-communicable diseases

The PHBS survey (PHBS, 2010) reveals that burden of OOPS on health care was far higher on the users of higher-tiers facilities like District Hospitals (DH) than lower-tier facilities like Community Health Centres (CHC), Primary Health Centres (PHC) or Sub-Centres (SC). This is especially true for inpatient care. For example, the *average* out of pocket cost incurred on hospitalisation till the day of the interview was 63% higher in the DHs than that in lower-tier facilities – ` 2,546 in DHs and ` 1,561 in other lower level facilities respectively.

Higher burden of OOPS in higher-tier health facilities, especially for inpatient care, can partly be explained by the fact that a large number of patients were admitted to these hospitals to treat trauma or more complicated ailments that required prolonged treatment. For instance, in PHBS, 2010, we have found that average cost hospitalisation of a cancer patient was close to ` 7,000 – highest among all types hospitalized care covered in the survey.[27] (See Annex 2) For accident related cases, burden of OOPS borne by patients on hospitalisation till date was close to ` 3,500. The magnitude of the burden of OOPS of such cases is amply demonstrated in Table 3.3 and Annex 2.

Table 3.3: Average OOPS on Hospitalised Treatment by Type of Ailment, Odisha, 2010, `, Current Prices

Facility	Common Ailments	Trauma and Other Ailments requiring Special Care
District Hospital	2,041	3,562
CHC, PHC & SC	1,601	1,275
All Facilitates	1,944	3,399

Source: PHBS, 2010.

For a more meaningful comparison, data were first disaggregated by the severity of ailments and, then, OOPS on most common ailments were compared across different levels of hospitals. The PHBS, 2010 data showed that 70% of the hospitalised patients admitted during the survey were because of common ailments, the rest 30% for trauma or ailments needing special care.[28] The difference in the OOPS incurred on hospitalised care for

[27] This is based on information collected from a single cancer patient found during PHBS-2010 field survey.

[28] Ailments and causes of hospitalization are classified in two categories as per their nature, severity, and morbidity pattern of Orissa. (i) 'Common Ailments' include Anaemia, Asthma, Chest & Other ENT Ailments, Blood Pressure & Other Heart Diseases, Blood Sugar/Diabetes, Diarrhoea/Dysentery, Fever, Cough, Cold, etc., Joint/Body Ache, Kidney, Stomach, Urinary & Other Gastro-intestinal Ailments, Malaria, Typhoid, and Other

common ailments between the higher-tier and lower-tier facilities were again found high. The average cost of hospitalisation for treatment for common ailments till date in the DHs was more than ` 2,000, which is 27% higher than the same in CHCs, PHCs, and SCs. This implies that a person, who sought treatment from a DH, would spend about ` 400 less had he/she received the treatment from a lower level facility for the same ailment. The data do not specify the reasons for such difference; however, from evidences on medicine costs and transportation costs (see Table 3.5), it may be inferred that the user of a DH is compelled to buy more drugs from private pharmacies and he/she would spend more on travel costs in comparison to a user of a CHC or a PHC.

3.2.2. Despite increasing public subsidy, OOPS on drugs is substantially high

Another key issue that needs to be highlighted in the current context is that the spending on drugs accounts for majority of the OOPS incurred while availing services from the public health care system in Odisha. This is despite the fact that the budgetary allocation by the GoO on the same has increased manifolds in recent times (from ` 18 Cr in 2007-08 to ` 50 Cr in 2011-12), registering an annual growth of 28%. The PHBs, 2010 data showed that more than half of the total burden of OOPS incurred on hospitalised treatment and childbirth under the public system went for purchasing medicines. For outdoor care, this share was just below the half-way mark (Table 3.4).

Table 3.4: Share (%) of Spending on Medicines in Total OOPS on Health Care, and Average Burden of OOPS on Medicines (`, *Current Prices*), Odisha, 2010

Type	Share (%)	Average Burden (`)
OOPS till Date on Hospitalisation	53%	1,618
OOPS per Non-Hospitalised Treatment	48%	210
Gross OOPS per Childbirth	54%	491

Source: PHBS, 2010

Spending so high on medicines by the users of government facilities, where medicines could be obtained without cost, indicates that they had to purchase all or some of the prescribed medicines from private pharmacies. Figure 3.2 confirms that this is indeed true across all the 8 districts covered by the survey, especially for the inpatients. Out of all currently admitted patients, 86% had purchased medicines from the market. Also 68% of the outpatients stated the same. Also, when asked about the reason of this private purchase, most of them - 53% of the hospitalised patients and 41% of the outpatients had indicated that the prescribed medicines were out of stock in the pharmacies (Figure 3.3).

Common Ailments. (ii) 'Trauma and Other Ailments, which need special care' include Accidents/ Injuries/ Burns/ Fractures/ Poisoning, Body Swelling, Cancer, Gynaecological Ailments, Hernia, Hydrosil, Neurological Disorders, Other Orthopaedic Ailments, Piles, Tuberculosis, and Tumour.

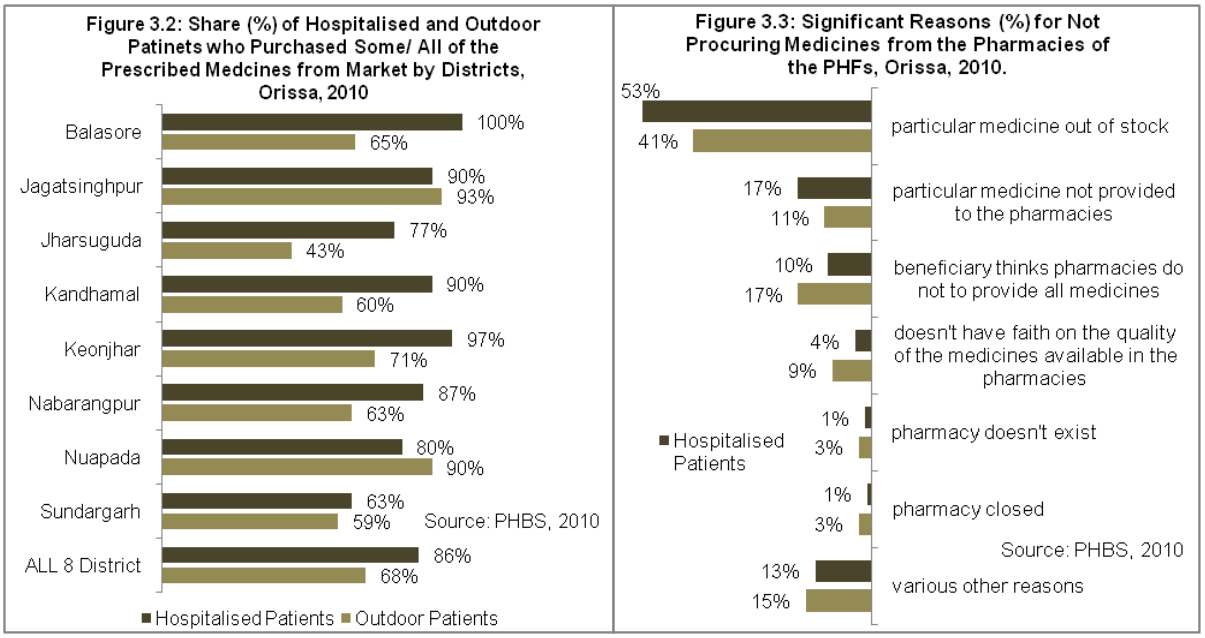


Table 3.5 compares the OOPS on medicines between higher and lower level hospitals. The burden of OOPS on medicines across types of facilities was almost equal for outpatients. However, the difference was conspicuously high for the inpatients. The PHBS, 2010 data shows that average spending on medicines by the patients currently admitted in the DHs was more than ` 1,700; average OOPS on the same by inpatients of lower-tier facilities was little more than ` 1,100.

Table 3.5: Average Burden of OOPS on Medicines by Type of Facility, Odisha, 2010, `, Current Prices

Facility	Average
***Panel A**: OOPS till Date on Hospitalisation*	
District Hospital	1,730
CHC, PHC & SC	1,108
Total	1,618
***Panel B**: OOPS per Non-Hospitalised Treatment*	
District Hospital	211
CHC, PHC & SC	209
Total	210
Source: PHBS, 2010	

The evidences clearly show that common people of Odisha has to spend large sums of money on their own to get the required medicines for various reasons – especially in the higher-tier facilities – despite increasing allocation of the financial resource by the government. The high share of medicines often leads to a peculiar situation – the medicines become a silent killer of a family instead of saving a life (Box 1).

Box 1: Medicines – the Silent Killer!

Purna and Rita, a poor couple, live in Deogaon block in Bolangir district with their 2 year old daughter Manasee and 1 year old son Sumit. The family survives on the meagre daily wage of Purna, the husband. Sumit was born with normal weight but, soon after birth, he suddenly fell sick due to acute respiratory infection. He also started losing weight.

Sumit was taken to Deogaon CHC – the nearest government hospital. The doctor prescribed some medicines, no improvement. After several rounds of fruitless visits to the same doctor and the drop of his weight at an alarming rate, the parents took him to a reputed private doctor at the district town (Bolangir). After a series of tests, the child's heart was found defective – he had a hole in heart! Medicines followed but no positive result yet.

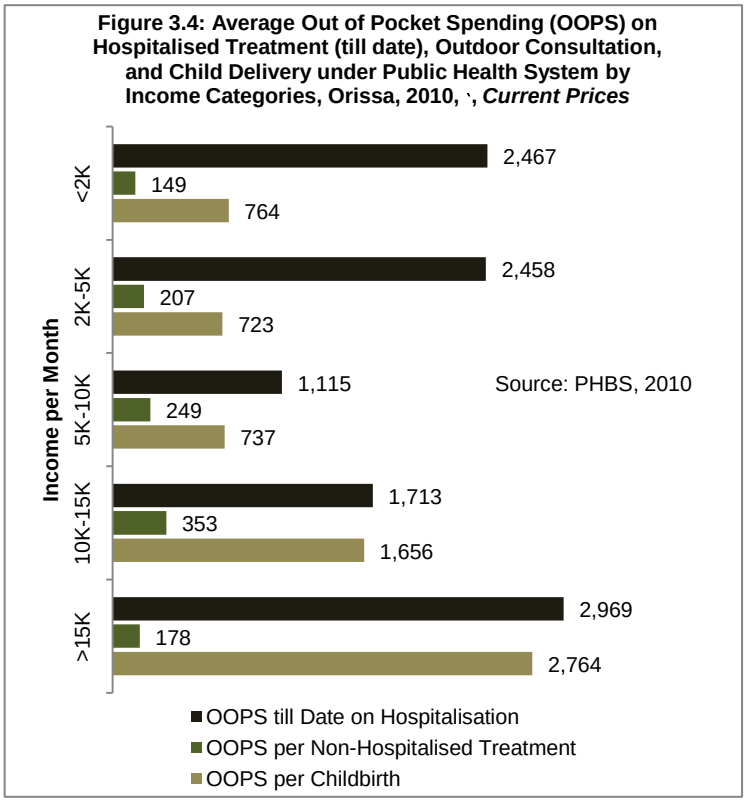
After a few days, the child's health took a serious turn and he was taken to the Bolangir DH. He was kept under treatment for 20 days. No charges for consultation or bed, but medicines could be obtained only from private pharmacies. A slight improvement but that was temporary, since, as the doctor indicated, it was a surgical case and the DH did not have adequate inputs to conduct a child heart surgery. The child was then taken to a state-run Medical College – the highest level of hospitals. After two weeks' stay in the hospital and reconfirmation of the earlier diagnosis, the doctor asked Purna to take his son to Bangalore for heart surgery. By that time, Purna and his family were completely stripped off all savings, assets, and were trapped with a huge debt in the market. They went back home and decided to leave the child to destiny's hand.

The long pathway of treatment has a parallel story of further impoverishment. The family spent about `80,000 on the treatment in which `54,000 (or 67%) were spent on medicines. Bulk of the medicine cost – about `33,000 - was incurred in two upper-level government hospitals. Almost all of these were financed by taking loans beyond their repaying capacity and mortgaging ornaments. Ironically, the medicines, which are supposed to save the life of the child, virtually killed a family by dragging it from a tolerable poverty to an intolerable sate of servitude.

Source: Case study conducted for this paper (names changed)

3.2.3. OOPS has significant equity and poverty implications!

Figure 3.4: Average Out of Pocket Spending (OOPS) on Hospitalised Treatment (till date), Outdoor Consultation, and Child Delivery under Public Health System by Income Categories, Orissa, 2010, `, *Current Prices*



How equitably the burden of OOPS is distributed amongst various socio-economic groups? The PHBS, 2010 data reveals mixed results. As Figure 3.4 shows, the burden of OOPS in birth delivery is progressive[29], and hence, equitable. For example, OOPS incurred during delivery of a child in a public health facility by the lowest income category, with monthly income less than ` 2,000, was 72% lower than the same incurred by the families with monthly income more than INR 15,000, the highest income group. Perhaps, focused intervention like Janani Suraksha Yojnana (JSY) – a scheme that promotes safe motherhood by encouraging institutional delivery, especially among the rural poor, through provisions of direct monetary incentives – are showing positive signs and poor families are availing cheap but safer routes of institutional deliveries.

[29] Progressive out of pocket financing is defined as a state when OOPS as a percentage of total household expenditure increases with respect to increase in ability to pay. That means the richer would spend proportionately more of their income on health care compared to poor. A regressive financing would describe just the opposite scenario.

Higher values of OOPS on delivery cases observed for the richer families are possibly explained by the fact they have better capacity to spend on important occasions, such as child birth.

But the scenario was just the opposite for the hospitalised cases or outpatient treatment. For instance, people in the lowest and the highest income categories spent about ` 149 and ` 178 while getting treatment from the outdoor section of a PHF. On the other hand, for hospitalised care, gap between the OOPS by the poor and the rich beneficiaries was only 17% – average OOPS of ` 2,467 for the lowest income group and average OOPS of ` 2,969 for the highest income group respectively. Spending almost same (or little higher) in absolute terms irrespective of income level points out to a serious equity problem – the poorer people are spending much higher percentage of their income compared to their richer counterparts, making OOPS regressive.

What is the impact of such high access cost on household economy? It could be disastrous especially when a major illness suddenly attacks a member of the household who does not have any protection from risk. A huge portion of household income drains out and the household slips into lower income status. There are no recent evidences on the extent of OOPS-induced poverty in Odisha. However, a study[30] estimated that nearly 1.5 million people in Odisha (representing 4% of the populations of 2001) slipped below the poverty line in 1999-00 because of health related OOPS. According to another more recent study, about 5% of all households in the state fell below the poverty line due to health care related OOPS[31].The following case study from one of the study districts demonstrate how a typically poor household gets into poverty trap due to catastrophic shock of medical care (Box 2).

Box 2: Beena is counting her days!

Beena lives with her husband Krushna and four year old son Kanu in a remote village in Pattamundai Block of Kendrapara district. Krushna, the only earning member in the family, trades in silver jewellery and earns INR 100 to 150 per day as commission from the local businessmen by selling the ornaments.

Despite poverty, things were under control until one morning in January, 2011 when Beena woke up with excruciating headache. Krushna took her to the nearby PHC (N) for treatment. The doctor found nothing special and prescribed some medicines for 15 days. She had to come back to the doctor after 7 days since the pain gave her no relief. After several visits and no result, she was taken to a higher level facility (UPHC, Patamundai) located 12 KM away from her village.

After several tests and spurts of new medicines given at the UPHC and still no result, Krushna got desperate. After several rounds of visits to various private and government hospitals, finally Beena received her diagnosis – a brain tumour. She was admitted to the Medical College at Cuttack where the doctors decided to operate on her brain. She had to go through various tests – all done in private centres – before the operation. The tumour was removed but the biopsy report identified it a malignant (cancer). Krushna was advised to take the patient to Mumbai (Tata Hospital). How much will it cost? About 3-5 lakhs of rupees, he was told.

[30]Charu C Garg and Anup K Karan (2005): "Health and Millennium Development Goal 1: Reducing out-of-pocket expenditures to reduce poverty: evidence from India", EQUITAP Project, Working Paper # 15.

[31] Berman, P., Ahuja, R. and Bhandari, L. (2010). 'The impoverishing effect of healthcare payments in India: New methodology and findings'. *Economic and Political Weekly*: XLV(16): 65-71.

Meanwhile Krushna had exhausted all his sources of finance. He had spent ` 1.25 lakh so far and there was no way he could spend more. He had received ` 55,000 from her relatives, friends, and neighbours as aid, borrowed ` 30,000 with interest, and sold ornaments (including those brought for business) worth ` 40,000. They are already pushed beyond their means and cannot even think of taking more loans.

Beena is a good wife, does not complain. She knows her fate and is just counting her days.

Source: Case study conducted for this paper (names changed)

3.2.4. The cumulative shocks to OPD users (chronic and non-chronic) are often more catastrophic than those to IPD users

While it is universally accepted that hospitalization implies catastrophe to the economy of an affected household, ambulatory or outpatient care begets no less disaster. It hits at a much slower rate but erodes the economic base of many more households in a more definite way. As a whole, it seems to perpetuate chronic poverty more than inpatient care does.

Table 3.7: Average Annual Burden of OOPS on Hospitalised and Non-Hospitalised Health Care, Odisha, 2010, `, *Current Prices*

Heads	Hospitalised Care	Outdoor Treatment
Average Number of Incidence of Ailments Treated per Family	1.2	29.2
Total Cost per Treatment (INR)	4161*	180
Total Burden of OOPS (INR)	4,830	5,249

Source: Caudated using data from NSS 60th Round (Jan-June 2004) and PHBS, 2010. ***Note***: * - Projected OOPS till Release

The cumulative value of OOPSs incurred due to recurrent use of non-hospitalised care for routine ill health snowballs into a huge financial burden due to its high rate of recurrence. An attempt is made here to gauge the burden OOPS created by frequent use of outdoor consultation as compared to the non-frequent but catastrophic incidences of hospitalised care using the secondary and primary data sources. We have used the information on (i) morbidity and health seeking behaviour of families in Odisha as available from the NSS 60th Round (Jan-June 2004) and (ii) total cost per treatment for hospitalised and non-hospitalised health care as available from PHBS, 2010. Moreover, to use these data we have made two assumptions, such as (i) morbidity pattern, defined as average number of incidence of ailments in a family per year, in Odisha has not changed during the period between 2004 and 2010, and (ii) health seeking behaviour of the families, as defined by average number of ailments received medical attention, both hospitalised and non-hospitalised care, per year in Odisha has not changed during this period. Calculations based on these, clearly shows that cumulative burden of OOPS due to outdoor treatment in year borne by a typical family in Odisha is higher than total cost incurred on hospitalised care. Aggregate burden of OOPS for a family due to OPD is calculated to ` 5,249 per year, whereas the total cost of IPD is ` 4,830. Surely, policy makers and administrators should rethink about the existing social protection policies, which are geared towards protecting families against catastrophes caused by hospitalisation. But financial perils caused by recurrent usage of OPD due to routine ill health should not be ignored.

In this context it is important to note that the chronic patients, who do not require hospitalization but have to depend on regular treatment procedure (medicines, blood transfusion, etc.), are extremely vulnerable to OOPS-induced poverty, especially when the disease has no cure at least in the short run. A case in point is Sickle Cell disease which is a major health problem especially in the western part of the state and among tribal population. A case of such disease may invite economic disaster to a family albeit in a gradual process (Box 3).

Box 3: Losing fight against Sickle Cell!

Manju, a widow from Bolangir district, with one daughter Purnima, earns a paltry sum which is just sufficient for their survival. Her husband died young when her daughter was just 3 years old. She knows the reason of his death – sickle cell disease. She has also seen many other people in and around her village suffering from this disease. Even her brother-in-law has also died of the same disease.

The curse seems not to be over yet. Her daughter had been frequently falling ill (at least once or twice in a month), since the time of her birth. Nothing so serious though – just cough, cold and fever. One day, after the death of her husband, her daughter fell down on the ground due to the numbness in her body. Her hands and legs were not moving. Immediately, Manju took Purnima to the CHC at Deogaon. The doctor prescribed some medicines and advised blood test. The test report shattered her when the doctor told her that her daughter was suffering from Sickle Cell.

The health condition of her daughter started further deteriorating due to Sickle Cell. She suffered from fever, cold, cough and numbness more frequently than before. The CHC is too far, hence Manju started consulting a quack located in her village. It is difficult to remember how many times she visited the quack's dispensary with her daughter. Also, on the advice of the quack, She did the Blood Test of her daughter for at least 4 times.

Finally, Manju consulted a private physician in Bolangir. The blood tests were repeated with same result. The doctor prescribed medicines which are continuing now. At present, Purnima's health is relatively better.

So far Manju spent about INR 34,000 on Purnima's treatment. Her savings from the death benefits of her husband, widow pension, and her own paltry income are completely wiped out. The neighbours have also given her some support (INR 5,500). Things are a bit streamlined now, but how will she manage the daily medicine costs? And, that too for an unspecified length of future?

Source: Case study conducted for this paper (names changed)

4. What can be done to reduce OOPS in Odisha?

4.1. Gaps in the existing policies

The past and recent reform measures undertaken by the GoO reflect strong intentions to invest more in the health sector and strengthen the service delivery system especially at the public health facilities. In an ideal situation, increasing public investment and improved governance should reduce the OOPS and will have a positive impact on the financial protection of the people. However, in practice, the causal link easily breaks due to several factors. Most important of them are (1) market failure arising out of asymmetric information, (2) emergence of various types of middlemen especially in inpatient care, and (3) inefficiency

in use of public resource which often leads to leakage. While asymmetric information in medical care (i.e., the user knows much less than the provider about what and how much medical care is required by him/ her) leads to a situation where a government doctor prescribes expensive and branded medicine which are available only in private pharmacies, the middlemen uses the low market power of the users and makes him/ her pay extra – as informal payments – for availing services in a public hospital. Inefficiency in public financing aggravates the situation where increased supplies of drugs remains unused or are trafficked out to private sector and new diagnostic equipments remain non-functional.

Clearly, a more direct initiative – targeted to address the above deficiencies - is required to control OOPS. For example, as the international experiences show, a gradual but strategic move to universal coverage through a subsidised risk pooling system – such as Thailand's '30 bhat scheme' – may prove effective to keep OOPS under control. Alternatively, as Sri Lanka's experience shows, providing easy access to well-regulated public health services with effective oversight on system performance can keep health care at a reasonably affordable level. For details on these international experiences see Annex 1.

It is, however, to be noted that the DoHFW has extensively adopted the demand side financing strategy of NRHM – the Janani Surakksha Yojana (JSY), a conditional cash transfer scheme for the mothers - to promote institutional delivery. The secondary effect of this scheme is reduction of OOPS on transportation and other items for the mothers who seek institutional care for birth delivery. The scheme has started showing positive effect on OOPS especially to the poorer section of population, as evidenced by the recent PHBS (see Section 3). Most recently, the benefits of the JSY scheme has been supplemented by another national scheme, named as *Janani Sishu Suraksha Karyakram (JSSK)* which would very soon allow the state to provide completely free and cashless services to pregnant women including normal deliveries and caesarean operations and sick new born (up to 30 days after birth) in Government health institutions in both rural and urban areas.

Clearly, NRHM has been offering a plethora of opportunities to the state to reduce OOPS in institutional birth delivery and make it affordable to the poorest section. So far, the state has responded well to these opportunities. However, the policies regarding OOPS in general inpatient and outpatient care (not related to pregnancy or neonatal care) still remain blurry and unfocused. The only scheme which comes close to address the financial protection issues for general medical care – and that is also only for inpatient care - is Rastriya Swasthya Bima Yojana (RSBY), a centrally sponsored medical insurance scheme for BPL families implemented by the Department of Labour and Employment. However, the scheme has been able to cover only 0.38 million households from five districts accounting for only 8-10% of total BPL households in the state. This fully subsidised scheme is targeted to cover only hospitalisation expenses leaving aside the main source of economic drain, i.e., the outpatient care. However, most recently, a pilot RSBY scheme has been launched in the Puri district – one of two such pilots in the country – by which coverage has been extended to outpatient care and beyond BPL families to unorganised sectors. The pilot, if successful, is expected to make a small but historical step towards financial protection from catastrophic OOPS of a virtually unprotected population of the state.

4.2. A few policy options

The existing policies of the state, as discussed above, are grossly inadequate to protect the middle and low income people from a huge risk of medically induced poverty. Against this backdrop, this paper presents a set of alternative policy options which are culled out of recent initiatives undertaken by various state governments in India. Some of the options are already been implemented by the GoO with varying coverage and spread.

4.2.1. Making medicines effectively affordable for public clients

The purpose of this option is to strengthen and supplement the existing drug distribution system at government facilities through some innovative measures. Since expenditure on drugs accounts for major share of total OOPS, streamlining public subsidies on drugs is potentially a strong instrument to reduce OOPS. The interventions may be broadly classified as:

(a) **State sponsored or supported commercial pharmacies at government health facilities**, similar to the Lifeline Fluid Stores in Rajasthan launched in 1990s. The initiative has been highly successful in Rajasthan since the Stores sell drugs at a very low margin at the hospital premises and people are able to buy medicines at about 30-54% below the market rates. A similar scheme – sponsored by the Department of Pharmaceuticals, GoI and named as *Jan Aushadhi Stores* – is already been implemented in Odisha since March, 2010 and, so far, 10 such stores have been launched across the state. The stores are managed by Indian Red Cross. The initiative is in its initial stage covering only a handful of districts and stands inadequate against the huge need. It is also important that an evaluation of impact of this intervention on OOPS is done in the pilot districts.

(b) **Streamlining governance of drug procurement and distribution system**, similar to Tamil Nadu Medical Services Corporation Ltd. (TNMSC) which was set up with the primary objective of ensuring ready availability of all essential drugs and medicines in the government medical institutions throughout the state by adopting a streamlined procedure for their procurement, storage and distribution.The TNMSC follows WHO's recommendation for the use of the generics for each drug. In order to ensure the procurement of only quality drugs at competitive prices, an open tender system is followed and purchases are made only from manufacturers and not through agents or distributors. The system of pooled procurement aimed at quality drugs and a transparent tender system with well-defined pre-qualification criteria has resulted into substantial savings of drugs – about 36%. In addition to that this has helped to improve the perception of the people as availability of drugs has enhanced at all facilities. The innovative measures to streamline drug procurement helped in dramatically bringing down drug prices[32].The impact is also quite evident in NSSO household survey (60th round, 2004) which ranks Tamil Nadu as one of the states with lowest OOPS on drugs at government facilities.

[32] For instance, the price of 10 strips of antibiotic ciprofloxacin tablets in 1992-1994 (before TNMSC) was `. 525. That fell to ` 88 in 2002-2003. Similarly, the cost of 100 Norfloxacin tablets fell from ` 290 to ` 51.30 during the same period.

(c) **Partnership Public Private (PPP) in establishing pharmacies for public users** which implies engaging civil societies (NGOs, self-help groups, cooperatives etc.) in parallel procurement and distribution of drugs. For example, interested NGOs may be supported to procure essential drugs directly from the manufacturers and sell through a chain of pharmacies with lower margin. The experiences of Self Employed Women's Association (SEWA) in Gujarat reflect good potential of such initiatives. A similar model has been initiated in Odisha itself by an NGO (*Gram Uthhan)* which has set up around 100 pharmacies, known as Medicine Point, in more than 200 villages in the coastal belt of Odisha. Such initiatives not only make the drugs more affordable but also make them accessible to rural population. At present, such initiatives cater to minuscule part of the demand; however, a more serious policy move to encourage them should stimulate the civil societies in scaling them up.

In this context, it would be useful to note the most recent initiatives by the Government of Rajasthan to make drugs absolutely free for all outpatient users of government hospitals from October 2 this year. Under this scheme, the drugs will be provided free to newly established medicine distribution centres by the government at various government hospitals and selected cooperative institutions will manage these centres. In the initial phase, the centres will be established at all hospitals run by medical colleges, 20 satellite hospitals, and 38 district hospitals across the state. More details about this scheme are awaited, but, if successful, the lessons from this initiative may help the Government of Odisha design similar scheme.

4.2.2. Using Rogi Kalyan Samiti more effectively for financial protection

The Rogi Kalyan Samiti (RKS), a registered Society at each of all government facilities (District Hospital to PHCs) level set up as a semi-autonomous management structure, is one of the direct derivatives of the NRHM programme. The RKS is free to prescribe, generate and use the funds placed with it, as per its best judgment for smooth functioning and maintaining the quality of services. The seed funds flow annually from the government in addition to the funds collected from the users of the hospitals through user charges. At present RKS has been operationalised at almost all government hospitals of Odisha.

The formal guidelines for the RKS clearly suggest the ways a RKS can use its resources which also include sharing or subsidizing OOPS (e.g., transportation or medicine costs) of poor users from whom lack of money could pose serious problem during service delivery. However, as experiences from other states indicate, this particular concern usually remains out of focus in RKS's agenda for action even though substantial part of RKS fund remains unutilised.

The RKS institution can be effectively used as a supportive system for addressing the problem of catastrophic payment for health care especially for poor users. For example, it can launch voucher schemes for the poorest users to partially or totally pay for referral transports and medicines which are unavailable in the hospital's pharmacy, subject to its financial capacity. Adequate flexibilities should be introduced to the fund approval system to help the local manager take spot decision in urgent cases.

4.2.3. Social protection measures for the poor to complement Rastriya Swasthya Bima Yojana

As mentioned earlier, Rastriya Swasthya Bima Yojana (RSBY) is the only health insurance mechanism in the state which intends to cover all BPL families in the state by this scheme in near future. There are few deficiencies in the scheme which makes it inadequate: (1) the families which are not BPL but survive just above the edge, or even middle class families, are also vulnerable to catastrophic payments and bear the risk of falling BPL. These families remain unprotected; (2) the scheme covers only inpatient users leaving the risk of gradual impoverishment due to chronic and outpatient care unprotected; (3) since the scheme is managed by commercial insurance companies based on voluntary enrolment, cream skimming or adverse selection may follow implying that the really unhealthy families/ persons may not get enrolled; (4) finally, without innovative marketing strategy and active outreach services for registration, the scheme may not reach the poor and uninformed families.

There are, however, ample scopes to address these deficiencies by supplementing RSBY with additional initiatives. For example, the initiative of Kerala government to widen the scope of RSBY through establishing *Akshaya Kendras* across the state to enrol APL families for the Comprehensive Health Insurance Scheme (CHIS). In this scheme Above Poverty Line (APL) families can enrol by paying ` 464 in addition to the RSBY registration fee of ` 30. The enrolment facility is available at over 2,000 Akshaya centres across Kerala. Some other states, such as Karnataka and Haryana, are on the way to implement similar initiatives.

The state can launch its own health insurance scheme following some successful models such as Aarogyasri scheme of Andhra Pradesh (AP) In order to facilitate the effective implementation of the scheme, the State Government of AP has set up the Aarogyasri Health Care Trust under the chairmanship of the Chief Minister. The trust, in consultation with the specialists in the field of insurance and medical professionals, runs the scheme. The scheme is totally financed by the government of AP (GoAP) costing about ` 92.5 billion to the exchequer. The Aarogyasri network includes 244 private and 98 public hospitals, all of which must meet specific structural, procedural and pricing requirements. Individuals seeking care approach their nearest in-network health facility, where Aarogya Mithras guide them through the system. If a patient needs further care, they will be given a referral card to the appropriate network hospital(s). Beneficiaries may also seek care and receive referrals at health camps held by in-network hospitals.

4.2.4. Improving oversight

The burgeoning OOPS is only a manifestation of a deeper system fault. Lack of accountability of the providers is one of the major cornerstones of this fault. Hence, as many policy analysts argue, correction of the systemic deficiency may be more effective and sustainable than compensating the consumers' OOPS through additional subsidies on pre- or post-payment. The most important element in this strategy is to improve oversight at the service delivery level to ensure that (1) the providers do not induce unnecessary or irrational

demand of the users, and (2) the leakage and misuse of public resources, especially those which are directly committed to benefit poor, are effectively controlled.

The concrete steps to implement the first element include mechanisms to control irrational drug prescriptions at the facilities. There are adequate evidences (from other states) that a significant portion of the prescribed drugs at the government hospitals is expensive and often irrational in terms of their values[33]. Repeated government orders and streamlining drug distribution system often fail to control these irrational practices due to lack of an effective system of regulating prescribing behaviour of the doctors. The regulation system may be initiated by establishing a task force in the DoHFW which would collect data on prescribed drugs in randomly selected government facilities in the state, develop a computerized system to feed the data, analyze them on a regular basis, and provide the key policy actors with evidences. It is also to be noted that the Central Government has recently embarked on designing a National Policy for Containment of Anti-microbial Resistance[34], which contains several directions for monitoring prescription behaviour at the facility level. The state can design a state level policy which would align to the national policy and establish an appropriate regulatory framework for the state.

5. Steps towards an action plan

The policy options outlined above are necessarily broad. It is important that the options are debated and discussed amongst the key stakeholders. Based on their feedbacks, a specific action plan can be drawn which would include an estimated financial implications for each of them. The specific steps towards this direction are suggested below:

(a) A state level workshop may be organized to disseminate the final draft of this paper and its recommendations. In addition to selected key persons associated with the state's health sector, the workshop may invite several renowned policy analysts from other states. It is expected that the debates and discussions in the workshop will generate more options and specifics on pros and cons of the proposed options.

(b) The workshop will also identify 1-2 feasible options and produce an outline of an action plan based on the identified option(s) for the DoHFW (to take specific policy measures against rising OOPS).

Based on the feedbacks and the plan outline, a more detailed and specific action plan would be drawn up by DoHFW within a particular timeline. TMST may provide further technical support to this process.

[33] Bhatnagar et al. "Drug prescription practices: a household study in rural Varanasi". *Indian J. Prev. Soc. Med,* Vol 34, No. 1&2, 2003.
[34] http://www.nicd.nic.in/ab_policy.pdf

ANNEX 1

International Experience of Health Financing: A Briefing Note for Odisha State

1. Introduction

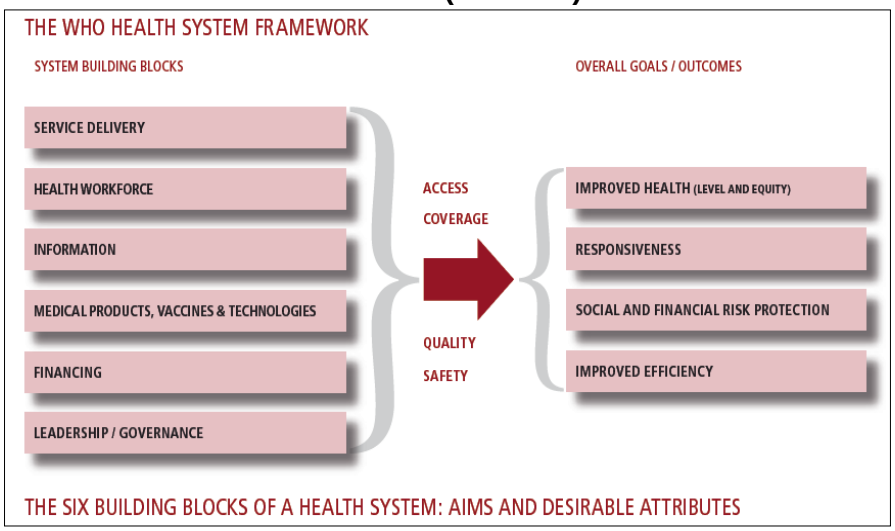
The purpose of this paper is to brief the Government of Odisha of the equity implications of health financing, and to share relevant international experiences with health financing reforms that have sought to improve health protection and increase the fairness of health outcomes. The highly context and country specific nature of health financing and its evolution means that there is no standard pathway to reaching ideal health financing arrangements which provide universal coverage. With this in mind, the paper looks at a selection of countries in Asia to illustrate how health financing reforms have achieved varying degrees of success. Finally, given the roll out of RSBY and interest in conditional cash transfers in Odisha, the paper reviews experiences with government financed health insurance schemes of the poor, and international evidence on conditional cash transfers as an instrument for changing health behaviours.

2. The importance of health financing for achieving health equity

2.1. Health financing a building block of the health system

WHO identifies financing as one of the six building blocks of a health system (see the diagram on page 2 taken from WHO, 2007[35]). According to WHO "a good health financing system raises adequate funds for health, in ways that ensure people can use needed services, and are protected from financial catastrophe or impoverishment associated with having to pay for them.[36] Health financing arrangements are intrinsically related to the level of access to and coverage of health services, the ability of citizens to pay for health care, and the level of social and financial protection offered to those who need to use services. Health financing arrangements are therefore a key factor in considering how to achieve equitable access to health services and health outcomes.

Picture 1 (Annex A)



[35] WHO, 2007, "Everybody's Business. Strengthening Health Systems to Improve Health Outcomes. WHO's Framework for Action", WHO: Geneva.
[36] WHO, 2007, "Everybody's Business. Strengthening Health Systems to Improve Health Outcomes. WHO's Framework for Action", WHO: Geneva.

2.2. Health financing structure and impact on equity

The structure of health financing can be divided into government, private sector employer contributions, and private or household expenditure. Public funding may finance provision of public services, contribute to social health insurance, and support financial protection mechanisms of the poor and vulnerable.

Box 1 (Annex A): Social Health Insurance
Social health insurance is a payroll tax financed scheme for employees in the public or private sector. Employees contribute a specific proportion of their salary, deducted at source, and the employer contributes an equal or higher proportion. In some countries, such as Thailand, the government also contributes. *Tax-financed schemes use general tax revenues and do not need prepaid individual or household contributions.*

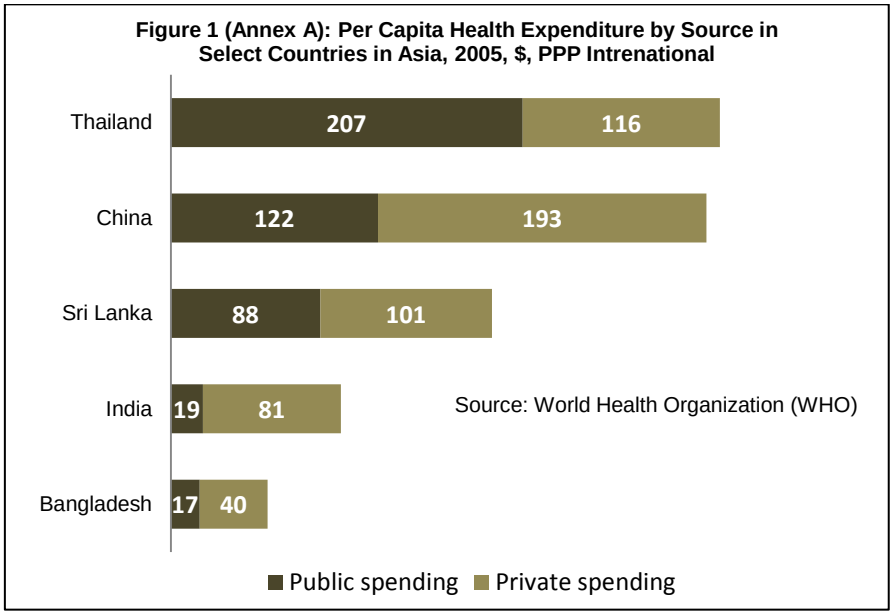
In many high and middle income countries, private sector employers contribute to social health insurance schemes for their employees, sometimes with employees and the state making parallel contributions. In low income countries where the size of the formal employment sector is small, the conditions for social health insurance are generally limited. Social health insurance only makes up a sizeable proportion of a country's total health expenditure in middle and high income countries, as seen below in Table 1.

Table 1 (Annex A): Key indicators of health financing in selected countries

Countries	THE as% GDP	GGHE as% THE	Private Exp as % THE	GGHE as % Gov Exp	External as % THE	SHI as % THE	OOPS as % THE
Malaysia	4.4	44.4	55.6	6.9	0.0	0.4	40.7
Thailand	3.7	73.2	26.8	13.1	0.3	7.1	19.2
Philippines	3.9	34.7	65.3	6.7	1.3	7.7	54.7
Indonesia	2.2	54.5	45.5	6.2	1.7	8.7	30.1
Vietnam	7.1	39.3	60.7	8.7	1.6	12.7	54.8
India	4.1	26.2	73.8	3.7	1.4		66.3
Low income	5.3	41.9	58.1	8.7	17.5	4.6	48.3
Lower middle income	4.3	42.4	57.6	7.9	1.0	15.8	52.1
Upper middle income	6.4	55.2	44.8	9.4	0.2	21.0	30.9
High income	11.2	61.3	38.7	17.2	0.0	25.6	14.0

Private expenditure can be in the form of prepayment mechanisms such as private, social or community insurance, and out-of-pocket spending at the point of delivery. The level and structure of health financing impacts on access to services, and provides varying degrees of financial protection from impoverishing health costs. The arrangement for paying providers for services also affects the incentives and controls placed on them. For example, fees for services as a payment mechanism is open to moral hazard and provider induced demand.

In general, tax based financing of health services is more progressive than social health insurance schemes which tend to be more proportional in their mobilising of finances[37]. Out of pocket spending is regressive as costs are not linked to ability to pay. The level of financial protection offered by a country or state's health financing arrangement is a marker of the level of fairness and equity of the health system.



3. Out-of-pocket spending and catastrophic expenditure

Evidence shows that countries with high out-of-pocket spending as a proportion of total health expenditure are more likely to have a high proportion of households facing catastrophic health expenditure. Catastrophic spending pushes families into poverty or deeper into poverty. Reducing out of pocket spending and the risk of catastrophic spending helps protect people from medical- induced poverty and is a cornerstone of a fair health system.

In countries where OOPS is less than 15% of total health spending, very few households face catastrophic spending[38]. Moving a countries health financing away from OOPS to prepayment mechanisms, such as tax-based financing of health care or social health insurance or a mix of mechanisms, reduces the chances of catastrophic spending. However, as described in more detail later, prepayment mechanisms per se do not guarantee financial protection, as this will depend on the level of population coverage, the benefits package, and co-payment requirements.

3.1. Catastrophic health expenditure defined

Catastrophic spending occurs when available health services require out of pocket payments, households have a low capacity to pay these costs, and there is a lack of prepayment mechanisms that pool the risk of health costs for users.

[37] Dr. Tae Jin Lee, December 2010, Presentation on "Equity in Health Financing", World Bank Flagship Course on Equity and Health Systems, Tagaytay, Philippines.
[38] WHO, 2005, "Designing health financing systems to reduce out of pocket expenditure, Technical Briefs for Policymakers, 2.

Catastrophic health expenditure is defined according to the household's ability to pay. Catastrophic health spending happens when a household has to reduce its basic expenses to pay the medical expenses of one of its members, this reduction may take place over a period of time. Out of pocket payments may cover direct costs such as for consultations, drugs and laboratory tests, or indirect costs such as for food and transport. The need for poor people to pay out of pocket costs may result in their non-use of services, or self prescribing and purchasing of drugs without medical consultation. Catastrophic spending does therefore not capture the large numbers of people who forgo the use of services because they are not affordable, in India, 28% of ailments were not treated because of the cost in 2004/5.

WHO suggests that catastrophic spending occurs when a household spends greater than or equal to 40% of its non-food income on health costs. Other measures of catastrophic spending are also used by governments and in the international literature, this includes (a) more than 10% of household consumption expenditure on health, and (b) more than 25% of non-food consumption expenditure on health[39].

3.2. Spending that drives catastrophic expenditure and impoverishment

International cross-country analyses for the 2010 World Health Report of the drivers of catastrophic expenditure find that medicines causes more people to experience catastrophic spending than either spending on outpatient or inpatient services in almost all of the 51 countries studied[40]. Analysis in India of the Consumer Expenditure Survey 61st Round (2004-5) endorses this finding. It found that drugs constituted 72% of out-of-pocket spending on health, and that the proportion of households experiencing catastrophic spending would fall from 5% to 1% of the population if there was no OOPS on medicines or outpatient care (drugs makes up 88% of outpatient costs). In contrast, removing OOPS on inpatient care does not reduce the current level of catastrophic expenditure.

3.3 Households those are most at risk of catastrophic spending

Studies show that where out-of-pocket spending is needed to finance health care, households with elderly, handicapped or chronically ill members are more likely to face catastrophic expenditure. A study of income and expenditure data in 60 countries found that lower income groups have a greater proportion of catastrophic spending than higher income groups, though the highest proportion of catastrophic spending tends to occur at higher income levels, which have access to greater resources. Age of household members, employment status of the head of household, and income are important determinants of exposure to catastrophic spending.

4. Health financing experiences from Asia

The level, structure and evolution of a country or state's health financing are affected by its history, political economy and institutional arrangements. Such context specific experiences make it difficult to form generalisations, or attempt to replicate health financing reform pathways. They do however provide valuable evidence of what works and doesn't, and factors to be considered as other states analyse and develop their own health financing

[39] Xu K., Evans D.B., Kawabata K., Zeramdini R., Klavus J., Murray C.J.L., 2003, "Household catastrophic health expenditure: a multicountry analysis", *Lancet* 362:111-117.

[40] Saksena P, Xu K., Durairaj V., 2010, "The drivers of catastrophic expenditure: outpatient services, hospitalisation or medicines?" World Health Report, background paper 21.

systems. Bearing this in mind, the following section looks at the experiences of Sri Lanka and Thailand, and draws out learning of relevance to Odisha.

4.1. Case study of Thailand[41]

A lower middle income country with a population of 64 million in 2005, Thailand has achieved almost universal literacy, and reduced poverty incidence from 21% in 2000 to 8.5% in 2007. Building on its pursuit of Primary Health Care and Health for All in the 1970s, and economic growth in the mid-80s, 75% of the population were covered with health insurance by 1998.

Political drive for universal insurance: In 2000, the new Thai-Rak-Thai political party pledged a "30 Baht treat all diseases" insurance scheme as part of its election manifesto to achieve universal insurance coverage. Policy elites with links to the new party and civil society organisations (CSO) inspired and influenced the political push for universal coverage. The new Constitution of 1998 which had created political space for CSOs in high level policy making bodies also meant that CSOs were able to maintain political pressure for implementation, and roll out of the scheme once the party came to power.

Financing: Health care financing in Thailand is based on general taxation paid through three major public health insurance schemes, out-of-pocket spending, and a small amount of private insurance. In 2010, it is estimated that Government expenditure contributed 73.2% of total health expenditure and private health expenditure made up the remainder at 26.8%. Government spending on health represented 13.1% of total government expenditure.

***The Universal Health Care Coverage Scheme* (*UCS*)** introduced in 2001 is funded by general taxes and originally paid providers on a capitation basis with the aim of increasing efficiency and equity, as funds followed the insured. The copayment of Bhat 30 was dropped for political reasons in 2006, and this further increased demand for services. The scheme funds a single benefit package covering outpatient and inpatient care which is written into the contract between purchaser and providers. UCS targets all citizens not covered by the other two national insurance schemes, namely the Civil Servants Medical Benefits Scheme for civil servants and dependants, and the Social Security Scheme which is based on payroll contributions from employees and employers. In 2007, UCS covered 75% of the population.

Payment mechanisms can control costs and increase equity of services: Citizens covered by UCS select a preferred provider on an annual basis to provide them health services. The number of insurance holders per area initially determined salary and non-salary payments to the provider, this meant that underserved areas with large populations and less health staff received comparatively higher funding than more sought after locations with lower populations and higher staff ratios. The capitation funding method helped to redistribute health personnel to areas with low health staff ratios, but it also bankrupted several urban provincial hospitals. Public protest led to the exclusion of salaries from the capitation funding formula to ease the situation for urban hospitals, and in 2005, resource allocations were revised again to be based on both capitation and facility workload.

[41] This draws on the work of Wibulpolprasert S. and Thaiprayoon S., "Thailand: Good Practice in Expanding Health Coverage – Lessons from the Thai Health Care Reforms" in Gottret G.J.S., and Waters H.R., 2008, *Good practice in health financing: lessons from reforms in low and middle income countries*, World Bank.

In the first year of implementation in 2001, UCS was criticised for being underfinanced, allocating a little less than US$32 per registered person per year. One of the results was that public hospitals increasingly accumulated debt. This, accompanied by the increasing workload placed on providers, and their growing discontent, led the Government to introduce a significant increase in the capitation budget from 2006. Over time the UCS has expanded coverage of more expensive interventions including antiretrovirals for HIV/AIDS in 2003 and renal replacement therapy in 2007. In 2005, community health funds were established with UCS and local government funding to address health promotion and disease prevention activities in the community.

Universal coverage achieved: UCS has been successful. It has achieved near universal coverage with the uninsured declining from 20% in 1998 to 2% in 2007. The number of people experiencing catastrophic spending decreased from 5.4% in 2000 to 2% in 2006. Relief from paying for health care has lifted an estimated one million people out of poverty. Moreover, universal coverage was achieved at a time of economic recession.

Lessons: Analysts identify several lessons that can be drawn from Thailand's successful move to universal coverage and reform of health financing. First is the strategy used to address the complex and multifactoral problem of universal coverage through the coming together of three key forces, (i) the generation and management of relevant health sector knowledge, (ii) involvement of civil society organisations and the mobilisation of public support, and (iii) political involvement. Research and evidence was generated and disseminated to policy elites with influence and linkages to politicians and civil society organisations. This helped shape political support and create public support for reforms. The "stickiness" or appeal of the issue also fed into building public support and political commitment.

The Thai experience, as has also been shown in other countries, shows the success of a gradual and incremental approach to health financing reform. Flexible implementation with evidence gathering enabled the Government to adapt and revise the scheme as experience and evidence of gaps and weaknesses emerged. Transparency of funding and civil society involvement in the ongoing review of the Scheme kept it accountable and responsive. Thailand's experience also underlines the importance of investing in health service delivery infrastructure to provide a platform for pursuit of universal coverage, and nurturing the human resources for health necessary to staff them. It shows how human resource problems need to include financial and non-financial solutions, eg. social recognition, if they are to bring health workers on board with reforms that may work against their interests.

Looking forward: The main concern of UCS is its long term financial sustainability given that it is solely funded from tax revenues. However, the strong political and public support for the scheme provides strong leverage on the budget, and as evidence has shown the Scheme has made a major impact on poverty reduction.

4.2. Case study of Sri Lanka[42]

Democracy: The introduction of democracy through universal suffrage in 1931, and the then political focus on empowering the poor and women, and raising the political

[42] This case study draws on the work of Rannan-Eliya R.P., and Sikurajapathy L., "Sri Lanka: "Good practice" in Expanding Health Care Coverage in Gottret G.J.S., and Waters H.R., 2008, *Good practice in health financing: lessons from reforms in low and middle income countries*, World Bank.

importance of social and health conditions, was the key engine behind the expansion of modern health services in Sri Lanka. The failure of the market to respond to a major malaria epidemic in 1934 further raised the political stakes for direct state provision of health care, and led policy makers and political elites to pursue health coverage to protect households from catastrophic impact of severe illness. This strategic policy link between health, poverty and economic well-being has underpinned health sector development. Political commitment to health services in the 1930s led to major investments in health infrastructure providing good physical access to services across the country by the 1950s.

Health gains: From a similar starting point as other countries in South Asia in the 1930s, Sri Lanka has achieved impressive social and health results at a faster pace. Moreover, while it spends less in absolute and comparable terms than other low income developing countries it achieves outcomes better than some much wealthier countries.

Universalism: Sri Lanka's political emphasis on universalism has fed into the health system and its pursuit of universal access. This has translated into a lack of explicit targeting of services or funding for the poor, and adaptation of policies and programmes that operationally result in exclusion or access barriers. So for example, the introduction of user fees in 1971 was dropped when the next elected government came to office as user feesy were found to have reduced access and use by the poor. The implicit pro-poor focus of government services is achieved through its well-spread network of facilities that are accessible to the poor (most Sri Lankans live within 3km of a health facility), the lack of user charges, and the opting out of the rich to the private sector. Public sector health services are used by, and accountable to all socio-economic groups, particularly for inpatient care. This has reinforced the political clout the public health service enjoys as influential middle classes and elites continue to back good quality government services. Access to health care in Sri Lanka is considered a fundamental social right.

Financing: Government finance contributes 46% to total health expenditure in the country and private spending the rest at 54% and this is mainly out-of-pocket spending. Government spends 8% of its total budget on health services and this comes from general tax revenue. Analysis shows that the health financing system is close to progressive with the poorest quintile receiving 20% of government health spending, and the richest quintile, 15%. Few people incur catastrophic health expenditure and are pushed into poverty through medical expenses, some 0.3% of the population in 1996/7.

Hospital dominated system: All government health services are provided free to citizens. The dominant focus of the public health system is its hospitals which has been the focus of health reform since the 1930s. Most inpatient care takes place in government hospitals across all socio-economic groups while outpatient care is split between the private and public sector; most private care being provided by off-duty government doctors. Government finances 85% of hospital spending while private spending covers more than 80% of outpatient and medicine costs. A considerable share of primary care is also provided by government hospitals.

Efficiency: One of the critical factors behind Sri Lanka's extension of coverage has been its emphasis on efficiency. A declining government health budget after the 1950s and until the 1990s forced health managers to seek efficiency gains to respond to demands in the face of strong political pressure for improved health services. Analysts suggest that the focus on efficiency has over time created an organisational culture that promotes increasing productivity. Through improved efficiency and allowing space for the private

sector to grow, the Government enabled the public health system to maintain its universal access focus as better off patients migrated to private providers for outpatient care. While the Government implicitly targets resources to the poor it explicitly supports its commitment to universalism and the political pull of government health services for all social groups is sustained.

Rural posting of doctors and dual medical practice: Compulsory posting of junior doctors to rural areas and the scope for dual medical practice, with doctors working privately when off-duty, have enabled coverage of rural areas. Junior doctors are regularly rotated and often to rural areas and are fired if they refuse postings. This has severe implications in Sri Lanka because specialist training is only available through the public sector, and without this they have limited pull to provide private practice. The dual practice policy was introduced in the 1930s and helps keep doctors in rural areas where earnings from private practice are an incentive. The temporary abolition of dual practice in the 1970s led to a reduction in doctors in rural areas and in government service more broadly.

Lessons: Sri Lanka offers several lessons in its success of expanding access to the poor and providing financial protection from the costs of illness. It shows how democratic accountability has protected the interests of the poor and upheld the goal of universalism. Fairness of the health system has been achieved through a dispersed network of facilities that removed geographical access barriers, provides free care to users, and compels doctors to serve in rural areas. Catastrophic spending has been minimalised through free inpatient care, and the availability of quality outpatient services at government facilities that tend to serve the poor. Finally, Sri Lanka has shown how government services can introduce efficiency measures in a centrally controlled health system environment.

Box 2 (Annex A): Enabling conditions for health financing reform

From a review of health financing good practices in low and middle income countries, the World Bank (2008) has identified a set of enabling conditions for successful health financing reform, these are:

- *"Economic, institutional and societal factors: strong and sustained economic growth, long-term political stability and sustained political commitment; a strong institutional and policy environment; and a well-educated population."*
- *"Policy factors: financial resources committed to health, including private financing; commitment to equity and solidarity; health coverage and financing mandates; consolidation of risk pools; recognised limits to decentralisation; and focus on primary care."*
- *"Implementation factors: carefully sequenced health service delivery and provider payment reforms; good information systems and evidence-based decision making; strong stakeholder support; efficiency gains and copayments used as financing mechanisms; and flexibility and mid-course corrections."*

Source: World Bank, 2008

5. Experience with Government financed health insurance schemes for the poor

In India, in 2007, the *Rastriya Swasthya Bima Yojana* (RSBY) was launched to cover the hospitalisation costs of below poverty line families in the unorganised sector. Each family receives health insurance to cover up to Rs. 30,000 ($600 in current prices) per year at public and private facilities and pays an annual payment of Rs 30. Earlier insurance schemes for the poor including the Universal Health Insurance Scheme launched in 2003, again to cover hospitalisation costs has had poor take up. Analysis of the impact of OOPS

on health care in India finds that hospital costs are not the main source of impoverishment, although they inflict shock on households, it is the cumulative costs of medicines that have greatest impact. As currently designed, RSBY offers limited financial protection though it will likely increase hospital utilisation of the poor.

Health insurance programmes that target the poor provide stronger financial protection when they cover inpatient and outpatient costs. In Mexico, Seguro Popular, which covers the poor and uninsured found that when coverage was expanded to include outpatient costs and medicines, catastrophic spending and medical impoverishment reduced[43]. However, low per capita allocations, as seen in programmes in Indonesia and the Philippines, reduce the protective value of insurance for the poor and near poor.

In Indonesia a tax financed scheme for the poor and non-poor was introduced after the 1997 financial crisis. Covering 33% of the population, it reaches almost all of the poor and non-poor. However, financed at only $6 per capita per year for a package of inpatient and outpatient care, compared to an average total health expenditure per capita of $41, the protection it offers is low. High out of pocket spending continues, though the Scheme has been found to have reduced the gap between use of services by the rich and poor[44].

In the Philippines, the Philippine Health Insurance Corporation sponsors a programme for poor households funded by central and local governments. Initiated in 1997, the package covers inpatient and outpatient costs but low ceilings mean that users have to top up medical bills. In 2008, only about a third of patient's medical bills were reimbursed by the Insurance Corporation. Financial protection provided is modest, in fact at the national level, catastrophic spending has increased from 2.11% in 2000 to 2.97% in 2006.

International experience shows that targeting the poor is challenging, and is often vulnerable to administrative and political mismanagement and abuse. Furthermore, those just above the poverty line are often economically vulnerable to falling into poverty and are excluded from protection programmes. Analysis in India shows that 24.9 million people living just above the poverty line in 2004/5 fell into poverty due to catastrophic spending. In designing schemes to protect the poor and vulnerable, protection of the near poor is an important policy issue with economic and health consequences.

6. The evidence on cash transfer schemes

Conditional cash transfer schemes are becoming increasingly popular as instruments to reach the poor, and promote behaviour change, since their success in South America in the 1990s. Conditional and unconditional cash transfers can lead to improved health and education outcomes, and reduction in poverty. The available evidence of impact is strongest for conditional cash transfers in middle income countries. Conditional cash transfers (CCTs) are diverse in nature, some focus on providing cash to families to reduce poverty sometimes with secondary health and education objectives, and others focus on changing health and education behaviours. In the health sector, the Mexican Progresa transfer scheme is one of the most often cited for its achievements. It reduced stunting among 12-36 month old children, reduced illness in newborns by 25%, and achieved 12% lower incidence of ill health in children under 5 compared to non-Progresa children. The scheme also increased the take up of antenatal care by 8%.

[43] Shahrawat, R. and K.D. Rao, 2011, "Insured yet vulnerable: out-of-pocket payments and India's poor", Health Policy and Planning, 2011: 1-9, doi:10.1093/heapol/czr029.
[44] Tangcharoensathien V. et al. 2011, "Health financing reforms in Southeast Asia: challenges in achieving universal coverage", Lancet 377:863-873.

Several issues do need to be considered when assessing the relevance of cash transfer schemes, particularly in resource poor settings. First, is the question of whether finance is the barrier to poor families taking up the planned behaviour, and therefore whether conditions need to be set or not. If finance is the barrier, making funds available is likely to overcome this, and so conditions are unnecessary. If finance is not the barrier, and the funding is an incentive to change behaviour then it may be appropriate to set conditions. Cash transfers have unforeseen consequences. Interestingly, in South Africa, pensions have been shown to improve the health status of the pensioners and the wider family that they live with; children living with pensioners are 3-5 centimetres taller than children that do not[45]. Unconditional child support grants in South Africa have also increased the height of children receiving benefits in the first 20 months of life[46]. Conditional cash transfers are significantly more complex and difficult to administer and monitor than unconditional transfers, and if cash without conditions can achieve the required behaviour or health outcome, then this is the more straight-forward approach.

In some circumstances, the non-availability or poor access to services on which conditions are set prevent beneficiaries from fulfilling conditions, and are therefore unreasonable as they unfairly sanction families that may otherwise have fulfilled the conditions of the scheme, and received the benefits. It may be more appropriate where services are not available to focus on service strengthening than generating demand through CCTs. In areas with poor service coverage, unconditional transfers are more appropriate[47].

CCTs include the potential exclusion of recipients if they fail to comply, but in practice schemes vary in the degree to which they are punitive. Care needs to be taken to ensure that the most vulnerable, who often face the most difficult challenges in complying with conditions are not detrimentally penalised, at the expense of achieving the schemes goal. Age and family size restrictions on eligibility to transfers also need to be sensitively handled as they may end up excluding the most vulnerable and needy. For example, health cash transfers for pregnant women limited to those over a certain age may penalise young first time mothers that most need health information and services. Given the complexity in administering CCTs, governments need to consider their capacity to manage and monitor the schemes at scale. This suggests that if conditions are necessary, limiting the number of conditions to be monitored to a minimum and establishing strong monitoring, payment and evaluation systems. In Oportunidades, the follow on programme from Progresa, politicians introduced a large number of conditions that are very difficult to monitor, and for beneficiaries to comply with[48].

Social transfer schemes work best where they work alongside investments in service provision. As the Bangladesh Female Secondary School Stipend Programme found, increased demand from CCTs can negatively impact the quality of schooling provided and learning outcomes. Progresa which only operated where schools and clinics were available also had to finance the supply of equipment, medicines and materials, and supplemented government service provision with NGO support. While often a politically attractive intervention, cash transfers demand strong administrative systems, rigorous monitoring and evaluation, and in low income settings such as Odisha, complementary investments in service provision.

[45] DFID and Development Pathways, “Conditional cash transfer programmes: their relevance for Nepal”.
[46] DFID, February 2006, “Using social transfers to improve human development”.
[47] DFID, February 2006, “Using social transfers to improve human development”.
[48] DFID and Development Pathways, “Conditional cash transfer programmes: their relevance for Nepal”.

ANNEX 2

Detailed Estimates from PHBS 2010

Annex 2.A: Average Out of Pocket Spending (OOPS) on Hospitalised Treatment, Outdoor Treatment, and Delivery of Child under Public Health System, Odisha, 2010, `, *Current Prices*						
District	per Hospitalisation (*currently admitted in a PHF*)			OOPS per Non-Hospitalised Treatment (*had consultation in the outdoor section of a PHF*)	OOPS per Childbirth (*JSY beneficiaries who had delivered in the last 6 months in a PHF*)	
	OOPS per Day	OOPS till Date	Projected OOPS till Release		OOPS per Day	Gross OOPS
Balasore	1,796	3,951	6,915	270	581	802
Jagatsinghpur	1,142	2,144	3,801	300	669	1,034
Jharsuguda	1,670	3,643	6,242	204	623	1,094
Kandhamal	764	2,054	3,714	40	950	1,322
Keonjhar	1,041	1,841	3,373	252	190	377
Nabarangpur	754	1,518	2,613	53	386	563
Nuapada	860	1,311	2,134	151	485	559
Sundargarh	1,219	2,743	4,826	140	230	391
ALL 8 Districts	**1,145**	**2,376**	**4,161**	**180**	**544**	**809**
Source: Public Health Beneficiary Survey, 2010.						

Annex 2.B: Out of Pocket Spending (OOPS) on Hospitalized Treatment by Type of Ailment under Public Health System, Odisha, 2010, `, *Current Prices*				
Reasons	Number of Cases		OOPS per Day	OOPS till Date
	n	%		
Panel A: Common Ailments				
Fever, Cough, Cold, etc.	60	*25%*	674	1,411
Kidney, Stomach, Urinary & Other Gastro-intestinal Ailments	21	*9%*	1,786	3,461
Malaria	19	*8%*	993	2,118
Diarrhoea/Dysentery	14	*6%*	497	1,251
Blood Pressure & Other Heart Diseases	11	*5%*	748	1,713
Asthma, Chest & Other ENT Ailments	7	*3%*	573	1,483
Joint/Body Ache	6	*3%*	213	525
Anaemia	5	*2%*	1,591	1,999
Blood Sugar/Diabetes	5	*2%*	1,355	2,005
Typhoid	5	*2%*	1,665	2,553
Other Ailment	14	*6%*	1,377	3,115
Sub-total : Common Ailments	**167**	***70%***	**960**	**1,944**
Panel B: Trauma and Other Ailments requiring special care				
Accidents/ Injuries/ Burns/ Fractures/ Poisoning	41	*17%*	1,665	3,497
Gynaecological Ailments	7	*3%*	1,979	3,940
Hydrosil	5	*2%*	986	2,815
Hernia	4	*2%*	1,344	2,575
Tuberculosis	4	*2%*	876	2,415
Tumour	3	*1%*	1,325	3,369
Piles	2	*1%*	2,367	3,972
Body Swelling	1	*0%*	964	3,156
Cancer	1	*0%*	4,113	6,646
Neurological Disorders	1	*0%*	1,088	2,355

Other Orthopaedic Ailment	1	*0%*	1,160	2,720
Sub-total: Trauma and Other Ailments which need Special Care	**70**	***30%***	**1,599**	**3,399**
TOTAL	**237**	***100%***	**1,152**	**2,381**
Source: Public Health Beneficiary Survey, 2010.				

Annex 2.C: Selected Demographic and Socioeconomic Indicator - Public Health Beneficiary Survey, 2010

Indicator	Category	*n*	*Percent (%)*
Gender	Male	301	47%
	Female	345	53%
	Total	*646*	*100%*
Religion	Hindu	612	95%
	Muslim	14	2%
	Christian	20	3%
	Total	*646*	*100%*
Social Group (Caste)	SC	173	27%
	ST	198	31%
	OBC	146	23%
	General	129	20%
	Total	*646*	*100%*
Education	Illiterate	214	33%
	Literate w/o Schooling	86	13%
	Primary	114	18%
	Upper Primary	75	12%
	Secondary	98	15%
	Above Secondary	59	9%
	Total	*646*	*100%*
Employment Status	Currently Employed	277	43%
	Unemployed	123	19%
	Out of Lobur force	246	38%
	Total	*646*	*100%*
Possession of BPL Card	Yes	373	58%
	No	273	42%
	Total	*646*	*100%*
Household Income (Month)	<2K	356	55%
	2K-5K	188	29%
	> 5K	102	16%
	Total	*646*	*100%*
Type of Facility (only for IPD and OPD)	District HQ Hospital (DHH)	329	68.0%
	Community Health Centre (CHC)	109	22.5%
	Primary Health Centre (PHC)	45	9.3%
	Sub Centre (SC)	1	0.2%
	Total	*484*	*100.0%*
Source: Public Health Beneficiary Survey, 2010.			