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Health Expenditure, Equity and Evolution of Aasandha

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Introduction and Background

With the introduction of the universal health insurance scheme Aasandha in January 2012, the Government of Maldives aimed at achieving five key objectives, namely: (i) to enhance affordability of health care and to promote access to health care; (ii) to mitigate health care related financial risk for households and protect the citizens from health care related impoverishment; (iii) to contribute to improving the quality and reliability of health care; (iv) to improve the efficiency of health insurance provision via good governance and effective use of fiscal resources; and (v) to ensure long-term sustainability of health insurance provision through an effective design of the health insurance system, cost containment measures and reforms in the payment mechanisms.

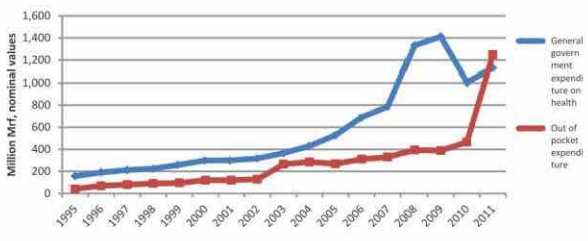
The objective of this note is two-fold. First, the note aims at discussing some of the equity issues related to health expenditure and health access in the Maldives. In particular, through the analysis of the trends in household expenditure on health, the note will provide an empirical benchmark against which to assess Aasandha's strengths and weaknesses. Second, the note will discuss the equity implication of some cost containment measures previously suggested for Government consideration (Nagpal and Redaelli 2013).

Trends in Households' Health Care Consumption Patterns

The trends in health expenditure for households in the Maldives suggest that health expenses have been steadily increasing over the past decade, in line with overall improvements in the population's living conditions and the concomitant expansion of health care supply. The analysis of expenditure data from the Household Income and Expenditure Survey (HIES) reveals a 42 percent increase in the real per capita expenditure on health over the period 2003/04 to 2009/10, that is, before the introduction of Aasandha and right at the onset of its predecessor Madhana[1] (Nagpal 2011).

Similar patterns emerge also from the analysis of Government expenditure on health. In particular, as discussed in the recently released National Health Accounts report (MOH and WHO, 2013), the analysis of public accounts over the same period revealed that household expenditure increased at a much faster pace than Government's one. As a result, out-of-pocket expenditure for Maldivian households in 2011 reached 49 percent of the total health expenditure in the country (NHA 2011). The National Health Accounts database (WHO) also suggests that both Government and out-of-pocket expenses have risen steadily in Maldives to very high levels (Figure 1).

Figure 1: Trends in Government and Out-of-Pocket Health Expenditure in the Maldives



Source: WHO National Health Accounts database at www.who.int/nha

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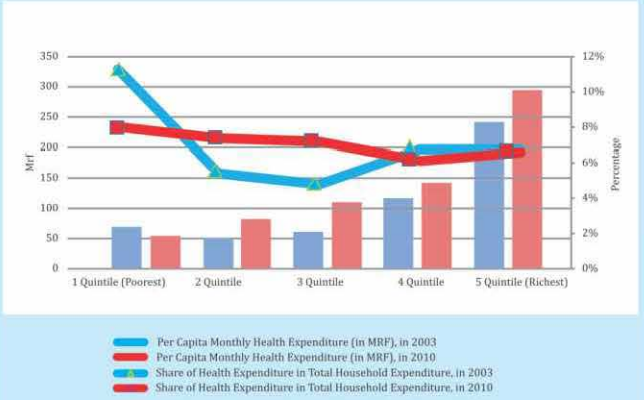
When analyzed for expenditure trends in different socioeconomic groups (by expenditure quintiles) between 2003 and 2009, households' expenditure on health increases with rise in socioeconomic status, meaning that the richest households tend to have higher consumption of health care in absolute terms (Figure 2)[2]. In 2003, households in the poorest quintile were spending as much as 11 percent of their total budget on health, about 3 percentage points more than the corresponding share of health expenditure of households in the richest quintile. In 2009/10, this difference did get narrowed but continued to be the highest share of expenses for the poorest quintile. Between 2003 and 2009, a decline in health expenditure was found only in the lowest quintile, and it is difficult to assess whether it is a result of underutilization of healthcare services or improved financial protection[3].

The analysis of the temporal evolution of household health expenditure patterns further reveals that, over the reference period between 2003 and 2009, health expenditure increased the most for relatively better off segments of the population, while the share of health expenses in household budget substantially increased for the second and third quintiles of the distribution.

Figure 2: Trends in Household Health Expenditure by Quintiles of Monthly Per Capita Expenditure

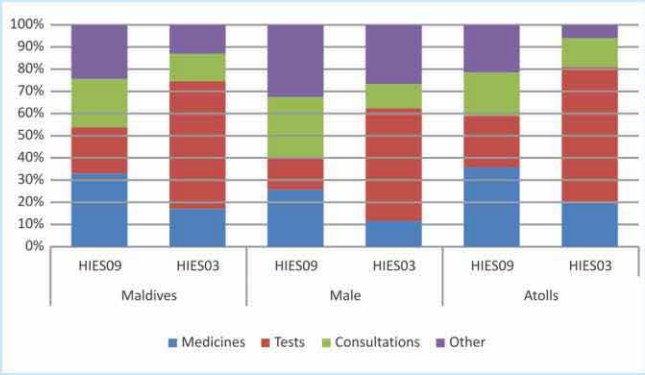


Source: Authors' analysis based on HIES 2003/04, HIES 2009/10

The increase in Maldivian households' expenditure on health over this period was also accompanied by a change in the composition of such expenditure — with higher shares of the total being progressively devoted to the purchase of medicines and consultations[4], and a corresponding decrease in the share of health expenditure devoted to diagnostic tests (Figure 3). These trends are true of both Male' and the Atolls but were more sharply pronounced for Male'. Since the households' health expenditure itself increased sharply over this period, the rise in expenditure on medicines and consultations in currency unit terms was even greater than that in the share of household health expenditure.

Of particular significance when looking at changes in the composition of the households' health expenditure is the increase in the frequency of treatment abroad. In 2003/04 only 13 percent of households had incurred health expenditure abroad, while in 2009/10 this number had grown to 32 percent. In terms of their geographical distribution, it continued to be that the households in Male' were more likely to seek treatment abroad, although geographical differences in overseas treatment between the capital area and other Atolls have been narrowing over time[5].

Figure 3 : Composition of Household Health Expenditure



Source: Authors' analysis based on HIES 2003/04, HIES 2009/10

The composition of health expenditure varies significantly by level of wellbeing, with biggest differences emerging in the share of total health expenditure devoted to medicines and overseas treatment. In particular, as shown in Figure 4, the health expenditure of the poorest 20 percent of the Maldivian population is mostly devoted to medicines, which account for about 60 percent of their total health expenditure (against 29 percent for the richest); treatment abroad is the largest component of out-of-pocket expenditure for the richest 20 percent of the population, standing at 36 percent of the total.

Aasandha: What do We Know About the Scheme's Distributional Implications?

Aasandha, the country's universal health insurance scheme, commenced on January 1, 2012. The scheme design bears a resemblance to its predecessor, the erstwhile national health insurance scheme Madhana, in many ways. Madhana covered about 25 percent of the country's population - primarily comprising civil service officials, senior citizens, and a growing number of voluntarily enrolled individuals. Aasandha covers inpatient and outpatient treatment, including drugs and diagnostics (though subject to certain specified exclusions and conditions), within an overall cap of

Figure 4 : Composition of Out-of-Pocket Health Expenditure for Lowest and Highest Socio-Economic Quintiles

Source: Authors' analysis based on HIES 2003/04, HIES 2009/10

100,000 MRF per person per year. Unlike Madhana, where the Government only covered the costs for less than one-fifth of the population and others were required to enroll and pay a contribution, the entire population of the country (comprising over 330,000 citizens) is eligible for Aasandha without any premium contributions.

The introduction of Aasandha achieved the important objective of expanding health insurance coverage to the entire population resident in the Maldives. The lack of recent household survey data limits the ability to understand in full the distributional implications of the scheme. However, with ongoing improvements in the Monitoring and Information System within the National Social Protection Agency (NSPA), it will be possible to link administrative data on Aasandha's beneficiaries with that available under the Maldives Pensions Administrative Office (MPAO), covering information of individuals employed in the formal sector (such as their income level and employer characteristics). By matching anonymized records under the two databases, it has been possible to answer important questions related to the economic profile of an important subsample of Aasandha users. The ability to triangularize data between the databases also helps assessing the relative share and absolute expenditure being incurred on the formal sector under Aasandha, which can guide future policy decisions on direct contributions to the scheme. In the future, as more data become available in Aasandha's MIS, it may also be possible to undertake further analysis on morbidity patterns and utilization profiles across these different groups.

Individuals actively employed in the formal sector in the Maldives account for about 20 percent of the total of Aasandha users and about 17 percent of the total amount billed for transactions under the scheme. The relative under-representation of formal sector employees covered in the MPAO database in terms of their utilization of the insurance scheme is likely to be a direct consequence of their working age profile, typically associated with lower demand for health[6].

Another important finding from the data triangularization exercise is that the relatively poorer among the formal workers tend to utilize the scheme the most. Although MPAO beneficiaries are not, by themselves, representative of income quintiles in the Maldives as a whole, it is interesting to note how the utilization of Aasandha varies by the income level even within those formally employed in the country (Table 1). In terms of the total amount billed as well as the number of transactions, the lowest income group amongst the formal sector employees utilizes the Aasandha program the most, and the two richest income groups use it the least.

Table 1: Aasandha Utilization by Different Income Levels of MPAO Beneficiaries

Quintiles Total Monthly Earnings	Total Amount Billed	% to Total Amount Billed	Per Capita Amount Billed	Average # Transactions
Poorest (1)	26,000,000	23.09	2,293	10.16
2	22,400,000	19.89	2,296	9.65
3	25,900,000	23.00	2,234	9.40
4	18,700,000	16.61	2,192	8.71
Richest (5)	19,600,000	17.41	2,164	7.57
Total	112,600,000	100	2,239	9.18

Source: Authors' analysis based on matched Aasandha and MPAO administrative data

Moving Forward: Distributional Implications of Aasandha Cost Containment Measures

Health expenditure in the Maldives, both by the Government and out-of-pocket by households, has risen steeply in recent years, with its consequent adverse impact on financial protection, especially of poorest households. Measures to contain the total health expenditure and to improve financial protection are thus the twin policy objectives that seem to be facing the Maldives' policymakers. This also creates a strong case for system-wide reform that addresses the increasing financial protection needs of the Maldivians, and Aasandha is a timely intervention in that respect.

The runaway rise in total health expenditure - both government and household - continues to face the risk

of further exacerbation by a health insurance program that does not make adequate efforts toward cost containment. This further increases the stakes for Aasandha in its dual efforts to provide adequate financial protection to the households, especially in the Atolls (where health expenditure has risen steeply as a share of the household's total expenditure), while containing the total health expenditure in the country through innovative purchasing of health services and improving the cost efficiency of the health system.

Administrative data from the first year of Aasandha's implementation suggest that the scheme has contributed significantly in terms of reaching out to the entire population of the country with health insurance coverage[7]. Improved coverage addresses the increasing financial burden of health related expenditure emerging from the analysis of household survey data over the period 2003-2009. Interestingly, dependents, informal sector workers and poorer segments of the population seem to have benefited more from the scheme than other groups. These are encouraging results for Aasandha, and greater efforts need to be undertaken to sustain and strengthen these trends.

The main challenge facing Aasandha is related to its fiscal sustainability[8]. As discussed in the previous Policy Note (Nagpal and Redaelli 2013), substantive savings for the scheme could be achieved by reducing the cost of medicines through the bulk procurement of essential and generic drugs and by reducing expenditure on overseas treatment through negotiation of close-ended package rates with providers. Both these measures, while improving the scheme's long run fiscal sustainability, will also have positive distributional implications, particularly with respect to the decrease in the cost of drugs, mostly affecting the poorest segments of the population.

Improved availability of household survey information and continuous analysis of administrative data will be important to periodically check on the scheme's performance and distributional implications. Good information on these aspects would be a valuable dipstick for supporting the country's universal health insurance program in its ability to manage total health spending and ensuring equity of health access and utilization.

[1] Madhana, the erstwhile national health insurance scheme in the Maldives, was introduced in 2008. The scheme was administered by the National Social Protection Agency (NSPA) and covered about 25 percent of the country's population. The membership comprised two large groups fully subsidized by the Government — all civil service officials and all senior citizens. Another large group was a growing number of voluntarily enrolling citizens paying contributions, which comprised only a small proportion of the population.

[2] As observed in many other countries, health consumption in Maldives has the characteristics of a 'normal good,' meaning that consumption increases with household socioeconomic status.

[3] Some of the poorest members of the population did have access to Madhana cover during 2009, which could have contributed to the reduction in health expenditure seen only in the poorest quintile.

[4] These patterns are particularly evident looking at health consumption of households living in the Atolls.

[5] In 2003/04, the households in the Atolls were only half as likely to incur expenditure abroad as compared to households in Male' (10 percent against 20 percent in Male'). However, by 2009/10, the frequency in Atolls almost tripled to 28 percent, and now they were two-thirds as likely to spend on overseas treatment as their counterparts in Male'.

[6] In terms of the age profile of the MPAO, beneficiaries are over-represented in the age group 20-50 years and under-represented in those over 60. More than 40 percent of the country's population is younger than the age group covered by MPAO.

[7] As of December 31, 2012, a total of 276,033 citizens, or about 84 percent of the population, had already used the scheme at least once during the first year of its implementation.

[8] Despite several cost-containment measures undertaken during the year, the available claims data showed that the insurance company had already received claims amounting to about MRF 943.6 million in the first year of the scheme. If these claims were to be accepted in full, the insurer would lose some money (vis-à-vis the premium received) on account of these claim payments and administration thereof.

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