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**Results of Feasibility Study Using World Health Survey Data
To Measure Medicines Need, Use and Out-of-Pocket Expenditures
in Eight Low and Lower-Middle Income Countries**

Final Report

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Summary

The Medicines Transparency Alliance (MeTA) aims to improve country pharmaceutical situations by increasing transparency, openness, and access to reliable information about medicines by key pharmaceutical sector stakeholders. Information on current patterns of medicines needs, access, use, and expenditures in countries will help MeTA stakeholders decide where to focus their efforts.

We undertook a feasibility study on Medicines Need, Use and Out-of-Pocket Expenditures in Low and Middle-Income Countries based on previous research that identified a strong relationship between high out-of-pocket health care spending and poverty. The goals of this research were to evaluate the potential for using World Health Survey data to estimate the relative size and economic importance of household out-of-pocket health care and medicines expenditures; the prevalence of conditions requiring care; and access to care and to needed medicines in eight low and lower-middle income countries.

The results of the present analyses provide new descriptive information on household health care and medicines spending, in addition to medicines need and access among individuals for eight selected countries that participated in the 2002 World Health Survey: Côte d'Ivoire, Ghana, India, Morocco, Pakistan, Philippines, Senegal, and Tunisia.

Our analyses show that most households in these countries are poor, and between a third and half of households devoted potentially catastrophic proportions of their available expenditures (>40% of non-food expenditures) to health care in the previous 4 weeks. Substantial proportions of the adult respondents had been diagnosed with one or more common chronic conditions, yet not all had ever received treatment; among those who had ever received treatment, even fewer were receiving it during the two weeks preceding the survey. Many young children in these households were ill in the past month, most with symptoms of malaria, upper respiratory tract infections, or diarrhea. Most adults and children were reported to have sought care and obtained medicines when they last needed them. However, among those who did not, the cost of getting care, the cost of medicines, and dissatisfaction with locally available medicines and health providers were the most frequent barriers to access.

Our analyses illustrate the importance of household information about access, affordability, and use of medicines, which are key outcomes of strategies to improve transparency in the pharmaceutical sector. They also illustrate the potential and the limitations of the World Health Surveys as a source of this information.

Background

The Medicines Transparency Alliance (MeTA)¹ aims to improve country pharmaceutical situations by increasing transparency, openness, and access to reliable information about medicines by key pharmaceutical sector stakeholders. Stakeholders in the MeTA process include those on the supply side of the pharmaceutical system (manufacturers, purchasers, distributors, health facilities, and drug outlets) as well as those on the demand side (professional organizations, consumer groups, health providers, patients, and consumers).

MeTA will operate globally and at national level through coordinated advocacy, programs, and research targeting key factors that interfere with optimal access to information leading to economically inefficient or clinically inappropriate use of medicines. Information on current patterns of medicines needs, access, use, and expenditures in countries will help MeTA stakeholders decide where to focus their efforts.

The link between illness and poverty is well established and has engendered concern over the burden of out-of-pocket health spending. In a 2003 Lancet study, Xu and colleagues examined the prevalence and key determinants of catastrophic health expenditures among 59 countries using economic survey data.² Out-of-pocket health expenditures were identified as the most important predictor for whether households would experience catastrophic health expenditures. This study provided evidence of the critical role of health insurance and risk sharing in reducing catastrophic health care expenditures.

Importantly, the Lancet study did not consider expenditures for medicines, which in many countries are mainly out-of-pocket and which contribute significantly to household economic burden. For example, among developing and transitional countries, approximately 70 percent of expenditures for medicines are spent out-of-pocket and the proportionate share of out-of-pocket spending tends to increase with decreasing country income.³ Large out-of-pocket payment shares threaten access to medicines, which impacts household wellness, financial stability, and individual productivity in the labor force.

The potential for potentially catastrophic economic and clinical effects associated with the burden of health and medicines expenditures underscores the need for programs and policies that promote affordability, including policies that reduce the price of medicines to consumers, encourage greater use of generics, expand health insurance coverage of medicines, and provide consumers with better access to unbiased information about health and medicines. To focus programs and policies aimed at improving access to medicines, empirical research is needed to estimate the relative size and impact of household out-of-pocket medicine payments and cost-related underuse of needed medicines in specific target populations.

Specific aims

The goal of the current study was to inform the development of MeTA by examining the feasibility of using data from the 2002 World Health Survey (WHS) on medicines expenditures, access, and use in selected developing countries to build upon the current body of knowledge about out-of-pocket health expenditures and poverty. This feasibility study was conducted using data from eight countries that had implemented the WHS modules which contained necessary data on medicines expenditures and use. These eight countries were selected for the feasibility study because they were representative of the types of countries that might be targeted for early stage MeTA activities.

The specific aims of the feasibility study were:

1. To assess household medicine expenditures as a proportion of total household spending and total health care spending, by estimating:
 - Demographic and economic characteristics of households included in the WHS;
 - Average household health care expenditures and distribution of these expenditures;
 - Average household medicines expenditures and distribution of these expenditures;
 - Proportion of total health expenditures spent on medicines;
 - Prevalence of catastrophic levels of health care expenditures.
2. To examine the prevalence and nature of certain chronic conditions measured in the WHS, access to care for these conditions, and potential underutilization of needed medicines, by estimating:
 - Prevalence of important chronic conditions, based on previous diagnosis or symptoms reported by individual respondents;
 - Prevalence of apparent underuse of medicines in relation to need for chronic illness;
 - Prevalence of cost as a reported reasons for underuse of medicines.

Methods

Data source

We used data from the 2002 World Health Survey for the following eight low and lower-middle income countries: Côte d'Ivoire, Ghana, India, Morocco, Pakistan, Philippines, Senegal, and Tunisia. These data were made available by the World Health Organization for the purposes of this project prior to their public release. The World Health Survey was developed to provide valid, reliable, and comparable survey modules that could bolster national health information systems. In addition, the WHS was designed to help establish an evidence base for health system monitoring and health policy decision-making.

WHS data were collected at both household and individual household member level in 70 countries within the six WHO regions. An extended version of the WHS was implemented in approximately 55 countries that included extensive information on household demographic and socio-economic indicators, household expenditures in different categories, including health care and medicines, health insurance status, and financial coping strategies in the face of health expenditures.⁴ The individual respondent survey which targeted one adult in each WHS household asked about health status, chronic illness diagnoses and treatment among adults, recent symptoms of acute illness among children, access to care, and potential barriers to access.

Survey methods for the 2002 WHS included face-to-face household surveys, computer assisted telephone interviews, and computer assisted personal interviews. Each country selected the most appropriate method, and all survey instruments were standardized and pre-tested, according to the WHO Multicountry Survey Study on Health and Responsiveness

2000-2001. Psychometric evaluation of the instrument properties was performed, including estimation of test-retest reliability.⁴

The study population in each country consisted of a nationally representative sample of respondents to both the household and individual modules. All household and individual respondents were older than 18 years of age and were randomly chosen to avoid selection bias.⁴ Representativeness of the samples for each country was measured by a Sample Population Deviation Index.⁴

Data quality

The initial focus of this feasibility study was to examine the completeness and consistency of WHS data in the eight countries selected. This initial assessment of data quality indicated that the survey forms, data collection procedures, and resulting file structures were relatively consistent across the eight countries. Sample sizes of households with completed surveys ranged from 3,224 to 10,548, while the samples of individual respondents ranged from 3,109 to 10,072. Some inter-country differences were observed in the rates of completeness of different portions of the household and individual surveys, but the overall quality of the data was judged to be satisfactory to proceed with quantitative analyses.

Statistical analyses

Because of the complex sample design for the WHS, national parameter estimates should be calculated using the sample weights included in the survey files. The short time frame of this feasibility study did not permit incorporation of sample weights or appropriate calculation of standard errors. Future analyses based on these data would need to accommodate the complex sample design.

This report presents unweighted descriptive analyses of household and individual respondent data by country, as well as averages and ranges of values across countries. Expenditure data are reported as averages for the national population as a whole and as means of population quintiles. Expenditure components are reported as mean category expenditure proportions. SAS V9 was used for all analyses.

Results

The sections below present key findings of preliminary analyses of data from the eight countries included in the feasibility study. Tabulated results by country are included at the end of this report.

Specific Aim 1: Household demographics and expenditure patterns

Household demographic and economic characteristics (Table 1)

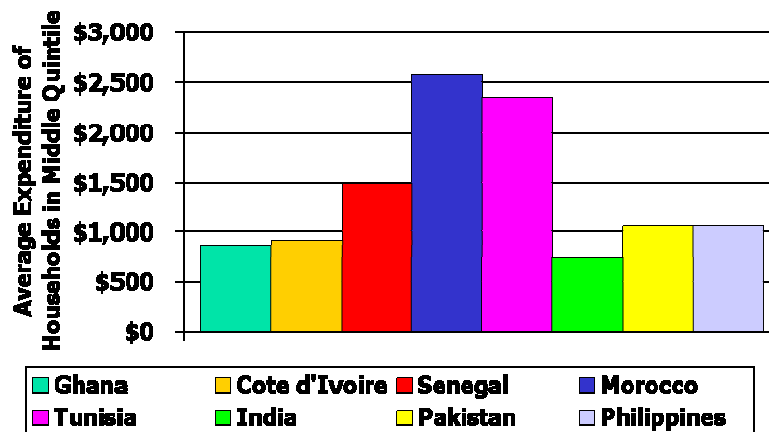
Five of the eight countries in the feasibility study are classified by the World Bank as low-income countries (2005 gross national income (GNI) \leq \$875): Côte d'Ivoire, Ghana, India, Pakistan, and Senegal. Three included countries are classified as lower-middle-income ($\$876 > 2005 \text{ GNI} \leq \$3,465$): Morocco, Philippines, and Tunisia. The WHS samples for these countries varied considerably in their demographic and economic characteristics.

The largest proportion of households (45% on average across countries) consisted of 6 to 10 members, but household size varied widely between countries. In Morocco, 54% of households consisted of 1-2 members, while 25% of Senegalese households reported 11 or more members. The age structure of households also varied widely by country; overall 27% to 54% of households had children under 5 years old, 43% to 77% of households had children age 6-15 years old, and between 21% and 59% had a household member age 60 years or older. Since the likelihood of serious chronic illness increases with age, countries where a high proportion of households have elderly members are more likely to exhibit higher rates of medicines expenditures and need for medicines. Detailed analyses comparing expenditure levels between countries or between population groups within countries would need to take account of these differences in household size and age composition.

Educational attainment is a primary determinant of health literacy, and education of the primary health decision maker has a strong relationship with the overall health status of the household. More than a fifth of all households (23% on average, range 6% to 43%) had no member who had completed primary schooling. However, educational attainment also varied widely between countries; for example, in Tunisia and the Philippines, more than 20% of households had a member with college and/or a post-graduate degree

The WHS collected data on estimated expenditures in the previous 4 weeks. All calculations of household expenditures were converted from local currency to 2002 U.S. dollars using a consistent source of foreign exchange rates. Based on these data, the typical household in Morocco and Tunisia (i.e., one in the middle expenditure quintile) spent nearly twice as much in total per year compared to similar households in the other countries. With their relatively larger household sizes, per capita expenditures in India and Pakistan were notably low. Average total household expenditures in the past 4 weeks of households in the middle expenditure quintile ranged from 2002 U.S. \$57 in India to \$198 in Morocco.

Figure 1. Annual total expenditures of households in middle expenditure quintile

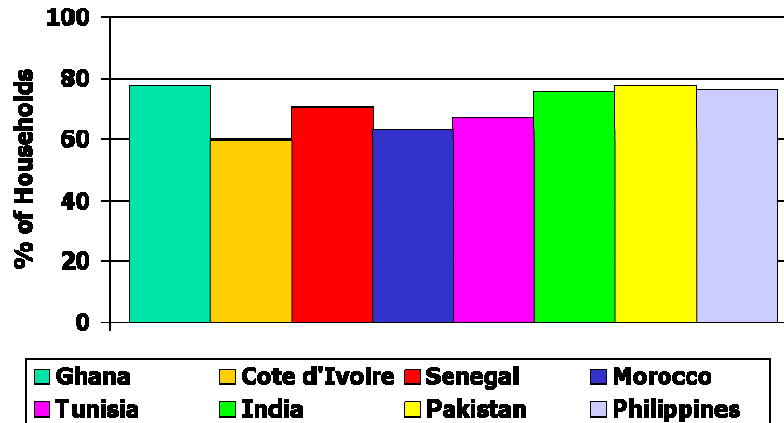


* Annualized total household expenditures based on previous 4-week expenditures

One common definition of poverty is based on devoting more than 50% of total household expenditures to food. By this definition, the majority of sample households in each of the eight countries included in the feasibility study was poor, with 60% to 78% of households

having spent more than half of total household expenditures for food in the past 4 weeks (Figure 2).

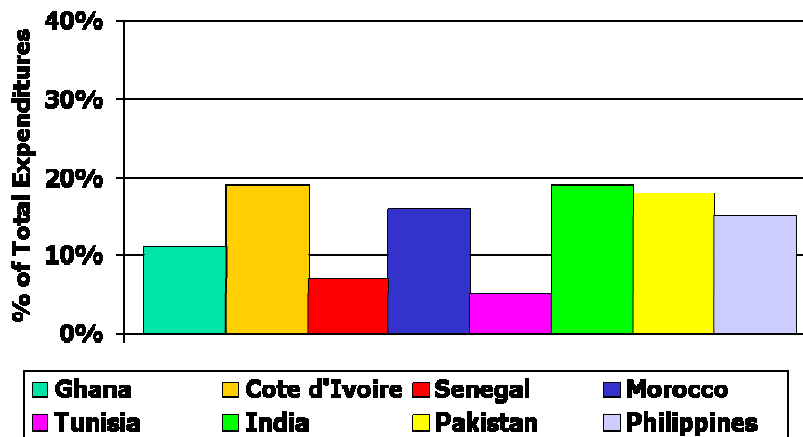
Figure 2. Percentage of Households with Food Expenses >50% of Total Expenditures



Household total, health care, and medicines expenditures (Table 1)

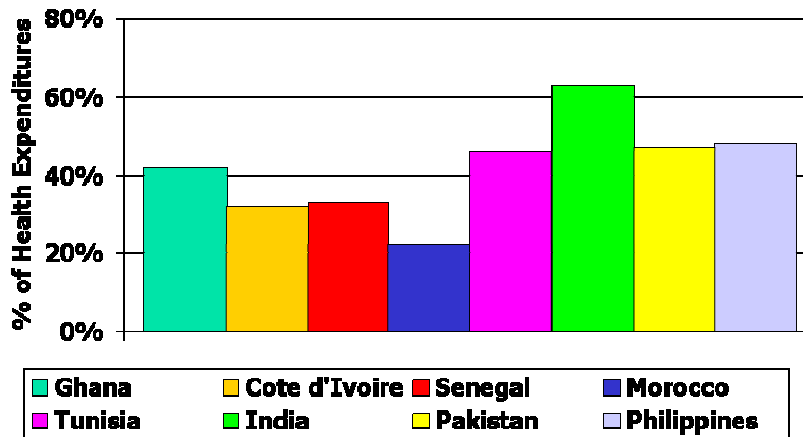
On average, households spent between 5% (Tunisia) and 19% (Cote d'Ivoire and India) of total household expenditures on health care (Figure 3). However, the distribution of health expenditures in the population was highly skewed. Over 40% of households in Cote d'Ivoire, Senegal, Tunisia, and the Philippines spent no money on health care in the previous 4-week period. This lack of expenditures may reflect either absence of health conditions requiring care, adequate access to free care in public health facilities, or substantial barriers in access to care among the poor,

Figure 3. Average 4-Week Health Expenditures as Percentage of Total Expenditures



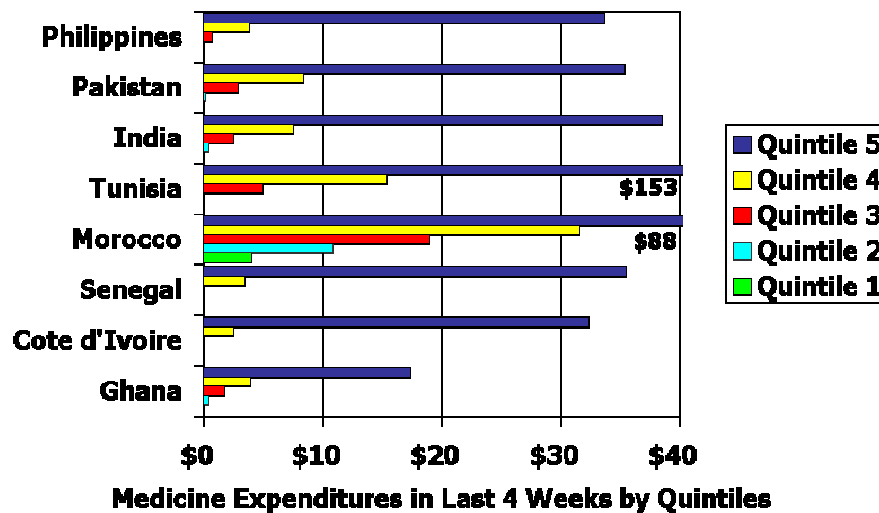
On average, medicines were reported to account for 26%-63% of health care expenditures (Figure 4). This is consistent with but somewhat lower than other surveys which have estimated that medicines account for up to 70% of out-of-pocket health care expenditures.

Figure 4. Average 4-Week Medicines Expenditures as Percentage of Health Expenditures



As with overall health expenditures, households in the lower quintiles allocated almost no money to medicines (Figure 5). In Senegal and Cote d'Ivoire, over 60% of households spent no money on medicines in the previous 4 weeks. Only in Morocco were there substantial amounts spent on medicines in the lower 40% of households. In contrast, the top quintile of households in all countries spent substantial amounts of money in the last 4 weeks on medicines, ranging from \$18 in Ghana to \$153 in Tunisia. In part, this reflects the skewed distribution of wealth in these national populations. However, this high expenditure group also includes households with high burden of acute or chronic need for medicines.

Figure 5. Average 4-Week Medicines Expenditures within Expenditure Quintiles

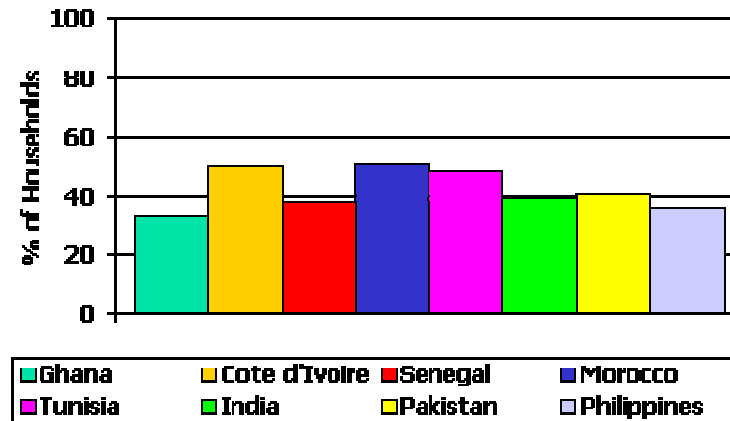


Catastrophic healthcare and medicines expenditures (Table 1)

In line with previous studies,² we defined households at risk of catastrophic health care spending as those devoting more than 40% of non-food expenditures to health care. By this definition, between 34% and 52% of households in the eight countries in the feasibility study

were at risk of catastrophic levels of health care spending (Figure 6). Identifying national strategies to increase access to medicines and affordability for this population at potential risk for catastrophic spending would be an important focus for MeTA activities.

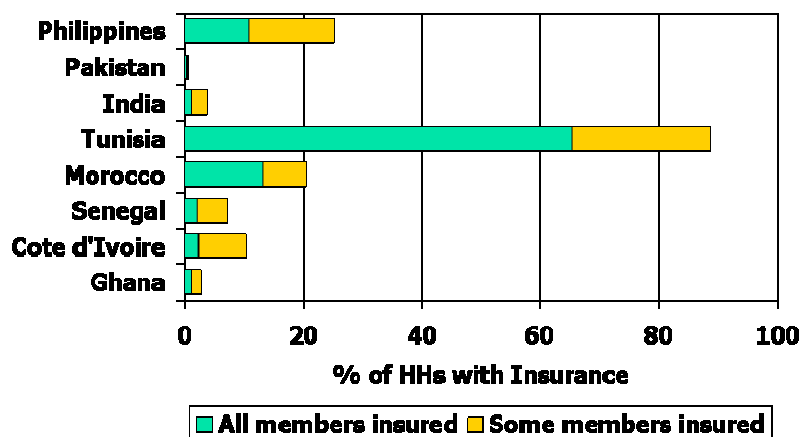
Figure 6. Percentage of Households with 4-Week Health Expenditures > 40% of Non-Food Expenditures



Health insurance status and coping strategies (Table 1)

Increasing rates of insurance coverage for medicines is one promising strategy for expanding access, lowering medicines prices, and leveraging higher quality of care. In Morocco, Philippines, and Tunisia, the three lower-middle income countries in the feasibility study, 20%, 25%, and 89% of households respectively reported that one or more members had health insurance coverage (Figure 7). Although most households in low-income countries had no health coverage, insurance systems were present to some degree in all countries, with between 1% and 10% of households having at least one insured member.

Figure 7. Percentage of Households Reporting Insurance Coverage



On average, 76% of households reported using the current income of a household member to meet some or all of their out-of-pocket payments for health care. Only a small percentage (1% to 13%) had access to health insurance payments. Many households needed to leverage

sources other than income and health insurance to pay for health care costs. On average, 19% (12% to 27%) of households used resources from family or friends outside the household to pay for health care; 11% (5% to 18%) used savings; 10% (6% to 16%) needed to sell something; and 14% (5% to 25%) borrowed from some source outside the home other than a family member or friend. Borrowing or expending capital to pay for health care is one of the ways that families begin the spiral into iatrogenic impoverishment.

Specific Aim 2: Illness patterns, need for, and access to care and medicines

Demographic characteristics of individual respondents (Table 2)

Between 3,000 and 10,000 adults responded in each country to individual surveys. These respondents constitute a representative sample of adults in these eight countries. On average, approximately one-half of respondents were women and the largest proportion (55%) were between 30 and 60 years of age; 64% of respondents (40% to 77%) were currently married; 49% (19% to 70%) had no formal education or less than primary schooling; and 44% (18% to 61%) were not currently working for pay. Substantial differences in the distributions of age, marital status, education, and employment status would need to be accounted for when comparing results from individual surveys across countries.

Health status, chronic illness, and treatment among adults (Table 3 and Table 4)

Self-reported health status is a good predictor of need for medical care and medicines. Most WHS respondents in the eight study countries (average 61%, range 42% to 75%) reported very good or good health; however, an average of 10% (4% to 23%) reported bad or very bad health. Overall, 49% (21% to 61%) of respondents reported no difficulties with work or household activities in the last 4 weeks.

The need for medicines to treat chronic illness represents a major burden of out-of-pocket health costs among adults. The WHS examined the prevalence and treatment of several chronic illnesses among individual respondents. In the analyses below, prevalence of a chronic condition is defined as the respondent reporting having ever been diagnosed, ever treated, currently treated, or having at least one medicine at home for personal treatment of the illness in question. Using this definition, the reported prevalences across countries of the six major chronic illnesses included in the WHS were as follows: arthritis (8%-25%), angina (2%-9%), asthma (3%-8%), depression (1%-13%), schizophrenia (1%-3%), and diabetes (1%-4%). Of those with these chronic illnesses, smaller proportions reported ever being treated for the condition: arthritis (7%-19%), angina (2%-7%), asthma (3%-6%), depression (1%-3%), schizophrenia (0%-1%), and diabetes (1%-3%). Failure to treat may represent preference for non-pharmacological management, but in many cases, untreated illness indicates lack of affordable access to needed medicines.

Among respondents who reported having ever treated their chronic illness, on average only about half had received treatment for their chronic condition in the past two weeks: arthritis (38%), angina (45%), asthma (44%), depression (53%), schizophrenia (61%), and diabetes (58%).

Across chronic conditions, the likelihood of having ever treated an illness and of having received treatment in the last two weeks varies in a consistent way across countries by the type of illness. For example, among respondents that were ever diagnosed, those with

diabetes were more likely to have ever received treatment and to have been treated within the last two weeks (Figure 8) than those diagnosed with asthma (Figure 9); those with arthritis were least likely to have ever treated this condition or to still be receiving treatment (Figure 10). These differences reflect the influences of many factors that determine effective access to care: overtness of symptoms; relative difficulty of diagnosis; available local options for care; effectiveness of communication with health providers; perceived differences in severity; choices about which illnesses to treat given limitations in ability to pay; and the local cost of medicines used to treat each illness. In order to fully understand the impact of efforts to improve access to and affordability of medicines, evaluations of MeTA will need to characterize and control for these factors at the household level and examine differential improvements in access for different important health problems.

Figure 8. Percentage of Adults with Diabetes Ever Treated and Treated in Last 2 Weeks

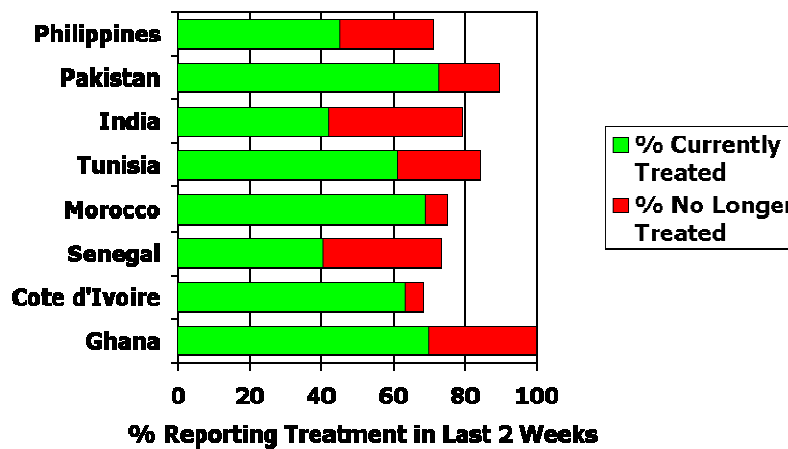


Figure 9. Percentage of Adults with Asthma Ever Treated and Treated in Last 2 Weeks

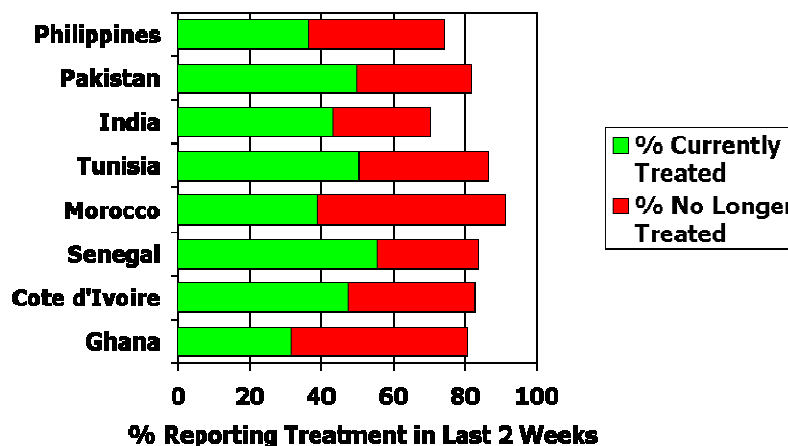
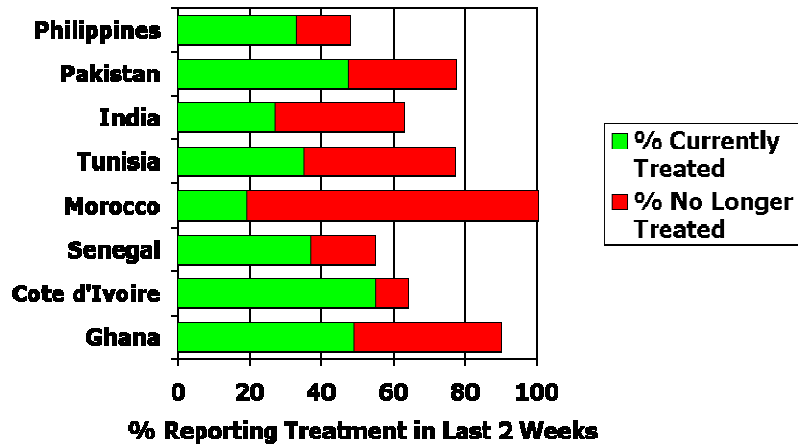


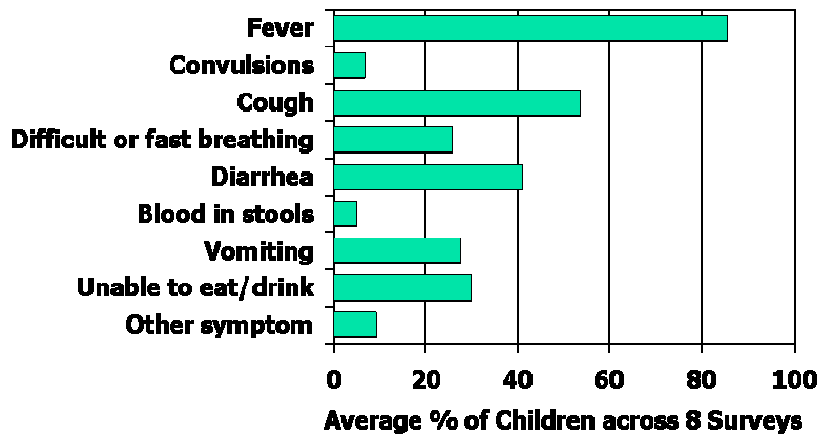
Figure 10. Percentage of Adults with Arthritis Ever Treated and Treated in Last 2 Weeks



Demographic characteristics and symptoms among children (Table 5)

On average, 41% (37% to 51%) of the youngest children under 5 years old in responding households were sick within the month prior to the survey. Fever was the most frequent symptom reported, present in more than 80% of the most recent illness episodes. Other frequently reported symptoms were cough (39% to 68%), difficult or fast breathing (18% to 42%), and diarrhea (28% to 48%). These symptoms reflect the importance of common acute health problems like malaria, mild and severe respiratory illness, and diarrhea as key issues to focus on in efforts to improve access to medicines for children.

Figure 11. Symptoms of Last Reported Illness in Youngest Child under 5 Years



Overall, an average of 86% of household respondents reported seeking care for the youngest sick child during his or her last illness episode. Among children who received care, an average of 34% had sought care at public and private hospitals; 28% at another type of outpatient facility; 19% from private physicians; 8% (2% to 28%) from a pharmacy, and 4% from traditional healers. However, the distribution of typical sources of acute care (and thus of medicines) varied widely across countries. Public hospitals and outpatient facilities were

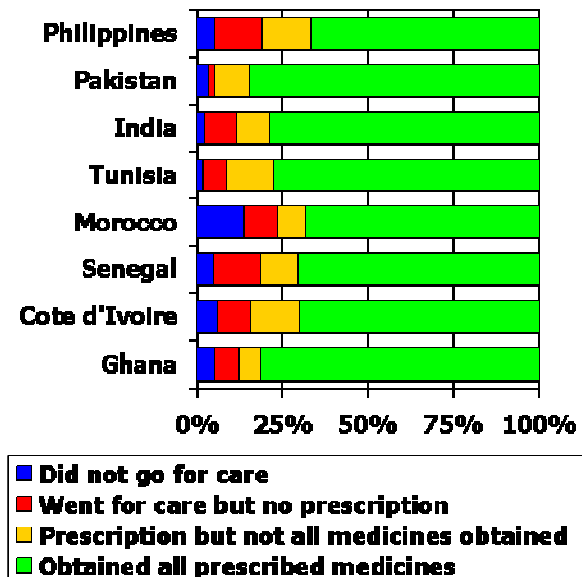
the most frequent reported sources of care for young children in all African countries and the Philippines, while private physicians were the dominant source of care in India and Pakistan,

Access to care and medicines among adults (Table 5)

Among adults, a surprisingly high 95% (86% to 98%) reported that they had received care when they needed it last (Figure 12). For those who did not receive care, affordability was the main reported barrier; an average of 49% (32% to 65%) could not afford visit costs, 19% (12% to 31%) could not afford transportation costs, and 6% (1% to 17%) could not afford to take time off. After affordability, the primary reasons for not seeking care involved dissatisfaction; 11% (3% to 18%) reported dissatisfaction with the quality of available medicines or equipment, 8% (1% to 15%) with the skills of local health providers, and 8% (4% to 17%) reported having previously been poorly treated.

Among adults who received a prescription, 87% (82% to 93%) received all of the medicines that were prescribed; 53% (37% to 74%) did not receive all medicines because they could not afford them, and another 29% (1% to 64%) could not find all of the medicines.

Figure 12. Access to Care among Adults Last Time Care was Needed

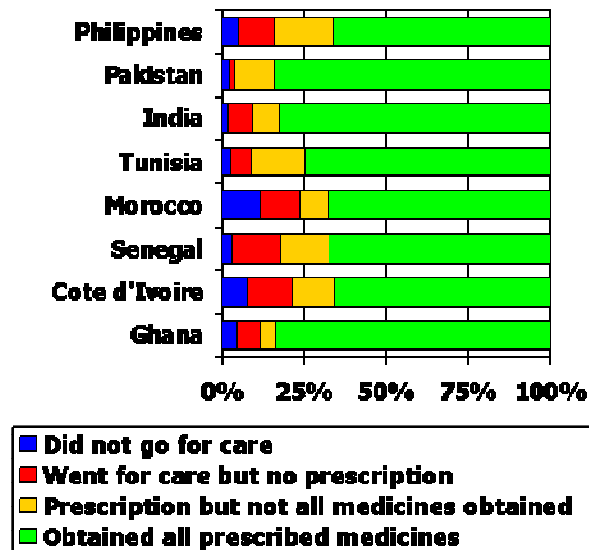


Access to care and medicines among children (Table 6)

Patterns of access to care and medicines among children under age 12 during their last illness reflect very similar patterns to those among adults (Figure 13). On average, 95% (75% to 98%) of children age 12 or under received care during their latest illness. Among those who did not receive care, affordability was the dominant concern; 55% (39% to 71%) of families could not afford visit costs, 23% (10% to 36%) could not afford transportation costs, and 5% (0% to 15%) could not afford to take time off.

Among children who received a prescription, 86% (79% to 94%) received all prescribed medicines; 54% (18% to 78%) could not afford all medicines, while 29% (8% to 68%) could not find all medicines.

Figure 13. Access to Care among Children Under 12 Years Last Time Care was Needed



Discussion

The results of these feasibility analyses of data from eight countries that completed the 2002 World Health Survey are important in several ways. First, it is clear that the WHS contains a wealth of important information on household demographic composition, socioeconomic, health status, access to care and medicines, and categories of household expenditures that would allow detailed description of patterns of expenditures, health care seeking, and need for and access to medicines. Comparison across countries is facilitated by the identical year of survey completion and the consistency of survey forms and data structures across countries.

Using data from the WHS, we have found that households in eight selected low and lower-middle income countries are largely poor and that a high proportion of households incur potentially catastrophic health care expenditures. When individuals from these households do not seek or have access to care or medicines, the most frequent reported barrier to access is the cost of care or medicines. Satisfaction with locally available medicines and care providers are also important factors that limit access.

While the WHS is the most complete and recent data source that allows multi-country assessment of expenditures on health care and access to needed medicines, it also has some limitations. The WHS was not designed specifically to focus on medicines issues. Therefore, important questions on which medicines were prescribed, which were used, at what cost, and more nuanced reasons for seeking care and using medicines were not asked. The WHO Department on Technical Cooperation on Essential Drugs and Traditional Medicines is currently developing a household survey specifically focused on measuring access to and use of medicines for acute and chronic illness. This survey would be an important future source of data to monitor the impact of global and national programs implemented to improve access to and use of medicines.

Limitations of the present analyses

Because of the limited scope of the feasibility study, there are several limitations to the reported analyses. First, the results have not yet been adjusted for the complex sample design of the WHS. Applying appropriate sampling weights would change some of the reported frequencies within countries, although the overall pattern of results would likely remain similar to those reported here. Second, future analyses using WHS data should characterize the distributions of expenditures (overall and within quintiles) and assess the impact of extreme values on expenditure estimates; trimming distributions for outlying values at the tails would result in more consistent and accurate estimates of expenditures. Finally, future analyses should also adjust expenditure values for purchasing power parities to allow more accurate and robust comparison of expenditures across countries.

Future steps

Consistent with the specific aims of the feasibility study, the present analyses are descriptive rather than analytic. The analyses do not account for the complex relationships between expenditures, poverty, household size, household health status, and insurance status. Future multivariate analyses of WHS data should examine the factors that determine access to and burden of expenditure for health care and medicines, controlling for country as well as these other determinants in the models.

Using data from all 55 countries that completed the long version of the 2002 WHS would allow more extensive and refined examination of the relationships between household medicines expenditures, health insurance, and catastrophic health care spending, as well as of the determinants of catastrophic expenditures and unmet need for medicines among chronically ill adults and young children. This work would provide important information for MeTA to use in selecting countries in which to work, targeting populations at greatest need, identifying promising strategies to improve medicines access and affordability, and producing baseline data prior to implementation of the initiative that could be used for impact evaluation.

Acknowledgements

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Table 1. Unweighted demographic and expenditure characteristics of country households

Characteristic of Household	Ghana		Cote d'Ivoire		Senegal		Morocco		Tunisia		India		Pakistan		Philippines	
	Unweighted sample size ^a	n=4,108 %	n=3,224 %	n=3,418 %	n=5,000 %	n=5,090 %	n=10,548 %	n=6,501 %	n=10,079 %							
Household Size																
Households with 1-2 members	770	18.7	782	24.3	188	5.5	2712	54.2	690	13.6	294	2.8	254	3.9	955	9.5
Households with 3-5 members	1,636	39.8	1,104	34.2	715	20.9	1,997	39.9	2,546	50.0	4,784	45.4	1,613	24.8	5,054	50.1
Households with 6-10 members	1,487	36.2	1,055	32.7	1,678	49.1	283	5.7	1,797	35.3	4,864	46.1	3,608	55.5	3,859	38.3
Households with 11+ members	215	5.2	283	8.8	837	24.5	8	0.2	57	1.1	606	5.7	1026	15.8	211	2.1
Age																
Households with children 0-5 years	1,914	46.6	1,162	36.0	1,830	53.5	1,367	27.3	1,466	28.8	4,204	39.9	3,399	52.3	4,606	45.7
Households with children 6-15 years	2,806	68.3	1,844	57.2	2,616	76.5	2,163	43.3	2,508	49.3	6,515	61.8	4,914	75.6	6,261	62.1
Households with persons 60+ years	1,194	29.1	668	20.7	1,417	41.5	1,035	20.7	1,906	37.4	6,209	58.9	2,234	34.4	2,200	21.6
Education of the highest-educated household member																
No schooling or less than primary school	1,351	32.9	1,129	35.0	1,466	42.9	813	16.3	419	8.2	1,833	17.4	1,685	25.9	611	6.1
Primary school completed	1,722	41.9	712	22.1	675	19.7	1,681	33.6	1,163	22.8	3,428	32.5	1,247	19.2	2,153	21.4
Secondary school or high school completed	573	13.9	533	16.5	480	14.0	1,019	20.4	847	16.6	1,952	18.5	1,089	16.8	4,232	42.0
High school/equivalent completed	143	3.5	319	9.9	312	9.1	722	14.4	1,489	29.3	1,340	12.7	1,233	19.0	706	7.0
College and/or post-graduate degree completed	291	7.1	470	14.6	466	13.6	481	9.6	1,168	22.9	1,961	18.6	1,245	19.2	2,373	23.5
Missing	28	0.7	61	1.9	19	0.6	284	5.7	4	0.1	34	0.3	2	0.0	4	0.0
Household Assets (permanent Income Indicators, lower Income countries)																
Households owning a bucket	3,720	90.6	2,980	92.4	3,051	89.3	0	0.0	3,952	77.6	9,845	93.3	5,848	90.0	5,680	56.4
Households owning a bicycle	1,391	33.9	1,155	35.8	588	17.2	1,577	31.5	1,626	31.9	6,247	59.2	3,019	46.4	3,220	31.9
Households owning a refrigerator	824	20.1	695	21.6	974	28.5	2,652	53.0	3,896	76.5	1,338	12.7	1,782	27.4	3,842	38.1
Households owning a clothes washing machine	39	0.9	51	1.6	76	2.2	683	13.7	1,543	30.3	376	3.6	2,307	35.5	2,939	29.2
Households owning a computer	120	2.9	110	3.4	184	5.4	170	3.4	349	6.9	259	2.5	351	5.4	571	5.7
Household Poverty																
Households with food expenditures < 50% of total expenditures	885	21.5	1,180	36.6	780	22.8	1,806	36.1	1,588	31.2	2,456	23.3	1,419	21.8	2,385	23.7
Households with food expenditures ≥ 50% of total expenditures	3,185	77.5	1,914	59.4	2,407	70.4	3,168	63.4	3,420	67.2	7,961	75.5	5,034	77.4	7,680	76.2
Exchange rate^b																
	8,669.34		688.32		688.32		11.03		1.44		50.91		65.05		52.47	
Average total expenditures in past 4 weeks^c																
Average total expenditures in past 4 weeks ^d	\$98.86	-	\$116.28	-	\$359.83	-	\$851.07	-	\$1,598.88	-	\$80.99	-	\$108.31	-	\$110.23	-
Average health care expenditures in past 4 weeks ^d	\$11.25	-	\$22.04	-	\$23.57	-	\$137.92	-	\$78.50	-	\$15.44	-	\$19.86	-	\$16.03	-
Health as percentage of total expenditures	11%	-	19%	-	7%	-	16%	-	5%	-	19%	-	18%	-	15%	-
Average medicines expenditures in past 4 weeks^d																
Average medicines expenditures in past 4 weeks ^d	\$4.67	-	\$6.98	-	\$7.78	-	\$30.58	-	\$36.17	-	\$9.80	-	\$9.37	-	\$7.63	-
Medicines as percentage of health expenditures	42%	-	32%	-	33%	-	22%	-	46%	-	63%	-	47%	-	48%	-
Households with Catastrophic Health Expenditures (>40% of non-food expenditures)																
Among households with no reported insurance	1,348	33.8	1,472	51.0	1,194	37.8	1,911	50.8	261	45.2	3,977	39.1	2,596	40.1	2,755	36.6
Among households with at least one member but not all insured	26	40.0	132	52.0	65	37.6	187	54.5	560	48.0	88	32.7	8	57.1	529	36.5
Among households with all members insured	14	31.8	34	46.6	29	40.3	341	55.6	1,583	48.4	51	43.2	10	58.8	358	33.2

Table 1. Unweighted demographic and expenditure characteristics of country households

Characteristic of Household	Ghana		Cote d'Ivoire		Senegal		Morocco		Tunisia		India		Pakistan		Philippines	
	Unweighted sample size*	n=4,108 %	n=3,224 %	n=3,418 %	n=6,000 %	n=5,090 %	n=10,548 %	n=6,501 %	n=10,079 %							
Mean (of Quintile) Total Household Expenditures (4 week)																
Quintile 1 (2002 US \$)	\$22.71	-	\$14.77	-	\$29.02	-	\$74.04	-	\$56.27	-	\$20.83	-	\$32.85	-	\$26.82	-
Quintile 2 (2002 US \$)	\$43.49	-	\$39.80	-	\$71.50	-	\$135.76	-	\$117.76	-	\$37.80	-	\$57.95	-	\$54.21	-
Quintile 3 (2002 US \$)	\$65.89	-	\$70.33	-	\$114.13	-	\$198.41	-	\$181.30	-	\$56.77	-	\$80.74	-	\$81.20	-
Quintile 4 (2002 US \$)	\$99.15	-	\$118.95	-	\$182.01	-	\$295.30	-	\$265.93	-	\$67.53	-	\$116.72	-	\$118.67	-
Quintile 5 (2002 US \$)	\$263.04	-	\$337.56	-	\$1,402.49	-	\$3,551.85	-	\$7,373.14	-	\$202.03	-	\$253.31	-	\$270.23	-
Mean (of Quintile) Household Expenditures for All Health Care (4 week)																
Quintile 1 (2002 US \$)	\$0.00	-	\$0.00	-	\$0.00	-	\$5.16	-	\$0.00	-	\$0.00	-	\$0.00	-	\$0.00	-
Quintile 2 (2002 US \$)	\$0.97	-	\$0.00	-	\$0.00	-	\$14.41	-	\$0.00	-	\$1.25	-	\$1.98	-	\$0.00	-
Quintile 3 (2002 US \$)	\$3.05	-	\$1.26	-	\$1.70	-	\$27.79	-	\$8.91	-	\$4.24	-	\$6.31	-	\$1.36	-
Quintile 4 (2002 US \$)	\$7.57	-	\$11.29	-	\$11.77	-	\$51.68	-	\$30.87	-	\$10.26	-	\$13.22	-	\$6.90	-
Quintile 5 (2002 US \$)	\$44.66	-	\$97.63	-	\$104.38	-	\$590.55	-	\$352.73	-	\$61.46	-	\$77.79	-	\$71.91	-
Mean (of Quintile) Household Expenditures for Medicines Only (4 week)																
Quintile 1 (2002 US \$)	\$0.00	-	\$0.00	-	\$0.00	-	\$3.98	-	\$0.00	-	\$0.00	-	\$0.00	-	\$0.00	-
Quintile 2 (2002 US \$)	\$0.42	-	\$0.00	-	\$0.00	-	\$10.89	-	\$0.00	-	\$0.43	-	\$0.14	-	\$0.00	-
Quintile 3 (2002 US \$)	\$1.68	-	\$0.00	-	\$0.00	-	\$18.96	-	\$4.98	-	\$2.49	-	\$2.91	-	\$0.69	-
Quintile 4 (2002 US \$)	\$3.86	-	\$2.50	-	\$3.45	-	\$31.60	-	\$15.39	-	\$7.55	-	\$8.39	-	\$3.82	-
Quintile 5 (2002 US \$)	\$17.41	-	\$32.41	-	\$35.46	-	\$87.49	-	\$160.47	-	\$38.54	-	\$35.41	-	\$33.64	-
Insurance Enrollment^f																
No reported insurance	3,990	97.3	2,889	89.8	3,156	92.8	3,759	79.7	578	11.5	10,159	96.3	6,470	99.5	7,533	74.9
Households with at least one member but not all insured	65	1.6	254	7.9	173	5.1	343	7.3	1,166	23.3	269	2.6	14	0.2	1,451	14.4
Households with all members insured	44	1.1	73	2.3	72	2.1	613	13.0	3,269	65.2	118	1.1	17	0.3	1,079	10.7
Financial Sources Used to Pay for Health Care																
Current income of any household member	3,259	79.3	1,522	47.2	2,108	61.7	4,548	91.0	3,999	78.6	8,482	80.4	5,862	90.2	7,703	76.4
Payments from health insurance	20	0.5	90	2.8	85	2.5	649	13.0	211	4.1	144	1.4	46	0.7	416	4.1
Savings	308	7.5	571	17.7	225	6.6	704	14.1	273	5.4	1,219	11.6	689	10.6	1,787	17.7
Sold items	334	8.1	415	12.9	373	10.9	803	16.1	316	6.2	1,053	10.0	414	6.4	573	5.7
Family/friends resources outside household	597	14.5	395	12.3	694	20.3	1,368	27.4	743	14.6	1,918	18.2	1,138	17.5	2,420	24.0
Borrowed from other than family/friend	500	12.2	166	5.1	316	9.2	783	15.7	678	13.3	2,586	24.5	1,226	18.9	1,387	13.8
Other	187	4.6	448	13.9	251	7.3	244	4.9	137	2.7	560	5.3	145	2.2	99	1.0

* Households with completed household rosters

^f Denominators for percents are category totals^g Converted using exchange rate (\$US1.00 = local currency, typical cash rate on June 30, 2002, from <http://www.oanda.com/convert/classic>)

Table 2. Unweighted demographics and self-rated health status characteristics of individual country household respondents

Characteristic of individual respondent	Ghana		Cote d'Ivoire		Senegal		Morocco		Tunisia		India		Pakistan		Philippines	
	Unweighted sample size	%	Unweighted sample size	%	Unweighted sample size	%	Unweighted sample size	%	Unweighted sample size	%	Unweighted sample size	%	Unweighted sample size	%	Unweighted sample size	%
Gender[†]	n=3,902		n=3,109		n=3,143		n=4,713		n=5,050		n=9,677		n=6,373		n=10,072	
Male	1,759	45.1	1,775	57.1	1,628	51.8	2,073	44.0	2,334	46.2	4,682	48.4	3,562	55.9	4,659	46.3
Female	2,143	54.9	1,334	42.9	1,515	48.2	2,640	56.0	2,716	53.8	4,995	51.6	2,811	44.1	5,413	53.7
Age[†]	n=3,901		n=3,109		n=3,127		n=4,713		n=5,049		n=9,672		n=6,371		n=10,069	
18-19	186	4.8	235	7.6	205	6.6	216	4.6	254	5.0	596	6.2	509	8.0	463	4.6
20-29	936	24.0	1,036	33.3	854	27.3	1,077	22.9	1,120	22.2	2,437	25.2	1,687	26.5	2,550	25.3
30-39	944	24.2	889	28.6	748	23.9	1,220	25.9	1,269	25.1	2,442	25.2	1,680	26.4	2,833	28.1
40-49	714	18.3	431	13.9	573	18.3	1,013	21.5	1,015	20.1	1,725	17.8	1,145	18.0	1,995	19.8
50-59	484	12.4	248	8.0	373	11.9	553	11.7	511	10.1	1,168	12.1	680	10.7	1,133	11.3
60-69	319	8.2	173	5.6	227	7.3	353	7.5	399	7.9	843	8.7	391	6.1	714	7.1
70+	318	8.2	97	3.1	147	4.7	281	6.0	481	9.5	461	4.8	279	4.4	381	3.8
Marital status[†]	n=3,899		n=3,100		n=3,149		n=4,713		n=5,050		n=9,675		n=6,371		n=10,072	
Never married	790	20.3	1,084	35.0	869	27.6	1,014	21.5	1,369	27.1	1,295	13.4	1,262	19.8	1,823	18.1
Currently married	2,295	58.9	1,218	39.3	1,982	62.9	3,231	68.6	3,217	63.7	7,424	76.7	4,728	74.2	6,747	67.0
Separated	102	2.6	105	3.4	14	0.4	0	0.0	23	0.5	60	0.6	21	0.3	193	1.9
Divorced	294	7.5	66	2.1	90	2.9	131	2.8	79	1.6	18	0.2	16	0.3	17	0.2
Widowed	361	9.3	178	5.7	191	6.1	337	7.2	362	7.2	822	8.5	340	5.3	675	6.7
Cohabiting	57	1.5	449	14.5	3	0.1	0	0.0	0	0.0	56	0.6	4	0.1	617	6.1
Education[†]	n=3,854		n=3,107		n=3,148		n=4,713		n=5,050		n=9,621		n=6,372		n=10,072	
No formal schooling or less than primary school	1736	45.0	1,700	54.7	2,186	69.4	2,588	54.9	1,909	37.8	4,649	48.3	3,829	60.1	1,872	18.6
Primary school completed	1722	44.7	566	18.3	444	14.1	988	21.0	1,367	27.1	1,677	17.4	848	13.3	3,094	30.7
Secondary school completed	240	6.2	442	14.2	275	8.7	461	9.8	382	7.6	1,281	13.3	769	12.1	3,452	34.3
High school/equivalent completed	47	1.2	174	5.6	109	3.5	395	8.4	961	19.0	965	10.0	443	7.0	546	5.4
College and/or post-graduate degree completed	109	2.8	223	7.2	134	4.3	281	6.0	431	8.5	1,049	10.9	483	7.6	1,108	11.0
Employment status[†]	n=3,856		n=2,975		n=1,975		n=4,713		n=4,954		n=9,508		n=6,301		n=10,025	
Government employee	283	7.3	157	5.3	102	5.2	279	5.9	446	9.0	350	3.7	393	6.2	558	5.6
Non-government employee	180	4.7	308	10.4	239	12.1	627	13.3	1,027	20.7	1,011	10.6	645	10.2	1,532	15.3
Self-employed	2,679	69.5	1,463	49.2	951	48.2	873	18.5	435	8.8	3,613	38.0	2,128	33.8	2,939	29.3
Employer	15	0.4	20	0.7	23	1.2	41	0.9	52	1.0	142	1.5	46	0.7	454	4.5
Not working for pay	699	18.1	1,027	34.5	660	33.4	2,893	61.4	2,994	60.4	4,392	46.2	3,089	49.0	4,542	45.3
General health status today[†]	n=3,886		n=3,049		n=2,854		n=4,712		n=5,013		n=9,575		n=6,363		n=10,070	
Very good	1368	35.2	647	21.2	637	22.3	587	12.5	1,231	24.6	2,133	22.3	1767	27.8	816	8.1
Good	1421	36.6	1,189	39.0	1,013	35.5	1,388	29.5	1,843	36.8	3,476	36.3	2993	47.0	5,125	50.9
Moderate	820	21.1	931	30.5	965	33.8	1,657	35.2	1,472	29.4	2,520	26.3	1315	20.7	3,756	37.3
Bad	232	6.0	263	8.6	215	7.5	754	16.0	409	8.2	1,255	13.1	263	4.1	354	3.5
Very bad	45	1.2	19	0.6	24	0.8	326	6.9	58	1.2	191	2.0	25	0.4	19	0.2
Difficulty with work or household activities in last 30 days[†]	n=3,843		n=2,994		n=2,776		n=4,713		n=5,014		n=9,497		n=6,241		n=10,068	
None	2353	61.2	1,543	51.5	1,426	51.4	1,937	41.1	2,916	58.2	4,831	50.9	3,518	56.4	2,118	21.0
Mild	695	18.1	625	20.9	563	20.3	753	16.0	683	13.6	1,894	19.9	1,608	25.8	2,888	28.7
Moderate	559	14.5	631	21.1	593	21.4	925	19.6	838	16.7	1,449	15.3	789	12.6	4,394	43.6
Severe	181	4.7	173	5.8	144	5.2	719	15.3	491	9.8	1,109	11.7	277	4.4	598	5.9
Extreme	55	1.4	22	0.7	50	1.8	379	8.0	86	1.7	214	2.3	49	0.8	70	0.7

[†]Initial denominator includes observations with a household roster (GISIGNOR=0) and individual questionnaire (CASEMISS=0).

[†]Denominators for percents are category totals

Table 3. Unweighted chronic illness characteristics of individual country household respondents

Chronic Conditions (during last 12 months) & Medicine Inventory (current)	Ghana		Cote d'Ivoire		Senegal		Morocco		Tunisia		India		Pakistan	
	Unweighted sample size	n=3,902 %	n=3,109 %	n=3,165 %	n=4,713 %	n=5,050 %	n=9,677 %	n=6,373 %						
Arthritis - broadly defined diagnosis														
Ever diagnosed with arthritis†	318	8.1	384	12.4	547	17.3	833	17.7	1,258	24.9	2,061	21.3	711	11.2
Ever treated for arthritis	286	7.3	244	7.8	303	9.6	834	17.7	968	19.2	1,298	13.4	550	8.6
Percentage of those ever diagnosed who were ever treated		89.9		63.5		55.4		100.1		76.9		63.0		77.4
Taking arthritis treatment in last 2 weeks	156	4.0	134	4.3	202	6.4	160	3.4	440	8.7	552	5.7	337	5.3
Percentage of those ever diagnosed who were treated in last 2 weeks		49.1		54.9		36.9		19.2		35.0		26.6		47.4
At least 1 medicine in personal inventory for arthritis	43	1.1	23	0.7	26	0.8	179	3.8	153	3.0	106	1.1	226	3.5
Angina - broadly defined diagnosis														
Ever diagnosed with angina†	220	5.6	222	7.1	247	7.8	275	5.8	115	2.3	878	9.1	181	2.8
Ever treated for angina	177	4.5	129	4.1	162	5.1	243	5.2	108	2.1	668	6.9	126	2.0
Percentage of those ever diagnosed who were ever treated		80.5		58.1		65.6		88.4		93.9		76.1		69.6
Taking angina treatment in last 2 weeks	69	1.8	82	2.6	94	3.0	65	1.4	81	1.6	372	3.8	102	1.6
Percentage of those ever diagnosed who were treated in last 2 weeks		31.4		63.6		38.1		23.6		70.4		42.4		56.4
At least 1 medicine personal inventory for angina	9	0.2	0	0.0	0	0.0	33	0.7	21	0.4	16	0.2	54	0.8
Asthma - broadly defined diagnosis														
Ever diagnosed with asthma†	178	4.6	123	4.0	119	3.8	162	3.4	192	3.8	609	6.3	231	3.6
Ever treated for asthma	143	3.7	101	3.2	99	3.1	148	3.1	166	3.3	426	4.4	188	2.9
Percentage of those ever diagnosed who were ever treated		80.3		82.1		83.2		91.4		86.5		70.0		81.4
Taking asthma treatment in last 2 weeks	56	1.4	48	1.5	66	2.1	63	1.3	97	1.9	262	2.7	115	1.8
Percentage of those ever diagnosed who were treated in last 2 weeks		31.5		47.5		55.5		38.9		50.5		43.0		49.8
At least 1 medicine personal inventory for asthma	8	0.2	8	0.3	3	0.1	55	1.2	25	0.5	72	0.7	56	0.9
Depression - broadly defined diagnosis														
Ever diagnosed with depression†	58	1.5	50	1.6	42	1.3	137	2.9	228	4.5	1,244	12.9	150	2.4
Ever treated for depression	20	0.5	24	0.8	41	1.3	138	2.9	121	2.4	183	1.9	97	1.5
Percentage of those ever diagnosed who were ever treated		34.5		48.0		97.6		100.7		53.1		14.7		64.7
Taking depression treatment in last 2 weeks	12	0.3	30	1.0	46	1.5	53	1.1	73	1.4	82	0.8	79	1.2
Percentage of those ever diagnosed who were treated in last 2 weeks		20.7		125.0		109.5		38.7		32.0		6.6		52.7
At least 1 medicine in personal inventory for depression	0	0.0	4	0.1	0	0.0	21	0.4	31	0.6	10	0.1	45	0.7
Diabetes - broadly defined diagnosis														
Ever diagnosed with diabetes†	33	0.8	38	1.2	52	1.6	182	3.9	202	4.0	263	2.7	175	2.7
Ever treated for diabetes	33	0.8	26	0.8	38	1.2	136	2.9	170	3.4	208	2.1	157	2.5
Percentage of those ever diagnosed who were ever treated		100.0		68.4		73.1		74.7		84.2		79.1		89.7
Taking diabetes treatment in last 2 weeks	23	0.6	24	0.8	21	0.7	125	2.7	123	2.4	111	1.1	127	2.0
Percentage of those ever diagnosed who were treated in last 2 weeks		69.7		63.2		40.4		68.7		60.9		42.2		72.6
At least 1 medicine in personal inventory for diabetes	5	0.1	2	0.1	0	0.0	113	2.4	115	2.3	72	0.7	70	1.1
Schizophrenia - broadly defined diagnosis														
Ever diagnosed with schizophrenia†	28	0.7	30	1.0	43	1.4	27	0.6	87	1.7	246	2.5	69	1.1
Ever treated for schizophrenia	26	0.7	16	0.5	32	1.0	17	0.4	58	1.1	134	1.4	47	0.7
Percentage of those ever diagnosed who were ever treated		92.9		53.3		74.4		63.0		66.7		54.5		68.1
Taking schizophrenia treatment in last 2 weeks	16	0.4	25	0.8	25	0.8	5	0.1	45	0.9	70	0.7	32	0.5
Percentage of those ever diagnosed who were treated in last 2 weeks		57.1		156.3		58.1		18.5		51.7		28.5		46.4
At least 1 medicine personal inventory for schizophrenia	0	0.0	1	0.0	0	0.0	7	0.1	6	0.1	10	0.1	4	0.1

†Initial denominator includes observations with a household roster (GISIGNOR=0) and individual questionnaire (CASEMISS=0).

‡Diagnosis of chronic illness broadly defined by one of the following: Ever being diagnosis or treated, recent treatment in the last 2 weeks, or at least 1 medicine in personal inventory for the condition.

§Diagnosis of tuberculosis based on having any of the symptom, TB test, or at least 1 TB medicine in personal inventory.

¶Diagnosis for HIV/AIDS only includes information on personal medicine inventory due to the survey design, which omitted other questions about HIV/AIDS.

Table 4. Unweighted demographic and illness characteristics of children under 5 years in country households

Characteristic of youngest child	Ghana		Cote d'Ivoire		Senegal		Morocco		Tunisia		India		Pakistan		Philippines	
	n=1,704	%	n=956	%	n=1,243	%	n=1,886	%	n=1,317	%	n=3,295	%	n=3,031	%	n=4,247	%
Unweighted sample size - households with children under 5 years																
Gender [†]	n=1,604		n=950		n=1,225		n=1,886		n=1,317		n=3,264		n=3,020		n=4,245	
Male	823	51.3	481	50.6	639	52.2	944	50.1	678	51.5	1,774	54.4	1,515	50.2	2,194	51.7
Female	781	48.7	469	49.4	586	47.8	942	49.9	639	48.5	1,490	45.6	1,505	49.8	2,051	48.3
Age [‡]	n=1,704		n=956		n=1,243		n=1,886		n=1,317		n=3,295		n=3,031		n=4,247	
0-12 months	469	27.5	321	33.6	404	32.5	492	26.1	385	29.2	993	30.1	599	19.8	1,295	30.5
13-24 months	410	24.1	221	23.1	315	25.3	477	25.3	287	21.8	630	25.2	901	29.7	983	23.1
25-36 months	386	22.7	206	21.5	255	20.5	373	19.8	257	19.5	634	19.2	661	21.8	804	18.9
37-48 months	274	16.1	140	14.6	174	14.0	305	16.2	211	16.0	519	15.8	532	17.6	671	15.8
49-60 months	165	9.7	68	7.1	95	7.6	239	12.7	177	13.4	319	9.7	338	11.2	494	11.6
Last time youngest child was sick [‡]	n=1,612		n=834		n=1,004		n=1,790		n=1,242		n=3,185		n=2,732		n=3,796	
Within last 2 weeks	354	22.0	249	29.9	270	26.9	569	31.8	226	18.2	624	25.9	833	30.5	846	22.3
2 weeks - <1 month ago	234	14.5	115	13.8	134	13.3	249	13.9	195	15.7	534	16.8	569	20.8	559	14.7
1 month - 3 months ago	353	21.9	169	20.1	185	18.4	383	21.4	270	21.7	548	17.2	505	18.5	732	19.3
> 3 months ago	334	20.7	110	13.2	174	17.3	300	16.8	266	21.6	506	15.9	295	10.8	736	19.4
Never was sick	337	20.9	192	23.0	241	24.0	289	16.1	283	22.8	773	24.3	530	19.4	921	24.3
Symptoms of last illness of youngest child among those who reported illness [‡]	n=1,275		n=642		n=763		n=1,501		n=989		n=2,412		n=2,202		n=2,675	
Fever	1136	89.1	553	86.1	634	83.1	1,305	86.9	817	85.2	2,086	86.5	1,840	83.6	2,401	83.5
Convulsions	62	4.9	51	7.9	62	8.1	172	11.5	58	6.0	250	10.4	35	1.6	119	4.1
Cough	526	41.3	280	43.6	298	39.1	895	59.6	458	47.8	1,629	67.5	1,379	62.6	1,923	66.9
Difficult or fast breathing	223	17.5	138	21.5	176	23.1	636	42.4	211	22.0	799	33.1	592	26.9	570	19.8
Diarrhea	536	42.0	298	46.4	330	43.3	718	47.8	373	38.9	977	40.5	880	40.0	616	28.4
Blood in stools	73	5.7	56	8.7	60	7.9	87	5.8	16	1.7	82	3.4	68	3.1	40	1.4
Vomiting	396	31.1	170	26.5	209	27.4	645	43.0	284	29.6	749	31.1	464	21.1	323	11.2
Unable to eat/drink	509	39.9	188	29.3	166	21.8	886	59.0	319	33.3	673	27.9	363	16.5	323	11.2
Other symptom	87	6.8	56	8.7	31	4.1	365	24.3	92	9.6	205	8.5	96	4.4	214	7.4
Youngest child received care during last reported illness [‡]	n=1,254		n=627		n=741		n=1,498		n=960		n=2,393		n=2,096		n=2,843	
Yes	1154	92.0	524	83.6	559	75.4	1,191	79.5	817	86.0	2,203	92.1	1,990	94.9	2,314	81.4
No	100	8.0	103	16.4	182	24.6	307	20.5	133	14.0	190	7.9	106	5.1	529	18.6
Source of care for children who received care [‡]	n=1,141		n=516		n=550		n=1,190		n=806		n=2,191		n=1,984		n=2,300	
Hospital	478	41.9	358	69.4	216	39.3	119	10.0	265	32.9	674	30.8	430	21.7	560	24.3
Outpatient facility (including health centre, health post, clinic)	357	31.3	24	4.7	244	44.4	533	44.8	276	34.5	160	7.3	333	16.8	955	41.5
Pharmacy	174	15.2	26	5.0	10	1.8	335	28.2	38	4.7	80	3.7	46	2.3	87	3.8
Private physician	27	2.4	11	2.1	26	4.7	169	14.2	219	27.2	1,047	47.8	857	43.2	307	13.3
Traditional healer	21	1.8	50	9.7	16	2.9	8	0.7	3	0.4	91	4.2	187	9.4	87	3.8
Other	84	7.4	47	9.1	38	6.9	26	2.2	3	0.4	139	6.3	131	6.6	304	13.2
Malaria treatment among children who received care for fever during last illness [‡]	n=1,004		n=412		n=378		n=0		n=4		n=1,735		n=1,489		n=1,230	
Yes	947	94.3	337	81.8	221	58.5	0	0.0	0	0.0	600	34.6	164	11.0	33	2.7
No	57	5.7	75	18.2	157	41.5	0	0.0	4	100.0	1,135	65.4	1,325	89.0	1,197	97.3
Type of medicine taken if malaria treatment received [§]	n=947		n=337		n=221		n=0		n=0		n=500		n=164		n=33	
Antimalarial medicine (prescribed by a medical professional)	842	88.9	270	80.1	199	90.0	0	0.0	0	0.0	295	49.2	148	90.2	21	63.6
Home remedy/herbal medicine	50	5.3	37	11.0	16	7.2	0	0.0	0	0.0	9	1.5	10	6.1	5	15.2
Remedy/medicine from traditional or faith healer	16	1.7	15	4.5	15	6.8	0	0.0	0	0.0	15	2.5	17	10.4	1	3.0
Other	38	4.0	12	3.6	9	4.1	0	0.0	0	0.0	254	42.3	9	5.5	7	21.2

[†] Initial denominator derived from children under 5 who also have GISIGNOR=0 and CASEMISS=0.

[‡] Denominators for percents are category totals

[‡] Denominator is respondents reporting the last time the youngest child was sick

[§] Denominator is children who received malaria treatment for fever during last illness

Table 5. Unweighted access to care and medicine characteristics of individual country household respondents

	Ghana		Cote d'Ivoire		Senegal		Morocco		Tunisia		India		Pakistan		Philippines	
Unweighted sample size	n=2,144	%	n=1,685	%	n=1,390	%	n=3,536	%	n=3,488	%	n=6,343	%	n=3,244	%	n=3,188	%
Characteristic of adult respondent who needed care																
Received care last time adult was in need [‡]	n=2,108		n=1,655		n=1,343		n=3,534		n=3,442		n=6,307		n=3,214		n=3,176	
Yes	1999	94.8	1,554	93.9	1,276	95.0	3,042	86.1	3,373	98.0	6,166	97.8	3,110	96.8	3,004	94.6
No	109	5.2	101	6.1	67	5.0	492	13.9	69	2.0	141	2.2	104	3.2	172	5.4
Reason for not receiving care last time adult was in need [‡]																
	n=109		n=101		n=67		n=492		n=69		n=141		n=104		n=172	
Could not afford the cost of the visit	66	60.6	58	57.4	32	47.8	321	65.2	22	31.9	67	47.5	39	37.5	72	41.9
Could not afford the cost of transport	30	27.5	12	11.9	14	20.9	126	25.6	6	8.7	44	31.2	15	14.4	22	12.8
No transport	21	19.3	11	10.9	17	25.4	64	13.0	5	7.2	33	23.4	20	19.2	12	7.0
The health care provider's drugs or equipment are inadequate	3	2.8	14	13.9	12	17.9	81	16.5	5	7.2	21	14.9	7	6.7	20	11.6
The health care provider's skills are inadequate	1	0.9	10	9.9	9	13.4	72	14.6	2	2.9	14	9.9	7	6.7	13	7.6
You were previously badly treated	4	3.7	13	12.9	9	13.4	84	17.1	5	7.2	6	4.3	2	1.9	11	6.4
Could not take time off work or had other commitments	2	1.8	3	3.0	4	6.0	6	1.2	1	1.4	15	10.6	8	7.7	30	17.4
You did not know where to go	2	1.8	7	6.9	7	10.4	5	1.0	1	1.4	9	6.4	19	18.3	17	9.9
You thought you were not sick enough	36	33.0	6	5.9	10	14.9	21	4.3	15	21.7	51	36.2	49	47.1	65	37.8
You tried but were denied health care	1	0.9	11	10.9	5	7.5	12	2.4	10	14.5	13	9.2	6	5.8	15	8.7
Other	6	5.5	20	19.8	9	13.4	5	1.0	15	21.7	14	9.9	17	16.3	39	22.7
Received a prescription for medicine if received care [†]																
	n=1,969		n=1,482		n=1,105		n=3,035		n=3,361		n=6,034		n=3,026		n=2,967	
Yes	1823	92.6	1,331	89.8	947	85.7	2,696	88.8	3,134	93.2	5,457	90.4	2,961	97.9	2,536	85.5
No	146	7.4	151	10.2	158	14.3	339	11.2	227	6.8	577	9.6	65	2.1	431	14.5
Received medicines if prescribed medicine [†]																
	n=1,810		n=1,311		n=918		n=2,689		n=3,107		n=5,434		n=2,944		n=2,530	
All of them	1677	92.7	1084	82.7	793	86.4	2,386	88.7	2,635	84.8	4,841	89.1	2,636	89.5	2,079	82.2
Most	51	2.8	104	7.9	45	4.9	59	2.2	118	3.8	123	2.3	153	5.2	198	7.8
Some	51	2.8	66	5.0	18	2.0	85	3.2	157	5.1	261	4.8	111	3.8	183	7.2
Very few	16	0.9	28	2.1	45	4.9	27	1.0	49	1.6	76	1.4	23	0.8	53	2.1
None of them	15	0.8	29	2.2	17	1.9	132	4.9	148	4.8	133	2.4	21	0.7	17	0.7
Reason for not getting all of the medicine if prescribed medicine [†]																
	n=131		n=222		n=124		n=298		n=455		n=550		n=265		n=446	
Could not afford	52	39.7	146	65.8	73	58.9	232	77.9	104	22.9	201	36.5	134	50.6	331	74.2
Could not find all medicines	72	55.0	40	18.0	14	11.3	3	1.0	291	64.0	202	36.7	102	38.5	34	7.6
Did not believe all the medications were needed	2	1.5	19	8.6	19	15.3	21	7.0	8	1.8	54	9.8	8	3.0	18	4.0
Started to feel better	2	1.5	8	3.6	10	8.1	16	5.4	16	3.5	68	12.4	9	3.4	43	9.6
Already had some of the medicines at home	0	0.0	1	0.5	5	4.0	6	2.0	11	2.4	4	0.7	9	3.4	9	2.0
Other	3	2.3	8	3.6	3	2.4	20	6.7	25	5.5	21	3.8	3	1.1	11	2.5

[‡]Initial denominator derived from adults who were last in need (Q7001=1) and GISIGNOR=0 and CASEMISS=0.

[†]Denominators for percents are category totals

[‡]Denominator is no receipt of care last time individual was in need of care

Table 6. Unweighted access to care and medicines characteristics of children aged 12 years or less in country households

	Ghana		Cote d'Ivoire		Senegal		Morocco		Tunisia		India		Pakistan		Philippines	
Unweighted sample size - households with children aged 12 years or under	n=1,065	%	n=617	%	n=633	%	n=793	%	n=917	%	n=1,665	%	n=2,102	%	n=2,610	%
Characteristic of child under 12 who needed care																
Received care last time child was in need [†]	n=1,054		n=604		n=607		n=792		n=911		n=1,658		n=2,078		n=2,593	
Yes	1004	95.3	559	92.5	586	96.5	700	88.4	888	97.5	1,628	98.2	2,034	97.9	2,453	94.6
No	50	4.7	45	7.5	21	3.5	92	11.6	23	2.5	30	1.8	44	2.1	140	5.4
Reason for not receiving care last time child was in need [‡]	n=50		n=45		n=21		n=92		n=23		n=30		n=44		n=140	
Could not afford the cost of the visit	33	66.0	30	66.7	15	71.4	63	68.5	9	39.1	14	46.7	20	45.5	53	37.9
No transport	9	18.0	8	17.8	4	19.0	25	27.2	7	30.4	7	23.3	16	36.4	8	5.7
Could not afford the cost of transport	13	26.0	10	22.2	4	19.0	33	35.9	5	21.7	6	20.0	14	31.8	14	10.0
The health care provider's drugs or equipment are inadequate	2	4.0	11	24.4	5	23.8	14	15.2	2	8.7	4	13.3	5	11.4	22	15.7
The health care provider's skills are inadequate	0	0.0	8	17.8	3	14.3	12	13.0	2	8.7	3	10.0	5	11.4	10	7.1
You were previously badly treated	0	0.0	5	11.1	1	4.8	19	20.7	0	0.0	2	6.7	3	6.8	6	4.3
Could not take time off work or had other commitments	1	2.0	1	2.2	0	0.0	2	2.2	0	0.0	3	10.0	4	9.1	21	15.0
You did not know where to go	0	0.0	5	11.1	3	14.3	2	2.2	0	0.0	1	3.3	11	25.0	12	8.6
You thought you were not sick enough	18	36.0	4	8.9	1	4.8	9	9.8	5	21.7	5	16.7	14	31.8	55	39.3
You tried but were denied health care	1	2.0	1	2.2	0	0.0	0	0.0	2	8.7	4	13.3	2	4.5	7	5.0
Other	1	2.0	7	15.6	0	0.0	2	2.2	6	26.1	8	26.7	8	18.2	38	27.1
Received a prescription for medicine if child received care [†]	n=988		n=541		n=496		n=698		n=886		n=1,587		n=1,926		n=2,418	
Yes	918	92.9	460	85.0	420	84.7	601	86.1	827	93.3	1,464	92.2	1,887	98.0	2,143	88.6
No	70	7.1	81	15.0	76	15.3	97	13.9	59	6.7	123	7.8	39	2.0	275	11.4
Received medicines if child was prescribed medicine [†]	n=917		n=452		n=406		n=601		n=820		n=1,458		n=1,875		n=2,138	
All of them	866	94.4	377	83.4	335	82.5	537	89.4	672	82.0	1,326	90.9	1,642	87.6	1,682	78.7
Most	26	2.8	44	9.7	33	8.1	5	0.8	36	4.4	29	2.0	100	5.3	175	8.2
Some	19	2.1	18	4.0	15	3.7	26	4.3	45	5.5	59	4.0	98	5.2	212	9.9
Very few	0	0.0	11	2.4	21	5.2	4	0.7	31	3.8	16	1.1	23	1.2	59	2.8
None of them	6	0.7	2	0.4	2	0.5	29	4.8	36	4.4	28	1.9	12	0.6	10	0.5
Reason for not getting medicine if prescribed medicines [†]	n=47		n=75		n=70		n=63		n=145		n=118		n=187		n=449	
Could not afford	19	40.4	44	58.7	46	65.7	52	82.5	26	17.9	39	33.1	107	57.2	350	78.0
Could not find all medicines	24	51.1	23	30.7	7	10.0	2	3.2	98	67.6	48	40.7	49	26.2	36	8.0
Did not believe all the medications were needed	1	2.1	3	4.0	11	15.7	1	1.6	0	0.0	10	8.5	10	5.3	12	2.7
Started to feel better	1	2.1	2	2.7	5	7.1	5	7.9	3	2.1	12	10.2	12	6.4	36	8.0
Already had some of the medicines at home	0	0.0	1	1.3	1	1.4	2	3.2	0	0.0	1	0.8	8	4.3	6	1.3
Other	2	4.3	2	2.7	0	0.0	1	1.6	18	12.4	8	6.8	1	0.5	9	2.0

[†]Initial denominator derived from children who were last in need (Q7001=2) and GISIGNOR=0 and CASEMISS=0.

[‡]Denominators for percents are category totals

[§]Denominator is no receipt of care last time child was in need of care

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