EXECUTIVE SUMMARY

Analyzing equity in health utilization and expenditure in Jordan with focus on Maternal and Child Health Services
Applying A Health Equity Lens to Health Financing And Healthcare Utilization

Jordan is an upper middle income country that has made considerable progress in improving the health of its population. The Government of Jordan (GoJ) is committed to sustaining these improvements going forward even as the country copes with the ramifications of the global economic downturn, the influx of refugees as a result of instability in the region, and epidemiological shifts such as an increase in the burden of non-communicable diseases [1]. In 2015, GoJ adopted the Sustainable Development Goals, which includes the goal of achieving universal health coverage (UHC) by 2030 [2]. The UHC vision is to ensure that everyone has access to needed healthcare services regardless of their place in society and without getting into financial ruin or impoverishment [3]. Ensuring that all citizens have access to high quality services and enjoy financial protection are critical priorities for GoJ [4].

Against this backdrop, this study set out to document household health expenditure patterns and inequality in the use of healthcare services in Jordan, with a focus on children and adolescents under 18 years of age. Specifically, it applies the health equity lens to study four topics: (1) out-of-pocket (OOP) health spending and catastrophic health spending, (2) the distribution of healthcare services delivered by government facilities across wealth quintiles, (3) inequality in healthcare utilization across socio-economic groups, and (4) healthcare utilization and health spending patterns among Syrian refugees. Key findings and recommendations for each of the four areas are summarized below.

Out-of-pocket health spending and catastrophic health spending

Analysis of the Household Expenditure and Income Survey (HEIS) data from 2008, 2010 and 2013 shows that mean household OOP health spending per year increased by 58% between 2008 and 2013 (Figure 1). Richer households spent considerably more on health than poorer households in all three survey rounds. Across all wealth quintiles, OOP expenditure increased between 2008 and 2013 at relatively similar rates. Mean annual OOP expenditure in 2013 varied considerably across governorates, ranging from 327.2 dinar ($1=0.708 JD, 2016) in Amman, which is home to nearly 42% of the national population according to 2015 Census estimates, to 72.2 in Tafieleh where 1% of the national population resides (Figure 2).
Catastrophic health expenditure refers to OOP health spending that drives a household into poverty and is measured by the share of households whose OOP health expenditure was over 40% of non-subsistence or non-food expenditure in a year.

Higher estimates of health insurance coverage based on membership data do not take into account that an individual may be covered by more than one form of health insurance. The HEIS, which asks if an individual has any health insurance, does not suffer from this problem of “double counting.” The 2015 Census estimates that 55% of the population is covered by health insurance, while the percentage for Jordanians reached 68%.

Catastrophic health spending is highest amongst the richest quintile, which is similar to previous findings [5].

Ensuring financial risk protection for everyone is directly linked to expanding health insurance coverage in the population. Here, the data shows that 78% of individuals had health insurance coverage in 2013, up from 70% in 2010 (Figure 4). However, the increase was minimal for the Ministry of Health’s civil insurance fund (CIF), which has been identified as the main public insurance scheme for insuring those who are currently uninsured [1].

In contrast, the percent of individuals insured by the Royal Medical Services (RMS), a scheme for members of the armed forces and their dependents, increased significantly. These two

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1. Catastrophic health expenditure refers to OOP health spending that drives a household into poverty and is measured by share of households whose OOP health expenditure was over 40% of non-subsistence or non-food expenditure in a year.

2. Higher estimates of health insurance coverage based on membership data do not take into account that an individual may be covered by more than one form of health insurance. The HEIS, which asks if an individual has any health insurance, does not suffer from this problem of “double counting.” The 2015 Census estimates that 95% of the population is covered by health insurance, while the percentage for Jordanians reached 88%.
schemes represent the two largest risk pools in the country. Despite both being public, their benefit packages are not harmonized, nor are the premiums [1,5]. There is considerable variation in health insurance coverage between regions. In 2013, 60% of people in Amman had some form of health insurance coverage compared to 94% in Ajlun. Equally troubling is the fact that health insurance coverage appears to have decreased from 2010 to 2013 in 5 out of 12 governorates including Aqaba, Jarash, Mafraq, Tafiela and Zarqa.

The distribution of healthcare services across wealth quintiles

The study was originally designed to include benefit incidence analysis (BIA) to explore the distribution of public subsidies for health and ascertain whether they are being targeted to the poor. This however was not possible because routine household surveys that collect health information in Jordan, specifically the Demographic and Health Survey (DHS) and the HEIS, do not currently collect the information necessary for conducting benefit incidence analysis. Instead, the study explored the distribution of maternal and child health (MCH) services across wealth quintiles using concentration curves, distinguishing between private and public facilities when possible.

Figure 5 presents the concentration curves for a range of child health services covered by DHS 2012. The top panel shows the concentration curves for children who are fully vaccinated, children vaccinated for measles, and children who have received 3 doses of polio. All three curves closely track the line of equality, showing very minimal inequality between the wealth quintiles in the consumption of these services, which is not surprising given that vaccination coverage is very high in Jordan across all population sub-groups. Since the DHS does not ask about the type of facility where the vaccination took place, we were not able to test whether the delivery of vaccination services at public facilities is pro-poor. The bottom left panel shows that diarrhea treatment at public facilities, which is shown in blue, is pro-poor. The concentration of treatment of fever or coughing in the last two weeks is shown in the bottom left panel. The concentration curves show that the rich consume a disproportionate amount of treatment for fever or coughing in private facilities while the consumption is evenly distributed across the wealth quintiles in public facilities.

Maternal health services at public facilities are similarly pro-poor (figure not shown). Women from lower wealth quintiles represent a larger share of women who access antenatal care (ANC) services and deliver their babies at public facilities. Similarly, richer women are less likely to access modern contraceptive methods from public facilities than women from lower wealth quintiles.

Figure 4: Health insurance coverage in 2010 and 2013 (Source: HEIS 2010 and 2013)

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2010</th>
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<tr>
<td>Any health insurance</td>
<td>69.6</td>
<td>78.4</td>
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<tr>
<td>CIF</td>
<td>40.4</td>
<td>38.4</td>
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<tr>
<td>RMS</td>
<td>25.4</td>
<td>38.4</td>
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<tr>
<td>Private insurance</td>
<td>5.5</td>
<td>7.2</td>
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<tr>
<td>Other</td>
<td>2.1</td>
<td>7.2</td>
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3. EPI Coverage Survey 2015 (MOH/UNICEF) provides in-depth analysis
Inequality in healthcare utilization across socio-economic groups

The DHS 2012 data shows that while Jordan is on track towards its goal of achieving equitable coverage of key MCH services, inequities still remain. 40% of Egyptian women in Jordan report not receiving any ANC compared to less than 1% across all other nationality groups. Coverage of 4+ ANC visits tends to be slightly lower among poorer women, as well as among Egyptian and Syrian women. Women in the two richest wealth quintiles have an average of 1.7 more ANC visits after adjusting for other social and demographic covariates. The majority of women across all population subgroups in Jordan deliver in a health facility. Women in higher quintiles are significantly less likely to deliver in a public facility compared to women in the poorer wealth quintile. While coverage for 1 postnatal care (PNC) visit is high and relatively comparable across population subgroups, only 22.8% of women reported completing the recommended two PNC visits after giving birth, and the coverage rate ranges from 20.7% in the poorest wealth quintile to 43.4% in the richest wealth quintile.

Jordan enjoys very high rates of coverage for full vaccination and there is little variation in the rates by socioeconomic and demographic characteristics. However, only about half of children between the ages of 6 months and 5 years receive vitamin A supplementation. Moreover, there is considerable variation across governorates; for example, coverage is below 50% in Amman, Jarash, Tafiela, Ajlun, and Madaba but over 80% in Mafraq. The likelihood that a woman breastfeeds within one hour after birth increases with the number of children that a woman has, suggesting that newer mothers are less likely to initiate early breastfeeding than women who have given birth to more children.

With respect to non-communicable diseases, the situation is somewhat mixed. There is a clear gradient in anemia prevalence in both women and children according to wealth. Poorer women are also less likely to obtain breast cancer screening and pap smears than their wealthy counterparts.
obtain breast cancer screening and pap smears than their wealthy counterparts. However, there is no significant association between the likelihood of obesity and wealth quintile.

**Healthcare utilization and health spending patterns among Syrian refugees**

Jordan is home to a growing population of Syrian refugees. Refugees constitute an especially vulnerable segment of the population, and a key challenge for the Jordanian health system. The Vulnerability Assessment Framework (VAF) data provides insight into health utilization and expenditure patterns amongst these households [6]. The majority of Syrian refugee families access health services at facilities operated by charitable institutions followed closely by public hospitals (Figure 6). The VAF data also shows that the economic situation of Syrian refugee households living in Jordan is precarious. Nearly 21% of households spent more than 10% of their total household expenditure on medical needs.

Since the 2014 policy change that has increased the required payments for refugees accessing the public health system, there have been dramatic increases in the OOP that refugee households report paying. The 2014 and 2015 Health Access and Utilization Surveys (HAUS) show that the percent of refugee women who reported incurring no costs for delivering a baby since entering Jordan dropped from 75% in 2014 to 49% in 2015 (Figure 7). The HAUS data also shows that the percentage of individuals with a chronic disease who report being unable to access health services has increased substantially between 2014 and 2015.
RECOMMENDATIONS

1. Jordan needs a comprehensive approach to health financing reform

In the long run, increasing health insurance coverage will reduce OOP health spending and ensuring financial risk protection for all. While the National Health Strategy (2015-2019) discusses key health financing challenges and some potential policy solutions [4], GoJ needs to articulate a clear plan for how the country will bring more people into risk pooling arrangements, increase the percentage of services covered by the benefit package, and reduce the amount of co-payment. This study and other recent health financing reviews provide a wealth of ideas and data to guide this discussion [1, 7]. Attracting those who are uninsured from the bottom two quintiles and other vulnerable segments into the Ministry of Health (MOH) scheme through partial subsidies seems like the ideal way to increase coverage and reduce fragmentation of risk pools. However, more research is needed on geographical variations in preferences and willingness to pay. Greater strategic purchasing\(^4\) on the part of existing health insurance scheme as well as harmonization of the benefit package across these schemes will go a long way in improving quality of care and increasing efficiency [7].

2. Improve data and capacity to conduct health equity analysis

Across a range of MCH services, the poor appear to be consuming a disproportionately larger share of the benefits at public facilities. However, a proper BIA study is required to ascertain whether government subsidies for healthcare provision overall is pro-poor. This is not possible with the household survey data that is currently available. GoJ should consider implementing the health expenditure module of the DHS, which was designed for collecting detailed information about utilization of inpatient and outpatient services by all household members and the costs associated with each visit. The module is not part of the core questionnaire and is optional for countries. Jordan should opt to add the health expenditure module in the next round of the DHS. BIA also requires current estimates of unit costs, which requires frequent costing studies. Finally, improving local capacity for health equity analysis will result in greater institutionalization of such methods in the future.

3. Strengthen primary healthcare

Jordan’s health system can achieve better equity in healthcare utilization by improving access to and quality of primary healthcare services [7]. While national coverage rates for several MCH interventions such as ANC and immunization are high, much more needs to be done to improve coverage for 2 PNC visits and vitamin A supplementation for children. Early detection and management of non-communicable diseases is essential for Jordan to manage the epidemiological transition its population is experiencing. A stronger primary care system has the potential to increase utilization of interventions to address these issues, while both keeping costs low and allowing for greater flexibility at the local level. A stronger primary health care system requires intersectoral cooperation and commitment towards meaningful actions to mitigate the effects of social determinants on existing disparities and inequities. A coherent primary health care system makes space for stakeholder participation that help in tailoring the services to the needs and demands of the communities.

4. Integrate Syrian refugees into the main health system

There is evidence to suggest that the 2014 policy change that increased the cost of health services at MOH facilities for refugees has reduced access and increased catastrophic health expenditure for refugee households. While this policy was further revised recently to reduce cost of MCH services, bringing these refugee households into the main health system, including the MOH insurance scheme, through full or partial subsidies to cover their insurance

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4. Purchasing refers the process by which funds are allocated to healthcare providers. According to the World Health Report 2000, “passive purchasing implies following a predetermined budget or simply paying bills when presented. Strategic purchasing involves a continuous search for the best ways to maximize health system performance by deciding which interventions should be purchased, how, and from whom” [8].
premiums will go a long way in reducing financial barriers to access for this vulnerable segment of the population and provide a sustainable approach to catering for their health needs. Development partners working with refugees should consider ways of structuring their support that align with national social and health protection schemes and structures.

References