A Roadmap to Achieve Social Justice in Health Care in Egypt

Social Justice in Health

- Improve health of disadvantaged groups
- Increase financial protection for disadvantaged groups
- Improve quality of health care delivery
A Roadmap to Achieve Social Justice in Health Care in Egypt

January 2015
CONTENTS

Acknowledgments viii
Acronyms x
Executive Summary 1
1. Aim: How can social justice be achieved in healthcare in Egypt? 17
2. Objectives: What are the objectives for achieving social justice in healthcare in Egypt? 23
3. Diagnoses: What are the Challenges to Achieving the Goals for Social Justice? 29
   3.1 Objective 1: Improve health of disadvantaged groups 32
      Challenge 1: Poor maternal and child health inequitably distributed in rural, remote, and slum areas 32
      Challenge 2: High burden of Hepatitis C overall with increased prevalence among poor, rural, and low-education populations 34
      Challenge 3: High rates of undernutrition across wealth quintiles and geography 36
      Challenge 4: Rising burden of NCDs, with higher prevalence of risk factors by gender and income 37
      Challenge 5: Increasing prevalence of substance abuse and mental health issues, especially among youth and women 39
      Challenge 6: High burden of disabilities especially among illiterate and rural populations 40
   3.2 Objective 2: Increase financial protection for disadvantaged groups 41
      Challenge 7: Limited coverage of healthcare costs for disadvantaged patients 41
      Challenge 8: Lack of a strategic purchaser to enable a transition to SHI coverage for disadvantaged groups 43
      Challenge 9: Lack of provider readiness for a strategic purchaser of services 45
   3.3 Objective 3: Improve quality of healthcare delivery in public facilities 45
      Challenge 10: Lack of responsiveness of health systems to disadvantaged groups 45
      Challenge 11: Limited citizens’ participation, including grievance redress mechanisms at facility, district, governorate, or national levels, especially for disadvantaged groups 47
4. Recommendations: How can Egypt achieve social justice in its healthcare system? 49
   4.1 Recommendations to improve health of disadvantaged groups 52
      4.1.1 Addressing maternal and child health concerns 53
      4.1.2 Tackling Hepatitis C 54
      4.1.3 Understanding the drivers of undernutrition 56
      4.1.4 Addressing NCDs 57
      4.1.5 Prioritizing mental health and addiction 58
      4.1.6 Addressing the needs of the disabled 59
      4.1.7 Main strategies for moving forward 59
   4.2 Recommendations to increase financial protection for disadvantaged groups 60
      4.2.1 Equitable revenue collection 61
| 4.2.2 Pooling for equitable distribution | 61 |
| 4.2.3 Purchasing strategically | 62 |
| 4.2.4 Main strategies for moving forward | 62 |
| **4.3 Recommendations to improve quality of care in health facilities, especially in lagging regions** | 66 |
| 4.3.1 Create responsive, accountable, and accredited providers, especially in lagging regions | 67 |
| 4.3.2 Increase citizen’s participation in financing, service delivery and monitoring of quality and satisfaction, especially in lagging regions | 68 |
| 4.3.3 Main strategies for moving forward | 68 |
| **4.4 The Family Health Model: Supporting one social justice program in healthcare for Egypt** | 71 |
| 4.4.1 Envisioning a model of “Family Healthcare Services for All by 2030” | 71 |
| 4.4.2 How should Egypt implement the model? | 73 |
| **5. Implementation: How should these recommendations be implemented?** | 77 |
| **5.1 Consideration 1: What are the enabling conditions to be addressed?** | 79 |
| Cross-cutting condition 1: Developing an integrated referral system | 79 |
| Cross-cutting condition 2: Reforming the pharmaceutical sector to reduce costs and improve quality | 80 |
| **5.2 Consideration 2: Who are the actors and what are their roles for implementation?** | 80 |
| **5.3 Consideration 3: How will the recommendations be funded?** | 83 |
| **5.4 Consideration 4: What legal provisions are recommended?** | 84 |
| **5.5 Consideration 5: What governing bodies need to be created or strengthened?** | 86 |
| **5.6 Consideration 6: What further research and studies are needed?** | 87 |
| **5.7 Consideration 7: How will implementation be measured?** | 87 |
| **6. Conclusion** | 89 |
| References | 92 |
Boxes

Box 1: The “Right to Health” as captured in Egypt’s Constitution of January 2014
Box 2: Who are the “Disadvantaged” Groups?

Figures

Figure 1: Twin goals proposed for Egypt to Achieve Universal Health Coverage
Figure 2: Three overarching objectives to achieve social justice in healthcare in Egypt
Figure 3: Eleven main challenges to achieving social justice objectives in healthcare in Egypt
Figure 4: Trends in early childhood mortality, Egypt, 2008-2014
Figure 5: Differences in MCH outcomes between most and least advantaged children, Egypt
Figure 6: Trend in the total fertility rate, Egypt, 1980-2014
Figure 7: Prevalence of HCV among different subgroups in Egypt
Figure 8: Trends in nutritional status of young children, Egypt, 2000-2014
Figure 9: Leading causes of mortality and morbidity in Egypt and their change between 1990-2010
Figure 10: Cause of disability/difficulty in Egypt (%)
Figure 11: Health financing indicators in Egypt
Figure 12: Percent of household income spent on healthcare by income quintile, Egypt
Figure 13: Sources of health financing in Egypt
Figure 14: Choice of providers for outpatient care by income quintile
Figure 15: Factors contributing to dual practice
Figure 16: Recommendations to improve the health of disadvantaged groups
Figure 17: Recommendations to increase financial protection for disadvantaged groups
Figure 18: Recommendations to improve quality of healthcare in public facilities
Figure 19: Model of “Family Healthcare Services for All by 2030”
Figure 20: Short-, medium-, and long-term strengthening of the “Family Healthcare Services for All by 2030” model
Figure 21: Implementation arrangements for proposed roadmap

Tables

Table 1: Average premium and costs of HIO beneficiaries (LE)
Table 2: Key healthcare actors in Egypt and their roles
Table 3: Current and expected future fiscal space for health based on the Constitutional mandate
This paper was coauthored by Aaka Pande (Health Economist, GHNDR), Alaa Hamed (Senior Health Specialist, GHNDR), and Amr Elshalakani (Health Specialist, GHNDR). We are grateful for the leadership, guidance and encouragement from Enis Barış (Practice Manager for the Middle East, North Africa and the Caribbean, GHNDR).

We gratefully acknowledge the support received from the incumbent Minister of Health and Population, His Excellency Dr. Adel El-Adawy, and his predecessor Dr. Maha El-Rabbat. This roadmap was developed at their direct request, and we greatly value their continuous support, input, and leadership.

The content of the paper was enriched by discussions with Ministry of Health and Population (MOHP) leadership and staff, whom we thank for their time and expertise. These include: Dr. Hanaa Amer, Deputy Minister; Dr. Wagida Anwar, Advisor to the Minister; and Sector Heads Dr. Mohammed A. Rahman, Dr. Hisham Atta, Dr. Emad Ezzat, Dr. Atef El-Shitany, Dr. Mohamed Sultan, and Dr. Amr Kandil. We also appreciate the valuable inputs from MOHP officials: Dr. Soad Abdel-Maguid, Dr. Hala Zayed, Dr. Hala Massekh, Dr. Desiree Labib, Dr. Kawthar Mahmoud, Dr. Ahmed El-Ansary, Dr. Omaima Metwally, Dr. Ali Gadallah, Dr. Hanaa Moustafa, Dr. Nagwa El-Ashry, Dr. Hala Youssef, Dr. Samia El-Nahas, Dr. Naira Niazi, and Dr. Abou-Bakr El-Mekkawy. This appreciation is extended to the leadership and staff at the Regional Health Directorates, Family Health Funds, and various facilities at Cairo, Luxor, Menoufia, and Alexandria governorates, who welcomed us and shared their rich experiences during the field visits.

We thank health experts in Egypt who shared their candid views to help strengthen the format and recommendations of the paper through multiple engagements. This includes, but is not restricted to, a spectrum of academicians, senior health professionals, policymakers, and representatives of professional associations. We thank Dr. Alaa Ghannam, Dr. Mostafa Hunter, Dr. Sahar El-Tawila, Dr. Fatma El-Zanaty, Dr. Waleed El-Feky, Dr. Emad El-Azazy, Dr. Salah Shady, Dr. Ahmed Rashad, Dr. Ayman Sabae, Dr. Heba Nassar, Dr. Naglaa Arafà, Dr. Yasmin Abbas, and Dr. Amal Shafik.

Valuable arguments and inputs for health care financing were provided by Dr. Mohammed Maait, Ms. Mai Farid, and Ms. Nada Sonalla. Moreover, credit is due to the staff at the Higher Public Health Institute of Alexandria University, led by Dr. Ibrahim Kharbough, for their high panel discussions and strategic comments.

Many CSOs contributed and enriched the discussions during the consultations, namely: Misr El-Kheir Foundation, Egyptian Initiative for Personal Rights (The Right to Health Division), Nebny Foundation, Al-Hassan Foundation for Spinal Cord Injuries, Bashayer Helwan, Association of Upper Egypt for Education and Development, Tamkin Association, and Lifemakers - Insan Project.

This work benefited from several fruitful discussions with international development partners, including the following colleagues: Dr. Henk Bekedam, Dr. Magdy Bakr, and Mr. Riku Elovaninio (WHO); Dr. Magdy El-Sanady and Dr. Moataz Saleh (UNICEF); Dr. Magdy Khaled (UNFPA); and Dr. Mohammed Hamad (UNODC).
We appreciate the inputs of our World Bank colleagues: Moustafa Abdalla (Social Protection Specialist, GSPDR) for his insightful views; and Souraya El-Assiouty (Program Assistant, GHNDR) and Mariam Ghaly (Administrative Assistant, CAIWB) for their overall support of the activities culminating in this paper. A very warm Thanks goes to Mohammed Duban, who assisted with review and typesetting of this document, and to Amy Gautam for doing a meticulous editing job in a very expedient time frame. Thanks due also to the professional photographers Amira Nour and Sara Fouad.

A special thank you to the team at the Minister›s Technical Office of MOHP for its persistent and endless support in organizing consultations and field visits for the authors. We thank Dr. Ghada Nasr, Dr. Omkolthoum El-Sayed, Dr. Yasser Omar, Dr. Makram Atef, and the wonderful team assistants Leila Hessien and Amira Ahmed for their help.

Finally, this paper is grateful to the many people who shared their stories with us—the old man selling vegetables in Luxor, the pregnant lady in Menoufia, the teenager in Alexandria, and the felucca sailor in Cairo, to name a few—and to all the people of Egypt whose bravery and expression in change over the past few years have sparked the impetus for this document. With this roadmap paper, we aim for a new partnership in Egypt that will foster the reality of a fair and accountable health system based on the principle of social justice.
## ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CSO</strong></td>
<td>Civil society organization</td>
</tr>
<tr>
<td><strong>DALY</strong></td>
<td>Disability-adjusted life-years</td>
</tr>
<tr>
<td><strong>DHS</strong></td>
<td>Demographic and Health Survey</td>
</tr>
<tr>
<td><strong>ESWA</strong></td>
<td>Economic and Social Commission of Western Asia</td>
</tr>
<tr>
<td><strong>FGM/C</strong></td>
<td>Female genital mutilation/cutting</td>
</tr>
<tr>
<td><strong>FHF</strong></td>
<td>Family Health Fund</td>
</tr>
<tr>
<td><strong>FHS</strong></td>
<td>Family Health Service</td>
</tr>
<tr>
<td><strong>FSC</strong></td>
<td>Family Smart Card</td>
</tr>
<tr>
<td><strong>GDP</strong></td>
<td>Gross domestic product</td>
</tr>
<tr>
<td><strong>GoE</strong></td>
<td>Government of Egypt</td>
</tr>
<tr>
<td><strong>GRM</strong></td>
<td>Grievance Redress Mechanism</td>
</tr>
<tr>
<td><strong>HCV</strong></td>
<td>Hepatitis C Virus</td>
</tr>
<tr>
<td><strong>HHEUS</strong></td>
<td>Household Health Expenditure and Utilization Survey</td>
</tr>
<tr>
<td><strong>HIO</strong></td>
<td>Health Insurance Organization</td>
</tr>
<tr>
<td><strong>HMIS</strong></td>
<td>Health monitoring information systems</td>
</tr>
<tr>
<td><strong>IMCI</strong></td>
<td>Integrated Management of Childhood Illnesses</td>
</tr>
<tr>
<td><strong>KPI</strong></td>
<td>Key performance indicator</td>
</tr>
<tr>
<td><strong>MCH</strong></td>
<td>Maternal and child health</td>
</tr>
<tr>
<td><strong>MDG</strong></td>
<td>Millennium development goal</td>
</tr>
<tr>
<td><strong>MENA</strong></td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td><strong>MOF</strong></td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td><strong>MOHP</strong></td>
<td>Ministry of Health and Population</td>
</tr>
<tr>
<td><strong>LE</strong></td>
<td>Egyptian pound</td>
</tr>
<tr>
<td><strong>LMIC</strong></td>
<td>Low and Middle Income Countries</td>
</tr>
<tr>
<td><strong>NCD</strong></td>
<td>Noncommunicable disease</td>
</tr>
<tr>
<td><strong>NGO</strong></td>
<td>Nongovernmental organization</td>
</tr>
<tr>
<td><strong>OOP</strong></td>
<td>Out-of-pocket</td>
</tr>
<tr>
<td><strong>PBR</strong></td>
<td>Patient Bill of Rights</td>
</tr>
<tr>
<td><strong>PTES</strong></td>
<td>Program for Treatment at the Expense of State</td>
</tr>
<tr>
<td><strong>SHI</strong></td>
<td>Social health insurance</td>
</tr>
<tr>
<td><strong>UHC</strong></td>
<td>Universal health coverage</td>
</tr>
<tr>
<td><strong>UN</strong></td>
<td>United Nations</td>
</tr>
<tr>
<td><strong>WHO</strong></td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
This paper lays out a roadmap to achieve social justice in healthcare by prioritizing areas related to service delivery, financial protection, and quality of care. The aim is to assist the Government of Egypt (GoE) in realizing the principle of social justice in the provision of healthcare. In doing so, the roadmap aims to prioritize key areas of focus for Egypt, including describing which existing programs to continue supporting and which new programs to consider for development, all under an integrated and interdependent structure. This paper is not meant to be an assessment of all the challenges facing the entire Egyptian healthcare system, but instead is a focused assessment of how the overarching aim of “social justice” can be achieved in the healthcare sector through an emphasis on improving services for the most disadvantaged groups.

This is done in four stages:

1. **Objectives**: The paper lays out the three objectives that need to be reached to ensure that social justice in healthcare is achieved.

2. **Challenges**: Next, it drills down to diagnose the eleven challenges currently preventing these objectives from being realized.

3. **Recommendations**: Then, it presents a series of fourteen recommendations by which these challenges can be overcome, drawing from successful pilots and programs in Egypt and global best practice.
4. Implementation arrangements: Finally, it puts forth a detailed description of seven implementation arrangements necessary to operationalize the proposed roadmap.

The time horizon for this roadmap is the next three to five years (2015-2020). This roadmap suggests recommendations that will result in incremental improvements in Egypt’s healthcare system in the short to medium term with a focus on disadvantaged groups. Achievement of these results should situate Egypt on the path to achieving social justice in healthcare in the long term. The paper comes as the final product of a year full of hard work by the team involving the review of all available literature, field visits and interviews to the remotest villages in the far north and south of the country as well as multiple consultations with experts, officials, civil society and ordinary citizens themselves.

1. Aim: How can social justice be achieved in healthcare in Egypt?

Achieving social justice is a pressing priority for both the people and the government of Egypt. To achieve social justice, a commitment must be made to ensure that the most disadvantaged have access to the same services as the average Egyptian—i.e., that everyone has the same “equality of opportunity” (World Bank 2012a). In the field of healthcare, this translates to all Egyptians, irrespective of income, gender, or geographic location, having access to the same standards of affordable, equitable, effective, and efficient healthcare.

Attaining universal health coverage (UHC) is a commitment of the Government of Egypt (GoE) and is one way to ensure social justice in healthcare. To ensure fair, progressive realization of UHC, prioritization of services must take place, with mechanisms to ensure that disadvantaged groups are not left behind. Social justice in the healthcare sector can be achieved by ensuring universal access to health coverage for all Egyptian citizens through the provision of an affordable package of essential health services within Egypt’s fiscal space and as per its Constitutional mandate (see Box 1: Right to Health as Captured in Egypt’s Constitution of January 2014), with a special emphasis on disadvantaged groups (see Box 2: Who are the “Disadvantaged” Groups?)

To ensure fair, progressive realization of UHC, prioritization of services must take place, with mechanisms to ensure that disadvantaged groups are not left behind. To achieve UHC, countries must advance in at least three dimensions. They must expand priority services, expand populations covered, and reduce OOP payments (WHO 2014). In each of these dimensions, countries are faced with a critical choice: Which services should be expanded first? Which populations should be included first? How can payments be shifted from OOP expenditure to a pooled prepayment scheme? This roadmap paper aims to assist GoE with this prioritization process to ensure progressive realization of UHC.

Expansion of family health services (FHS) to all Egyptian citizens by 2030, with a focus on disadvantaged populations, is a concrete way to realize the principle of UHC and work toward social justice in healthcare. Family health services should comprise a package of essential health services related to Egypt’s burden of disease and would
include: maternal and child health (MCH); reproductive health and family planning services; prevention, screening, and treatment of noncommunicable diseases (NCDs); mental health; and nutrition. This package should be integrated into all levels of care, from primary health centers to district hospitals.

Further, expanding mandatory social health insurance (SHI) to all Egyptian citizens by 2030, with a focus on disadvantaged populations, will ensure that Egyptians will be financially protected in an equitable fashion. This will ensure that no Egyptian will be pushed into or kept in poverty by paying for healthcare. SHI should ensure comprehensive risk pooling across various population segments and will expand health insurance coverage to include the poor at first, and then gradually, the informal sector. It should separate the institutional responsibilities for the purchasing function from service provision and will transform currently passive practices of payers into active purchasing

2. Objectives: What are the objectives for achieving social justice in healthcare in Egypt?

Every health system can be thought to have three objectives—to improve health status, to provide financial protection, and to ensure patient satisfaction. Analysis of Egypt’s current health system through these lenses suggests that these objectives have only been partially met for certain outcomes or specific populations. With respect to health status, Egypt’s population has become healthier in the last 20 years, with an increase in overall life expectancy from 64.5 years to 70.5 years, though the benefits have not accrued equally (World Bank 2014b). Similarly, with respect to financial protection, while more than half of the population has access to some form of health insurance, 72 percent of all healthcare costs are still covered out of pocket (OOP; Rafeh et al. 2011). Finally, with respect to patient satisfaction, while patients in a recent survey generally ranked all facilities moderately high, but differences persisted by facility type (Rafeh et al. 2011).

Consequently to achieve social justice in healthcare in Egypt, the following three objectives would have to be met:

1. **Objective 1**: Improve health of disadvantaged groups
2. **Objective 2**: Increase financial protection for disadvantaged groups
3. **Objective 3**: Improve quality of healthcare delivery in public facilities

3. Diagnoses: What are the challenges to achieving social justice in healthcare?

Eleven challenges need to be addressed to ensure that social justice in healthcare is achieved. These challenges are based on an analysis of the gaps remaining in achieving the three health system objectives, identified through a detailed review of qualitative and quantitative data, peer-reviewed and grey literature, and national plans as well as discussions with health experts. Consensus on these challenges was based on several
in-depth interviews, rounds of consultations, and special workshops with experts from Ministry of Health and Population (MOHP), Ministry of Finance (MOF), Health Insurance Organization (HIO), civil society, NGOs, the private sector, donors, and academia during a yearlong process in 2013-2014. For each challenge, there are particular groups who are particularly vulnerable; to assist them, additional effort is necessary.

These challenges are:

For Objective 1, (i) inequitable maternal and child health (MCH) in rural, remote, and slum areas; (ii) high burden of Hepatitis C overall with increased prevalence among poor, rural, and low-education populations; (iii) high rates of under nutrition across wealth quintiles and geography; (iv) rising burden of non-communicable diseases (NCDs), with higher prevalence of risk factors by gender and income; (v) increasing prevalence of substance abuse and mental health issues, especially among youth and women; and (vi) high burden of disabilities especially among illiterate and rural populations.

For Objective 2, (i) limited coverage of healthcare expenses for the disadvantaged; (ii) lack of a strategic purchaser to enable a transition to social health insurance (SHI) coverage for disadvantaged groups; and (iii) lack of provider readiness for a strategic purchaser of services.

For Objective 3, (i) lack of responsiveness of health systems to disadvantaged groups; and (ii) limited citizens’ participation, including lack of grievance redress mechanisms at facility, district, governorate, or national levels, especially for disadvantaged groups.

Objective 1: Improve the health of disadvantaged groups

Challenge 1: Poor maternal and child health (MCH) inequitably distributed in rural, remote, and slum areas

Egypt has seen gains in MCH outcomes, as demonstrated by reductions in the last 10 years in the maternal mortality ratio by one-third, from 100.0 to 66.0 maternal deaths per 100,000 live births; and the under-five mortality rate by half, from 41.9 to 22.0 infant deaths per 1,000 live births (World Bank 2014a). However, neonatal mortality represents half of infant mortality and is disproportionately higher among those living in rural Upper Egypt. Concurrently, Egypt is witnessing an increase in fertility with a decline in the contraceptive prevalence rate. In addition, rates of female genital mutilation/cutting (FGM/C) remain extremely high, with 91 percent of all women aged 15-49 circumcised (El-Zanaty and Way 2009). To address this, Egypt has developed a National Acceleration Plan for Child and Maternal Health (2013-2015) (MOHP 2013) to speed up the progress in further reduction of maternal and child deaths, but it can be better targeted to disadvantaged groups.

Challenge 2: High burden of Hepatitis C overall with increased prevalence among poor, rural, and low-education populations

Egypt has the highest prevalence of Hepatitis C virus (HCV) globally, with the prevalence rate among 15- to 59-year-olds estimated at 14.7 percent (El-Zanaty and Way 2009). Groups with higher prevalence rates include lower educated populations, rural populations, low-
income groups, and men (Awadalla 2011; Mahmoud et al. 2013). Egypt developed a Plan of Action for the Prevention, Care and Treatment of Viral Hepatitis (2014-2018) with several international best practices in place pertaining to prevention, treatment, screening, and surveillance. To our knowledge, the prior strategy on which this was based (2007-2012) has not yet been formally evaluated and as a result, potential lessons that could have been learned have not been captured.

Challenge 3: High rates of undernutrition across wealth quintiles and geography

In terms of macronutrient deficiencies, around one in five children under the age of five are classified as stunted and one in ten are classified as severely stunted (El-Zanaty and Associates 2014). Wasting (weight-for-height) increased in the last 15 years, while the rate of underweight (weight-for-age) children saw no significant change (El-Zanaty and Associates 2014). More than one in four children in Egypt suffer from some degree of anemia, and rural children are more likely to be anemic than urban children (29 percent and 23 percent, respectively) (El-Zanaty and Associates 2014). As a result, Egypt is not on target to meet the World Health Assembly Nutrition targets. Presently, Egypt has a 10-year Food and Nutrition Policy and Strategy (2007–2017) in place, but MOHP does not have a nutrition unit (MOHP 2007).

Challenge 4: Rising burden of noncommunicable diseases (NCDs), with higher prevalence of risk factors by gender and income

Egypt is undergoing an epidemiological transition, with 72 percent of all mortality and morbidity in 2010 (captured in units of disability-adjusted life-years, or DALYs) due to NCDs (IHME 2013). The distribution of NCDs tends to be concentrated in older and wealthier populations, though a latent undiagnosed burden of NCDs is likely in poorer, less educated groups, who have reduced access to health services. Risk factors differ by gender and age. Presently, Egypt does not have a unified and costed national NCD plan and does not collect regular data on NCD risk factors, prevalence, and complications.

Challenge 5: Increasing prevalence of substance abuse and mental health issues, especially among youth and women

Unipolar depressive disorders and anxiety are among the main causes of disability and death (as measured in DALYs) among women aged 15-49 (IHME 2013), while addiction, often a coping mechanism for mental health conditions, is rising among men (Hamdi et al. 2013). The lifetime prevalence of substance abuse is thought to vary between 7.3 and 14.5 percent with a prevalence of 13.2 percent in males and 1.1 percent in females (Hamdi et al. 2013). The government’s national mental health plan, developed in 2003, needs to be updated to reflect current needs (WHO 2010b). In addition, mental health services are woefully underfinanced and make up only 2 percent of the total government health budget; only 5 percent of undergraduate training hours at medical school are devoted to mental health teaching (WHO 2010b).

Challenge 6: High burden of disabilities especially among illiterate and rural populations

Estimates of disability in Egypt vary from 0.7 percent (ESCWA and League of Arab States
2014) to 10 percent of the population with up to 25 percent of the population thought to be indirectly affected either as family members or as caregivers (UN, date unknown). Disabled populations are more likely to be male, unmarried, illiterate, and rural. Egypt has a national council for disability affairs and provisions in the Constitution to address disabilities, but implementation of a national strategy has been weak. While disabled populations are entitled to certain services, disadvantaged disabled populations tend to be excluded.

**Objective 2: Increase financial protection for disadvantaged groups**

**Challenge 7: Limited coverage of healthcare costs for disadvantaged patients**

Egypt spends less on healthcare than its regional peers, resulting in high OOP expenditures. Despite the presence of multiple public and semi-public health providers, around half of the population does not enjoy any type of formal coverage, especially those who are poor or employed in the informal sector (HIO 2011). In recent years, MOHP introduced interventions aiming to provide better access to health services targeted to disadvantaged groups, but they are yet to materialize into effective financial protection.

**Challenge 8: Lack of a strategic purchaser to enable a transition to SHI coverage for disadvantaged groups**

Egypt’s current health system is fragmented with a number of financing agents. Four key financing players are present and were designed to complement each other; in some cases, there are overlaps of coverage and provision of different packages of health services. In addition, inefficiencies remain within each institution.

**Challenge 9: Lack of provider readiness for a strategic purchaser of services**

Significant centralization, line item budgeting, and lack of service costing mechanisms have made providers unresponsive to local needs. Even with the creation of a strategic purchaser, most public providers lack the ability to interact with that purchaser.

**Objective 3: Improve quality of healthcare delivery in public facilities**

**Challenge 10: Lack of responsiveness of health systems to disadvantaged groups**

Public health facilities are not considered responsive to patients, leading patients to pay for private sector care. Inequities persist by income, across governorates, and by gender. Supply-side payment mechanisms along with low wages for physicians and other health staff provide little incentive for better performance. Dual practice remains a pressing problem, with almost 80 percent of doctors working in both the public and private sector (Giuliano Russo 2013).
Challenge 11: Limited citizens’ participation, including lack of grievance redress mechanisms at facility, district, governorate, or national levels especially for disadvantaged groups

Citizens’ participation in the delivery of health services is limited, hampered by the absence of formal grievance redress mechanisms (GRMs). While some facilities have complaint boxes or Patient Bill of Rights (PBRs), this is not uniform across all public facilities and ways of dealing with complaints or infringements of rights are ad hoc. No medical malpractice law exists and if a patient has a grievance with a physician, his complaint is usually referred to the Doctors Syndicate, a semi-autonomous union of all doctors, which may lack the impartiality necessary to assess such cases.

4. Recommendations: How can Egypt achieve social justice in its healthcare system?

For Egypt to achieve social justice in its healthcare system and so attain its three overarching objectives, a multi-pronged approach is proposed.

1. Providing an integrated package of family health services mapped to the growing burden of disease, and targeting the scaling up of health services to lagging areas;

2. Expanding financial protection through social health insurance coverage for the poor and those in the informal sector;

3. Advocating for the separation of purchasing of healthcare services from service provision to enhance accountability in the health system, especially for disadvantaged groups; and

4. Increasing quality of healthcare and ensuring equitable distribution of a responsive health workforce through performance based incentives and accreditation; and improving citizen’s engagement in delivering, financing, and monitoring of services with a focus on service delivery to disadvantaged groups.

Specifically, the multi-pronged approach consists of fourteen key recommendations.

For Objective 1, the recommendations are the following: (i) creating or supporting targeted national plans to tackle high-priority health concerns; (ii) supporting an integrated family health services model care with appropriate referral mechanisms; (iii) monitoring or surveillance of high risk groups; and (iv) supporting key risk factor specific interventions, especially with respect to disadvantaged populations.

As for Objective 2, it is recommended to ensure the following, especially for coverage of disadvantaged populations: (i) separation of purchasing and provision functions; (ii) reforming existing payers; (iii) defining and costing price of package of services; (iv) defining provider payment mechanism; (v) and preparing providers for contracting.

To achieve Objective 3, the recommendations, especially for lagging regions, are: (i) training of providers in line with the new healthcare demands; (ii) attaining independent accreditation for public facilities; (iii) scaling up performance-based financing and other incentives; (iv) creating avenues for citizen’s participation in service delivery; and (v)
establishing grievance redress mechanisms and progressive legislature such as Patient Bill of Rights.

**Recommendations to improve the health of disadvantaged groups**

Provide an integrated package of family health services mapped to the growing burden of disease with targeted scale up in lagging areas. Egypt should promote an essential package of family health services delivered at the relevant level of care that would: (i) include cost-effective interventions related to maternal health; family planning and reproductive health, including nutrition and management of sexually-transmitted diseases; child health and immunizations; outpatient management of diabetes, hypertension, and cardiovascular disease; and tuberculosis treatment; (ii) be linked to public health programs for critical diseases like Hepatitis C and NCDs; and (iii) be linked to higher level of care through referrals. This would result in a revision of the expanded primary healthcare service delivery model proposed in 1999 so as to better meet the needs of the population include the package of services which will be covered by SHI.

Specifically, this would entail adopting the following recommendations:

**Recommendation 1: Creating or supporting targeted national plans to tackle high-priority health concerns**

To prioritize the six health status challenges, it is important to either support existing national plans or draft new costed national action plans where they do not exist. For example, the existing National Acceleration Plan for Child and Maternal Health and recently launched Plan of Action for the Prevention, Care and Treatment of Viral Hepatitis in Egypt 2014-2018 should be supported and enhanced to include a renewed focus on disadvantaged groups. However, national action plans for NCDs and disabilities do not exist at present and should be prioritized.

**Recommendation 2: Supporting an integrated family health services model of care with appropriate referral mechanisms, with a focus on disadvantaged groups**

To effectively and efficiently tackle the six priority health issues, an integrated family health service delivery model is required with a priority to expand its coverage to disadvantaged groups. This would result in a revision of the expanded primary healthcare service delivery model proposed in 1999 and include a basic package of services for MCH, NCDs, nutrition, mental health, and disabilities to better meet the needs of the population include the package of services which will be covered by SHI. Prevention, screening, and basic treatment (e.g., antenatal care visits, growth monitoring and promotion, and screening for NCDs and mental health) would take place at the primary level with a robust referral system to secondary and tertiary care facilities for more complicated cases (e.g., emergency obstetric care and NCD-linked complications) targeted to disadvantaged groups.

**Recommendation 3: Monitoring and surveillance of high-risk groups**

To effectively combat high-priority health conditions, it is important to have reliable, up-
to-date estimates of baseline disease prevalence and changing trends in incidence. These need to be representative at the governorate and, if possible, district level, and available for vulnerable subgroups. This would include a perinatal and neonatal surveillance system for maternal deaths; surveillance of NCDs (both risk factors and disease prevalence), nutrition, mental health, and disabilities; continued national surveillance of HCV among general and high-risk groups as part of the Demographic and Health Survey (DHS); and creation of a national registry of disabled persons.

**Recommendation 4: Supporting key risk factor specific interventions among disadvantaged populations**

Apart from the general recommendations, each disease also requires risk factor specific actions among disadvantaged populations. Some examples include: targeted demand creation through employing female community workers, and vouchers for family health services or conditional cash transfer schemes for nutrition; awareness campaigns around FGM/C, disabilities, mental health, and addiction; promotion of physical activity and good nutrition practices, including exclusive breastfeeding; distribution of new chemotherapies and promotion of infection control and blood safety for HCV; continuing food fortification programs for iron and Vitamins A and D in government food subsidy programs and encouraging the roll-out of fortified foods in the commercial sector; raising tobacco taxes further and extending and enforcing legislation to create a “100 percent smoke-free environment” in all indoor workplaces and public spaces; screening for tobacco use and obesity among high-risk groups; increasing the number of training hours devoted to mental health and the number of nutritionists and dieticians to deal with the growing dual burden of under nutrition and obesity; and creating disability accessible spaces.

**Recommendations to increase financial protection for disadvantaged groups**

To ensure financial protection to Egypt’s most disadvantaged groups, the system must provide adequate coverage plans for Egypt’s poor and then those working in the informal sector. This coverage should be dual: (i) state funded health coverage plans for a package of essential family health services; and (ii) support for enrollment in SHI to cover higher levels of service. This approach aims to mitigate the financial impact of enrolling those groups in any pooled funding mechanism, providing them with financial protection against healthcare costs while minimizing costs incurred by the community.

In addition, to increase system efficiency and open up fiscal space to provide coverage to the most disadvantaged, payment and provision of care should be separated through demand-side financing using strategic purchasing and contracting, or through supply-side financing using performance-based financing schemes, or both.

Specifically, this would entail adopting the following recommendations:

**Recommendation 5: Separation of purchasing and provision functions to increase accountability and efficiency for disadvantaged populations**

Separation of functions aims to improve efficiencies in service delivery. HIO should separate its internal payment and provision functions. The “Payer” division would assume
the roles of contributions management, provider management, claims processing, utilization management, and reporting. The “Provider” division would work on achieving efficient and quality services in HIO facilities. While this separation is challenging in a fiscally constrained environment, it must be prioritized to increase efficiencies in the system and allow for transition to a strategic payer. The new SHI organization should be established to assume the responsibilities of a payer without service provision.

Recommendation 6: Reforming existing payers who provide coverage to disadvantaged populations

**Egypt is committed to achieving UHC as reflected in language on the “Right to Health” in the Constitution, and expanding SHI coverage is one way to achieve this aim.** A multi-payer scheme could be introduced to upgrade the existing payers in preparation for a future merge into a strategic purchaser. During the transition, HIO could continue as the payer for formal sector workers, while another payer could be responsible for the poor and informal sector workers. The latter could be the Program for Treatment at the Expense of the State (PTES) as it was established to serve the uninsured. This requires introducing short- to medium-term reforms in all these organizations. This system is similar to ones used in other countries that have worked towards achieving UHC, such as Mexico, Chile, Thailand, and Colombia. In the long term, these two payers could be merged once their packages and rules and regulations are unified.

**For PTES:** Upgrade purchasing functions to contract service providers based on different providers’ prices instead of providing financial support based on reimbursement; improve targeting mechanisms to limit access of the financially better off segments of the population; and gradually become a purchaser for informal sector workers (based on contributions that could be partially subsidized for the near poor) and the poor (based on non-contributory government subsidies).

**For FHFs:** Become the entry governorate-level structures for strategic purchasing of a defined package of essential family health services at the primary and secondary healthcare levels based on payment for performance especially for disadvantaged populations; become the entry point for access to services provided under PTES and HIO, and later the national SHI fund; unify rules, regulations, and payment schemes at regional FHFs; and improve their efficiency by decreasing administrative cost.

**For HIO:** Improve efficiency of HIO to create fiscal space to allow for an increase in coverage for the disadvantaged groups. To achieve this create a preliminary internal separation between purchasing and provider functions within the organization; introduce provider payment mechanisms applied uniformly and equally between HIO providers as well as with other public, university, and private providers; expand contracting practices to more fairly select both public and private providers based on a competitive process for those meeting minimum quality standards; upgrade health insurance functions such as beneficiary management, provider management, claims processing, and utilization management; move from a scheme dependent on individual enrollment to one based on family enrollment with the possibility of expanding coverage to formal sector workers’ dependents; unify the premium structure for formal workers, especially those covered under Law 32 and Law 79; encourage those who opted out of the system to return for
coverage against catastrophic illness; and establish partnerships with private health insurance companies to provide complementary packages.

**Recommendation 7: Defining and costing price of package of services, especially for healthcare needs of disadvantaged populations**

Egypt already enjoys a basic package of family health services at the primary care level as defined in 1999. Yet insufficient roll-out, lack of financial sustainability, and segregation into different vertical programs prevent it from providing UHC. Reviving the package requires efforts more on the operationalization level and adjustment of the package of services included to be responsive to the needs of disadvantaged populations. Costing of the different components must be revisited to determine actual unit costs that could be translated into programmatic budgets through MOF allocations. In addition, the package should be upgraded to meet the new health needs of Egypt including prevention and treatment of NCDs, disabilities, and mental health conditions.

Specifically, the family benefits package should ensure the integrated provision of three groups of services, selected based on priority problems and cost-effectiveness of interventions at primary and secondary health care level such as maternal healthcare services (family planning, safe motherhood interventions, nutrition); child health services (such as integrated management for childhood illnesses, IMCI, for acute respiratory illness, diarrhea, and malnutrition; immunization); and adult and all age group services (outpatient management of diabetes, hypertension, and cardiovascular disease; mental health; tuberculosis treatment; sexually-transmitted disease management; disabilities; and emergency care).

**Recommendation 8: Defining provider payment mechanism, especially for services required by disadvantaged groups**

It is recommended that primary care services offering the comprehensive FHS package be paid in fixed capitation amounts that cover the fixed costs of operations; while a complementary pay-for-performance scheme finances the variable costs based on volume, quality, and incurred hardship for services provided.

**Recommendation 9: Preparing providers for contracting, especially those targeting disadvantaged groups**

Given their historical reliance on line item budgeting, self-generated revenues, and less attention to efficiency, Egyptian hospitals (public and private alike), especially those which provide services to disadvantaged groups, must develop the ability to cost their provided services. This would entail training of fiduciary staff; and introduction of health monitoring information systems (HMIS) to track expense and capture physician behavior, prescribing practices, and ancillary costs.

**Recommendations to improve quality of care in healthcare facilities, especially in lagging regions**

Increase the quality of healthcare through performance-based incentives,
accreditation, training, and citizens’ engagement, especially for disadvantaged populations. Structuring a payment system with performance-based incentives for providers has been shown to be successful at improving quality of care both globally and in Egypt through reforms introduced as part of the Family Health Model in 2001. This should be scaled up to lagging regions. In addition, citizens should be more directly engaged in the provision of care by establishment of grievance redress mechanisms (GRMs) and active monitoring of the quality of and satisfaction with healthcare services. Finally, quality and safety can be further improved through mandatory accreditation for FHSs and improved training resulting in greater compliance with clinical guidelines, standards, and treatment protocols in healthcare facilities.

Specifically, this would entail adopting the following recommendations:

Recommendation 10: Training of providers in line with new healthcare demands, especially in lagging regions

The current skill mix of Egypt’s medical workforce may not allow them to adequately respond to increasing healthcare demands, therefore task shifting and retraining is necessary especially in lagging regions. In Upper Egypt, where physicians’ availability is lowest, nursing staff could be further trained to perform basic procedures to improve health outcomes, after appropriate training and legal frameworks are in place. Training providers on domains of responsiveness is essential to increase patient satisfaction. Dual practice can be regulated through different staggered “global fixes” such as allowing private practice in public hospitals, increasing basic wages and incentives, and then gradually banning dual practice.

Recommendation 11: Attaining independent accreditation for public facilities, especially those in lagging regions

Egypt should start working towards at least foundation-level accreditation for its public providers to ensure better quality and as a prerequisite for eventual contracting with a strategic payer(s). Only facilities that meet at a minimum the Foundation Accreditation Level for hospitals and the Provisional or Full Accreditation Level for primary healthcare units and centers will be eligible for contracting.

Recommendation 12: Scaling up performance-based financing and other incentives, especially in lagging regions

Structuring a payment system with performance-based incentives for providers has been shown to be successful at improving quality of care (Scott et al. 2011). Through the reforms introduced as part of the Family Health Model in 2001, Egypt integrated pay-for-performance incentives in FHF-contracted facilities in five governorates, which was shown to be successful in improving the quality of care and resulted in increased satisfaction levels for both healthcare providers and beneficiaries (Huntington et al. 2009). Other positive incentives include accelerated career progression, exposure to training facilities at nearby centers of excellence, and government-guaranteed and pre-negotiated contracts for working within or outside of the country for higher pay after a set number of years in service. Negative incentives to discourage professionals from working
in non-lagging regions include caps on available job openings, frequent staff rotations, and stipulation of service in a lagging region for a set period of time as a precondition for eligibility for payment bonuses.

**Recommendation 13: Creating avenues for citizens’ participation in service delivery, especially in lagging regions**

Citizens’ participation in service delivery can be increased by drafting a national strategy for citizens’ engagement in healthcare that includes creating an office for engagement with civil society at the national level and establishing a Committee for Patient Rights at the facility level. Information on performance must be linked with mechanisms that allow citizens, service providers, and officials to share and act on it. Collecting feedback on public services from users, benchmarking service delivery and local governance performance and disseminating information on performance can also provide a rigorous basis for citizen action (World Bank 2015b forthcoming).

**Recommendation 14: Establishing grievance redress mechanisms and progressive legislature such as a Patient Bill of Rights**

Legislative recommendations should be considered to provide grievance redress, including considering the development of a medical malpractice law, creation of a uniform Patient Bill of Rights (PBR), and harmonization of existing laws and decrees related to health. Based on global best practice, the PBR should consider including areas on patients’ right to accurate and easily understandable information; choice of healthcare provider; emergency services; taking part in treatment decisions; respect and nondiscrimination; confidentiality and privacy of health service and information; and fair, fast, and objective review. The current health system is governed by a series of outdated and sometimes contradictory decrees and laws that should be aligned.

**The Family Health Model: Supporting one social justice program in healthcare for Egypt**

With its existing network of population- and community-based services, albeit of variable strength and quality, Egypt is not starting from scratch in the implementation of a family health model. It has a strong preventive program and a geographically widespread primary care infrastructure. Availability of an adequate quantity and quality of trained healthcare workers is a cornerstone of the model’s success. Finally, the model should mount an increasing focus on helping lagging regions achieve the MDG targets and tackle Hepatitis C and the rising burden of NCDs. Since the “Family Healthcare Services for All by 2030” model is a supply-side mechanism, adequate measures to enhance demand for its services should also be sought.

**How should Egypt implement the model?**

In the short term (2017), Egypt should aim to provide the package of family health services to the most lagging regions in terms of health outcomes and financial protection, covering initially an estimated 20 percent of the poor. Following the footsteps of the GoE’s program to upgrade and enhance the living conditions in the poorest 1,000 governorates would be a good start. This immediate measure would provide a much needed sense of
equity among the population. In the medium term (2020), it should expand the service to include the poorest 40 percent of the population, covering nearly all of Upper Egypt with gradual introduction of a referral system. In the long term (2030), all citizens should enjoy family health services as an integral part of their basic rights. The financial cost of the model should optimally be borne by the state through tax-based pooled funds.

5. Implementation: How should these recommendations be implemented?

Implementation of these recommendations requires several components to be in place—seven of which are laid out below. Implementation considerations include (i) creation of enabling conditions; (ii) definition of roles for different actors; (iii) consideration of different avenues for funding of recommendations (iv) promulgation of new legal provisions; (v) creation and strengthening of different government bodies; (vi) commissioning of further research and studies; (vii) and agreement on a uniform set of metrics to track overall progress.

Consideration 1: What are the enabling conditions to be addressed?

Reforms in two cross-cutting areas –creating integrated referral systems, and pharmaceutical reform – are important to enable implementation of roadmap. Creating an integrated referral system with incentives to refer patients by creating lower copayments should be encouraged through the recommended health financing reforms. Egypt should also create a national pharmaceutical regulator to track supply, demand, and quality.

Consideration 2: Who are the actors and what are their roles for implementation?

MOHP should not be considered the sole actor involved in shepherding the health system through a transformation process in a climate of social and economic uncertainties. Each of the multiple actors involved in the regulation, financing, and provision of healthcare should have a clear role and set of recommendations to follow in the reform process. This will provide for complementarities, synergies, and a national sense of ownership, all of which will enable smooth implementation.

Consideration 3: How will the recommendations be funded?

In general, fiscal space for health can be increased in five ways: a favorable macroeconomic climate, resulting in overall increases in government revenue; reprioritization of health within the government budget; an increase in health-specific foreign aid; an increase in health-specific resources; and increased efficiency of government outlays (Tandon 2010). Given the current economic climate in Egypt, the first way may not be realistic in the next five years. However, the latter four are all possible ways to finance the short- and medium-term recommendations proposed.

Consideration 4: What legal provisions are recommended?

Egypt may need to harmonize and modify its various laws and governing decrees related
to healthcare. Such changes must be carried out in a prioritized manner and include the passage of the SHI law, passing a medical malpractice law, creating a unified national Patient Bill of Rights, amending the medical cadre law, and reforming the FHF and PTES legal frameworks.

Consideration 5: What governing bodies need to be created or strengthened?

To ensure implementation of the short- and medium-term recommendations, two governing bodies in particular need to be created or strengthened. A Supreme Health Council should be created to set the overall strategy, oversee the functionality of the health system, and ensure that the privileges and obligations of all players are respected and maintained. The National Accreditation Committee should be strengthened to be independent and oversee a national accreditation program, which will be needed as part of the transition to a strategic payer. An Independent Regulatory Authority should be created at the national level to ensure that providers maintain a certain level of quality of care at facilities; provide services at pre-agreed fixed prices; uphold the governance and social accountability rights of citizens and workers; and provide relevant feedback to policymakers towards a smooth running of the system. At the minimum such a body should be an umbrella body for regulation for health organizations, professionals, and food and drug supplies.

Consideration 6: What further research and studies are needed?

Although several studies have examined the major challenges facing the Egyptian healthcare system, critical gaps remain in the understanding of their root causes. Further studies should be undertaken on the causes and determinants of malnutrition; drivers and cost of NCDs; disease burden and provider mapping for mental health; allocative efficiency of healthcare programs; and effective decentralization of the health system.

Consideration 7: How will implementation be measured?

Continuous monitoring and periodic evaluations of the reform program will be critical to its success. At the national level, key performance indicators should track higher-level outputs and outcomes that measure health status, financial protection, and quality of care both at the national level and disaggregated for disadvantaged groups. Thirteen suggested indicators are presented below—specific targets and timelines should be set based on consultations with stakeholders, who will both implement programs and closely monitor their progress.

- **Objective 1: Improve health of disadvantaged groups (national aggregate and among disadvantaged groups)**
  1. Child mortality rate
  2. Maternal mortality ratio
  3. Number of doses of new Hepatitis C drug regimens (simeprevir or sofosbuvir) distributed
  4. Percent of children immunized
5. Percent of women receiving assisted delivery
6. Percent of children classified as stunted (height-for-age)
7. Percent of adult women classified as obese
8. Percent of male tobacco smokers

● **Objective 2: Increase financial protection for disadvantaged groups (national aggregate and among disadvantaged groups)**

9. Incidence of catastrophic health expenditure due to out of pocket payments
10. Incidence of impoverishment due to out of pocket payments
11. Poverty gap due to out of pocket payments

● **Objective 3: Improve quality of healthcare delivery in public facilities (national aggregate and among disadvantaged groups)**

12. Number of public sector facilities accredited
13. Number and percentage of complaints to grievance redress channels that are solved.

### 6. Conclusion

Despite several gains in healthcare in previous decades, Egypt has progress to make still to ensure that social justice is realized in healthcare. While the “Right to Health” is recognized in the new Constitution, health outcomes continue to be unequally distributed and certain populations (defined by income, education, gender, or geography) remain excluded from gains in health outcomes, increases in financial protection, and improvements in healthcare quality. By supporting a “Family Healthcare Services for All by 2030” model with a focus on disadvantaged populations and commitment to ensure that all Egyptians have mandatory health insurance by 2030, current challenges to achieving social justice in health can be addressed.

Based on evidence from pilots in Egypt and global best practice, short- and medium-term recommendations to achieve these objectives can be feasibly implemented (World Bank 2013b). Coupled with the commitment of multiple stakeholders with well-defined roles, increases in fiscal space through improvements in prioritization and efficiency, and a rigorous and regular monitoring and evaluation system, social justice in healthcare can be available to all.

The World Bank stands committed to partnering with Egypt to assist with the development and implementation of these reforms, in line with its strategy of creating fair and accountable health systems in the region and overarching commitment to reduce poverty and increase shared prosperity (World Bank 2013a).
1. AIM: HOW CAN SOCIAL JUSTICE BE ACHIEVED IN HEALTHCARE IN EGYPT?
1. AIM: HOW CAN SOCIAL JUSTICE BE ACHIEVED IN HEALTHCARE IN EGYPT?

This paper lays out a roadmap to achieve social justice in healthcare by prioritizing areas related to service delivery, financial protection, and quality of care. The aim is to assist the Government of Egypt (GoE) in realizing the principle of social justice in healthcare. In so doing, the roadmap aims to prioritize key areas of focus for Egypt, including describing which existing programs to continue supporting and which new programs to consider for development, all under an integrated and interdependent structure. This paper is not meant to be an assessment of all the challenges facing the entire Egyptian healthcare system, but instead is a focused assessment of how the overarching aim of “social justice” can be achieved in the healthcare sector through an emphasis on improving services provided to disadvantaged groups.

This is done in four stages:

1. **Objectives:** The paper lays out the three objectives that need to be reached to ensure that social justice in healthcare is achieved.

2. **Challenges:** Next, it drills down to diagnose the eleven challenges currently preventing these objectives from being realized.

3. **Recommendations:** Then, it presents a series of fourteen recommendations by which these challenges can be overcome, drawing from successful pilots and programs in Egypt and global best practice.

4. **Implementation arrangements:** Finally, it suggests a detailed description of seven implementation arrangements necessary to operationalize the proposed roadmap.

The time horizon for this roadmap is the next three to five years (2015-2020). This roadmap suggests recommendations that will result in incremental improvements in Egypt’s health system in the short to medium term with a focus on disadvantaged groups. Achievement of these results should situate Egypt on the path to achieving social justice in healthcare in the long term. The paper comes as the final product of a year full of hard work by the team involving the review of all available literature, field visits and interviews to the remotest villages in the far north and south of the country as well as multiple consultations with experts, officials, civil society and ordinary citizens themselves.

Achieving social justice is a pressing priority for both the people and the government of Egypt. The call for social justice was the rallying cry heard from Tahrir Square in 2011 ("Aish, Horreya, Adala Eghtema’eya") and this call has continued through successive political transitions, as enshrined in Egypt’s Constitution (see Box 1). To achieve social justice, a commitment must be made to ensure that the most disadvantaged have access to the same services as the average Egyptian—i.e., that everyone has the same “equality of opportunity” (World Bank 2012a). In the field of health, this translates to all Egyptians, irrespective of income, gender, or geographic location, having access to the same standards of safe, affordable, equitable, effective, and efficient healthcare. Presently, a child born in rural Upper Egypt is only half as likely to survive till age five as a child born in urban Lower Egypt (El-Zanaty and Associates 2014).
Attaining universal health coverage (UHC) is a commitment of the Government of Egypt (GoE) and is one way to ensure social justice in healthcare. UHC is defined as all people receiving quality healthcare services that meet their needs without being exposed to financial hardship in paying for the services (WHO 2013; WHO 2014; World Bank 2013c; World Bank 2014c). Given resource constraints, this does not entail all possible services, but a comprehensive range of key services that is well aligned with other social objectives (WHO 2014). The objectives of UHC are to ensure that all people can access quality healthcare services; safeguard all people from public health risks; and protect all people from impoverishment due to illness, whether from out-of-pocket (OOP) payments for healthcare or loss of income when a household member falls sick (Maeda et al. 2014; World Bank and WHO 2014). A 2012 U.N. resolution urged governments to move toward providing all people with access to affordable, quality care. Egypt shares this global commitment to attain UHC and is currently working towards achieving this goal. Reaching UHC is also central to ending extreme poverty by 2030 and boosting shared prosperity.

To ensure fair, progressive realization of UHC, prioritization of services must take place, with mechanisms to ensure that disadvantaged groups are not left behind. To achieve UHC, countries must advance in at least three dimensions. They must expand priority services, expand populations covered, and reduce OOP payments (WHO 2014). In each of these dimensions, countries are faced with a critical choice: Which services should be expanded first? Which populations should be included first? How can payments be shifted from OOP expenditure to a pooled prepayment scheme? For the fair, progressive realization of UHC, the following strategy has been suggested (WHO 2014): (i) categorizing services into priority classes, taking into consideration relevant criteria including cost-effectiveness, priority for the worst off, and financial risk protection; (ii) expanding coverage for high-priority services to everyone, by eliminating OOP payments, increasing mandatory, progressive prepayment, and pooling funds; and (iii) ensuring that disadvantaged groups are not left behind, including low-income groups and rural populations. This roadmap paper aims to assist GoE with this prioritization process to ensure progressive realization of UHC.

Social justice in the health sector can be achieved by ensuring universal access to health coverage for all Egyptian citizens through the provision of an affordable package of essential health services within Egypt’s fiscal space and as per its Constitutional mandate. Social justice in the health sector would ensure that the most disadvantaged Egyptians have access to the same level and quality of services as the average Egyptian without financial hardship. This can be achieved by ensuring that the Egyptian health system enables UHC and is fair and accountable. A fair system provides the same level of quality health services to people with the same need, regardless of socioeconomic status, gender, place of residence, or any other potential difference, while an accountable system demonstrates and takes responsibility for performance to create high-quality healthcare (World Bank 2013a).

Expansion of family health services (FHS) to all Egyptian citizens by 2030, with a focus on disadvantaged populations, is a concrete way to realize the principle of UHC and work towards social justice in healthcare. Family health services would comprise a package of essential health services related to Egypt’s burden of disease and would
include: maternal and child health (MCH); reproductive health and family planning services; prevention, screening, and treatment of noncommunicable diseases (NCDs); mental health; and nutrition. This package would be integrated into all levels of care, from primary health centers to district hospitals.

Further, expanding mandatory social health insurance to all Egyptian citizens by 2030, with a focus on disadvantaged populations, will ensure that Egyptians will be financially protected in an equitable fashion. No Egyptian will be pushed into or kept in poverty by paying for healthcare. Social health insurance (SHI) will ensure comprehensive risk pooling across various population segments and will expand health insurance coverage to include the poor at first, and then gradually, the informal sector. It will separate the institutional responsibilities for the purchasing function from service provision, and will transform currently passive practices of payers into active purchasing.

Figure 1 presents proposed twin goals for UHC for Egypt.

Figure 1: Twin goals proposed for Egypt to Achieve Universal Health Coverage

Egypt’s Universal Health Coverage Goals

- All Egyptians have access to quality family health services by 2030
- All Egyptians have mandatory social health insurance by 2030

Source: Authors.
Box 1: The “Right to Health” as captured in Egypt’s Constitution of January 2014

The commitment to achieving social justice in healthcare is coined in Egypt’s new Constitution of January 2014. Article 18 enshrines the “Right to Health” and ensures that “every citizen is entitled to health and to comprehensive healthcare with quality criteria. The state guarantees to maintain and support public health facilities that provide health services to the people, and work on enhancing their efficiency and their fair geographical distribution.” To ensure this commitment is translated into action, the state has committed to allocating a percentage of government expenditure of no less than 3 percent of Gross Domestic Product (GDP) to health, almost double its current allocation. The percentage is expected to increase gradually to reach global rates with improvements in the economy and better targeting of subsidies to the poor.

Right to Health in the Egyptian Constitution: Article 18

• “Every citizen is entitled to health and to comprehensive healthcare with quality criteria. The state guarantees to maintain and support public health facilities that provide health services to the people, and work on enhancing their efficiency and their fair geographical distribution.

• The state commits to allocate a percentage of government expenditure that is no less than three percent of GDP to health. The percentage will gradually increase to reach global rates.

• The state commits to the establishment of a comprehensive healthcare system for all Egyptians covering all diseases. The contribution of citizens to its subscriptions or their exemption therefrom is based on their income rates. Denying any form of medical treatment to any human in emergency or life-threatening situations is a crime.

• The state commits to improving the conditions of physicians, nursing staff, and health sector workers, and achieving equity for them.

• All health facilities and health related products, materials, and health-related means of advertisement are subject to state oversight. The state encourages the participation of the private and public sectors in providing healthcare services as per the law.”

Source: Arab Republic of Egypt 2014.
OBJECTIVES: WHAT ARE THE OBJECTIVES FOR ACHIEVING SOCIAL JUSTICE IN HEALTHCARE IN EGYPT?
2. OBJECTIVES: WHAT ARE THE OBJECTIVES FOR ACHIEVING SOCIAL JUSTICE IN HEALTHCARE IN EGYPT?

Every health system can be said to have three objectives—to improve health status, to provide financial protection, and to ensure patient satisfaction. Health status refers to the level and distribution of health outcomes among citizens; financial protection is the degree to which citizens are protected from financial risks; and patient satisfaction is the degree to which citizens are satisfied with the services provided by the health sector (Roberts et al. 2004). Analysis of Egypt’s current health system through these lenses suggests that these objectives have only been partially met for certain outcomes or in specific populations.

With respect to health status, in the last 20 years, Egypt’s population has become healthier, with an increase in overall life expectancy from 64.5 years to 70.5 years, though the benefits have not accrued equally (World Bank 2014b). Due to expansions in availability of basic health services including for maternal child health (MCH), Egypt is on track to reach the Millennium Development Goals (MDGs) related to MDG 4 (child mortality) and MDG 5 (maternal health); however, disparities in achievement of these targets exist across geographic regions and income quintiles, such as in rural Upper Egypt (El-Zanaty and Way 2009; El-Zanaty and Associates 2014). On closer examination by governorate, Cairo, Alexandria, and Port Said are unlikely to meet the target for child mortality and Sharkia, Kalyoubia, Beni Suef, and Minya are unlikely to meet the target for maternal mortality (UNICEF 2013).

Similarly, with respect to financial protection, while more than half of the population has access to some form of health insurance, 72 percent of all healthcare costs are still covered OOP (Rafeh et al. 2011). The current scheme excludes the poor as well as those in the informal sector. In addition, there is inequity in access within programs devoted to provide coverage for the uninsured, such as the Program for Treatment at the Expense of State (PTES). The groups with the highest coverage rates include those: aged 5-15 (93.5 percent); in the highest wealth index (66.8 percent); residing in urban Lower Egypt (56.4 percent); and living in urban areas (54.4 percent) (Rafeh et al. 2011).

Finally, with respect to patient satisfaction, while patients in a recent survey generally ranked all facilities moderately high, but differences persist by facility type (Rafeh et al. 2011). Over 60 percent of surveyed representatives stated they were “completely satisfied” with the quality of health services received (Rafeh et al. 2011). On closer examination, variation existed in the level of satisfaction by type of facility: 66.4 percent of patients

---

1. Infant mortality among the poorest quintile is 42.1/1,000 compared to 16.8/1,000 among the wealthiest quintile; similarly, under-five mortality among the poorest quintile is 59/1,000 compared to 18.9/1,000 among the wealthiest quintile (El-Zanaty and Way 2009).

2. Assisted delivery, the key proxy indicator for maternal mortality, among the poorest quintile is 55 percent compared to 97 percent among the wealthiest. In addition, delivery at any health facility is 45 percent among the poorest compared to 95 percent among the wealthiest (El-Zanaty and Way 2009).

3. Based on the 2008 Demographic Health Survey, only 14 percent of the poorest quintile are covered by any health insurance compared to 47 percent among the wealthiest (El-Zanaty and Way 2009).
were completely satisfied with service delivery at Ministry of Health and Population (MOHP) hospitals compared to 76.0 percent of patients using private hospitals (Rafeh et al. 2011). However, publicly-funded healthcare services showed much lower utilization rates than those in the private sector. Further, the lowest utilization rates were among the poor\(^4\). Similarly, inpatient services provided at Health Insurance Organization (HIO) facilities were characterized as having the lowest levels of responsiveness compared to outpatient and inpatient services in the private sector (Mosallam 2013).

Consequently, to achieve social justice in healthcare in Egypt, the following three objectives must be met (Figure 2):

**Objective 1:** Improve health of disadvantaged groups

**Objective 2:** Increase financial protection for disadvantaged groups

**Objective 3:** Improve quality of healthcare delivery in public facilities

Figure 2: Three overarching objectives to achieve social justice in healthcare in Egypt

---

\(^{4}\) 16 percent of the poorest quintile did not seek care for acute illness and 18 percent did not seek care for chronic illness because it was considered costly compared to 0.7 percent for acute illness and 4 percent for chronic illness among the wealthiest quintile (Rafeh et al. 2011).
Box 2: Who are the “Disadvantaged” Groups?

The key to achieving the three overarching objectives is successfully identifying disadvantaged groups and then targeting programs and policies to address their unique needs. Groups in Egypt that can be considered disadvantaged with respect to healthcare coverage and utilization include:

1. Households in the lowest wealth quintiles
2. Populations situated in certain geographic locations or “lagging regions” such as rural Upper Egypt and the Frontier Governorates (and in certain habitations like slums)
3. Populations with low parental education, particularly with respect to mother’s education
4. Workers in the informal sector who are specifically not covered through health insurance schemes
5. Women (for specific health outcomes related to maternal and reproductive health, malnutrition, etc.)
6. Disabled populations

For example, for the purpose of this paper, the least advantaged individual could be defined as a woman with illiterate parents, from the poorest wealth quintile, living in rural Upper Egypt.

To identify and target these groups, several interventions from the health sector as well as other sectors can be used. In the last few years, Egypt has introduced a number of instruments to improve targeting the poor with services. These include: developing poverty maps to determine where the poorest villages are located; collecting household data using proxy means tests to identify the poorest households; and recently, creating a targeting mechanism that relies on linking between multiple databases to filter and identify the poor in Egypt. All are critical to ensure that health services are targeted to these populations. Egypt intends to build on its current Family Smart Card (FSC) system to target benefits to poor and vulnerable households. In addition to the current food ration program, the government is introducing additional benefits to the FSC, including bread and cash transfers. This system can also be used to target disadvantaged individuals with health services.
3. DIAGNOSES: WHAT ARE THE CHALLENGES TO ACHIEVING SOCIAL JUSTICE IN HEALTHCARE?
3. DIAGNOSES: WHAT ARE THE CHALLENGES TO ACHIEVING SOCIAL JUSTICE IN HEALTHCARE?

Several priority challenges need to be addressed to ensure that the three objectives articulated in this framework paper are achieved. These challenges are based on an analysis of the gaps remaining in achieving the three health system objectives, identified through a detailed review of qualitative and quantitative data, peer-reviewed and grey literature, and national plans as well as discussions with health experts. Consensus on these challenges was based on several in-depth interviews, rounds of consultations, and special workshops with experts from MOHP, Ministry of Finance (MOF), HIO, civil society, NGOs, the private sector, donors, and academia in 2013-2014.

In this section, a situational analysis consisting of three parts is presented for each of the eleven challenges. First, the main challenges in Egypt are identified through the use of national-level data. Second, since aggregate data can often mask within-country variation, especially among vulnerable groups, the status of disadvantaged groups for each challenge area is presented. Finally, a description of current programs and policies to address these challenges is provided.

Figure 3: Eleven main challenges to achieving social justice objectives in healthcare in Egypt

Source: Authors.
3.1 OBJECTIVE 1: IMPROVE HEALTH OF DISADVANTAGED GROUPS

Challenge 1: Poor maternal and child health inequitably distributed in rural, remote, and slum areas

Egypt has seen gains in MCH outcomes, as demonstrated by reductions in the last 10 years in: the maternal mortality ratio by one-third, from 100.0 to 66.0 maternal deaths per 100,000 live births; and the under-five mortality rate by half, from 41.9 to 22.0 child deaths per 1,000 live births (Figure 4). However, challenges still remain (UNFPA 2013; World Bank 2014a). At the national level, Egypt is on track to achieve the MDGs related to MCH. With regard to maternal health, 80 percent of women received regular antenatal care (i.e., four or more checkups) and 90 percent had skilled attendants at delivery (El-Zanaty and Associates 2014). With regard to child health, 92 percent of all children are immunized against all main preventable childhood diseases

Figure 4: Trends in early childhood mortality, Egypt, 2008-2014

Source: El-Zanaty and Way 2014.

But certain lagging regions and populations continue to have poor MCH outcomes. For example, 46 percent of births in the poorest quintile took place without trained staff and 55 percent of births took place outside of health facilities (El-Zanaty and Way 2009). Children in least advantaged groups half as likely to have a trained attendant at delivery and twice as likely to die in their first month compared to their more advantaged peers (Figure 5; World Bank 2014b).

Neonatal mortality represents half of infant mortality and is disproportionately higher among those living in rural Upper Egypt. Neonatal mortality marginally declined

“Immunized against all major preventable childhood diseases” is defined as children having received a BCG, three DPT and three polio immunizations, and a measles vaccination (El-Zanaty and Associates 2014).
in the last six years, from 16 deaths to 14 deaths per 1,000 live births (Figure 4; El-Zanaty and Way 2014), and represents almost half of all infant deaths. A child born in rural Upper Egypt has a 50 percent greater likelihood of dying from neonatal causes than a child born in urban Upper Egypt and is twice as likely to die from neonatal causes than a child in urban Lower Egypt (El-Zanaty and Way 2014).

Figure 5: Differences in MCH outcomes between most and least advantaged children, Egypt

Note: ECCE stands for Early Childhood Care and Education.


Concurrently, Egypt is witnessing an increase in fertility with a decline in the contraceptive prevalence rate. While the total fertility rate (TFR) decreased over the last 30 years, an uptick is now being observed, especially among women aged 20-24 (Figure 56; El-Zanaty and Way 2014). The age-specific fertility rate in this cohort is 26 percent higher than the rate found among the same age group six years ago. The highest fertility rates are seen among women in rural Upper Egypt (TFR=4.1) and the lowest among women in urban Lower Egypt (TFR=2.5). This is reflected in the rate of contraceptive use flat lining. There are differences in the level of current use of family planning methods by residence. Urban women are somewhat more likely to use contraceptives than rural women (61 percent and 57 percent, respectively). Usage rates are higher in Lower Egypt (64 percent) and the Urban Governorates (63 percent) than in Upper Egypt (50 percent) and the three Frontier Governorates (Matruh, Red Sea, and New Valley) (55 percent) (El-Zanaty and Way 2014).

In addition, rates of female genital mutilation/cutting (FGM/C) remain extremely high, with 91 percent of all women aged 15-49 circumcised (El-Zanaty and Way 2009). The prevalence is found to be slightly lower among younger age cohorts, suggesting that this practice may be declining. However, it is found to be higher among girls in the lowest income quintile, who are 2.5 times more likely to have undergone FGM/C by age 18 than those in the highest quintile (El-Zanaty and Way 2009).
To address this, Egypt has developed a National Acceleration Plan for Child and Maternal Health (2013-2015) (MOHP 2013) to speed up the progress in further reduction of maternal and child deaths. The plan identifies concrete measures in terms of prioritizing interventions in lagging regions, with funding gaps that need additional financing.

**CHALLENGE 2: HIGH BURDEN OF HEPATITIS C OVERALL WITH INCREASED PREVALENCE AMONG POOR, RURAL, AND LOW-EDUCATION POPULATIONS**

Egypt has the highest prevalence of Hepatitis C virus (HCV) globally, with the prevalence rate among 15- to 59-year-olds estimated at 14.7 percent (El-Zanaty and Way 2009). Chronic HCV is the main cause of liver cirrhosis and liver cancer and one of the top five leading causes of death (IHME 2013). It is believed that the epidemic spread due to poor injecting practices during mass-treatment campaigns for parenteral-antischistosomal-therapy (PAT). This is supported by prevalence rates of up to 84 percent among schistosomiasis patients treated with PAT during the time of these campaigns 20-30 years ago (El-Sabah et al. 2011; Mahmoud et al. 2013).

Prevalence of HCV differs by socioeconomic factors and among specific groups. Groups with higher prevalence rates include lower educated populations, rural populations, low-income groups, and men (Figure 7; Awadallah 2011; Mahmoud et al. 2013). For example, the overall prevalence in rural areas averaged about 20 percent, higher than the national average (Mahmoud et al. 2013). A study conducted in Kalama, a village in the Nile Delta, reported HCV prevalence of 40 percent among village residents (Darwish et al. 2001). Based on a synthesis of several studies, Mamhoud et al. (2013) report a high prevalence of HCV among pregnant women and children, with a reported prevalence of about 8 percent among pregnant women in Assiut and Benha, and as high as 15.8 percent in rural villages of the Nile Delta. Studies conducted among rural schoolchildren reported an average prevalence of about 7 percent. High prevalence was also observed among select subgroups such as blood donors, tourism workers, army recruits, and fire brigade personnel. Worryingly, little evidence exists of a decline in HCV prevalence, either among the general population or among high-risk groups (Mahmoud et al. 2013).
Egypt developed a “Plan of Action for the Prevention, Care and Treatment of Viral Hepatitis (2014-2018)” with several international best practices in place pertaining to prevention, treatment, screening, and surveillance (MOHP, 2014). To our knowledge, the prior strategy on which this was based (2007-2012) has not yet been formally evaluated and as a result, potential lessons that could have been learned have not been captured.

Figure 7: Prevalence of HCV among different subgroups in Egypt

Figure 2 Hepatitis C virus (HCV) prevalence among the general population and populations at direct or high risk in Egypt, in studies conducted pre- and post-2001. A: Graph depicting HCV prevalence among different general population groups. B: Graph depicting HCV prevalence among different high/direct risk populations. In this figure, we included only stratified HCV prevalence measures, if these stratified measures were available. Otherwise, we included the overall prevalence measures in the study.

CHALLENGE 3: HIGH RATES OF UNDERNUTRITION ACROSS WEALTH QUINTILES AND GEOGRAPHY

Egypt has high rates of undernutrition that cut across wealth quintiles and geography. In terms of macronutrient deficiencies, around one in five children under the age of five are classified as stunted and one in ten are classified as severely stunted (El-Zanaty and Associates 2014). Urban children are only slightly more likely to be stunted than rural children (23 percent and 21 percent, respectively) (El-Zanaty and Associates 2014). Considering place of residence, the percentage of stunting is higher in urban Upper Egypt (30 percent) than in other areas (El-Zanaty and Associates 2014). Children whose mothers never attended school or who attended but did not complete primary school are somewhat more likely to be stunted than children whose mothers completed the primary level or higher (El-Zanaty and Associates 2014).

Wasting (weight-for-height) increased in the last 15 years, while the rate of underweight (weight-for-age) children saw no significant change (El-Zanaty and Associates 2014). In the last six years, the percentage of children stunted reduced compared to the levels observed in 2008. However, the proportion of children who are wasted has increased gradually over time, from 3 percent in 2000 to 8 percent in 2014 (Figure 8; El-Zanaty and Associates 2014).

Micronutrient deficiencies vary by education and wealth among women and children. Overall, more than one in four children in Egypt suffer from some degree of anemia, and rural children are more likely to be anemic than urban children (29 percent and 23 percent, respectively) (El-Zanaty and Associates 2014). Children in the three Frontier Governorates

Figure 8: Trends in nutritional status of young children, Egypt, 2000-2014

Percentage of children under age five of mothers interviewed in the survey for whom the nutrition status measure fell below -2SD from the 2006 WHO Child Growth Standards reference median

and in rural Upper Egypt are more likely than children in other areas to be anemic (45 percent and 30 percent, respectively) (El-Zanaty and Associates 2014).

Consumption of Vitamin A and iron-rich foods also shows regional variation. Approximately one-third of children aged 6-35 months consume foods rich in Vitamin A on a daily basis, though this has decreased in the last three years (El-Zanaty and Way 2009). Almost three out of four children of this age group consume iron-rich foods, with regional variation. Children in urban Upper Egypt have the highest level of consumption of Vitamin A-rich foods, while children in urban Lower Egypt have the highest level of consumption of iron-rich foods. The likelihood that a child will consume iron- and Vitamin A-rich foods rises with the education status of the mother and particularly with wealth, indicating that economic factors play a role in shaping children’s diets (El-Zanaty and Way 2009).

With regard to iron supplementation during pregnancy, just over one-third of women reported that they had taken iron tablets or syrup during the pregnancy preceding their last live birth. This represents a decline from the level reported in 2005 (49 percent). Urban residents (particularly those living in the Urban Governorates), women with a secondary or higher education, and women in the highest wealth quintile were considerably more likely to have taken iron tablets or syrup during pregnancy than other women. Similarly, usage rates for iodized salt were higher in urban households and those with greater household wealth or more educated mothers (El-Zanaty and Way 2009).

As a result, Egypt is not on target to meet the World Health Assembly Nutrition targets. Four of the six global World Health Assembly (WHA) nutrition targets are being tracked globally: reducing child stunting by 40 percent; reducing anemia in women of reproductive age by 50 percent; preventing an increase in child overweight; and reducing and maintaining child wasting to less than 5 percent. Egypt is not on target to meet any of these goals (International Food Policy Research Institute 2014).

Presently, Egypt has a 10-year Food and Nutrition Policy and Strategy (2007–2017) in place (MOHP 2007), but MOHP does not have a nutrition unit. A landscape analysis of the structures and policies in place to support nutrition in Egypt suggests that “commitment and willingness to act are abundant but challenges remain in terms of ability to act. Whilst at the national level there is evidence of potentially effective nutrition governance structures (inter-ministerial committees), their inactivity and lack of coordination suggests the need to strengthen nutrition leadership” (UNICEF 2012). The capacity to act has largely been affected by health system weaknesses such as mismatched allocation of nutritionists and a lack of funding, supply of nutrition commodities, and educational materials. In addition, there has been a focus on curative versus preventative services, which tend to be less cost effective (UNICEF 2012).

Challenge 4: Rising burden of NCDs, with higher prevalence of risk factors by gender and income

Egypt is undergoing an epidemiological transition, with 72 percent of all mortality and morbidity in 2010 (captured in units of disability-adjusted life-years, or DALYs) due to NCDs (IHME 2013). As a result, the top three causes of death were ischemic heart disease, stroke, and cirrhosis (see Figure 9). This is in sharp contrast to 20 years ago when
the leading causes of death and disability were communicable diseases such as diarrheal diseases, lower respiratory infections, and preterm birth complications (IHME 2013).

The distribution of NCDs tends to be concentrated in older and wealthier populations, though there is likely a latent undiagnosed burden of NCDs in poorer, less educated groups, which have reduced access to healthcare services. For example, hypertension and diabetes are found to be more prevalent in wealthier quintiles (El-Zanaty and Way 2009). This could be because risk factors associated with NCDs tend to be associated with wealthier lifestyles or because access to health services in Egypt (especially hospitals) is more concentrated among the rich, so that they are more likely to be diagnosed (Rocco et al. 2014).

Risk factors differ by gender and age. Risk factors for NCDs are defined as currently smoking, having fewer than five servings of fruit and vegetables per day, having a low level of activity, being classified as overweight, and having raised blood pressure, age and gender differentials emerge. Older women (aged 45-64) are more likely to have three or more of these risk factors compared to older men and are twice as likely as younger men or women (aged 25-44) to be at risk (WHO 2012). This is unsurprising given that Egypt has some of the world’s highest rates for female obesity, with four out of ten adult women classified as obese (El-Zanaty and Way 2009). Men tend to have a higher prevalence of smoking: 44.3 percent of men report daily smoking compared to 0.3 percent of women (WHO 2012). This has increased over time, 34.6 percent of men reported daily smoking in 2005 (WHO 2012).

Presently, Egypt does not have a unified and costed national NCD plan. In addition, data tracking NCDs are scarce and mostly available using the STEPwise approach to surveillance (STEPS) survey. The present system of disease surveillance at MOHP is mainly hospital-based and focused only on communicable diseases. NCDs have not been included in the routine reporting forms of hospitals (El-Refaee and Fouad 2010). In addition, the effective treatment of NCDs requires the presence of high-performing chronic care systems with integrated referral systems, which are presently not in place.
Challenge 5: Increasing prevalence of substance abuse and mental health issues, especially among youth and women

The burden of mental health is growing in Egypt, especially among women. Unipolar depressive disorders and anxiety are among the main causes of death and disability (as measured in DALYs) among women aged 15-49 (IHME 2013), while addiction, often a coping mechanism for mental health conditions, is rising among men (Hamdi et al. 2013). According to a 2003 survey on mental health, the overall prevalence of mental health conditions was 16.9 percent, with mood disorders at 6.4 percent, anxiety disorders at 4.7 percent, and multiple disorders at 4.7 percent (Ghanem et al. 2009). The risk of mental disorder among women was twice that among men (Ghanem et al. 2009).

Addiction is a rising concern, especially among youth and men. The lifetime prevalence of substance abuse is thought to vary between 7.3 and 14.5 percent with a prevalence of 13.2 percent in males and 1.1 percent in females (Hamdi et al. 2013). Prevalence increases significantly in males of Bedouin origin, in seaside governorates, with lesser levels of education, and in certain occupations (Hamdi et al. 2013). The 15-19 age group has the highest onset of substance use (Hamdi et al. 2013). Cannabis is the drug mostly misused in Egypt, with alcohol being a distant second (Hamdi et al. 2013).

The government’s national mental health plan, developed in 2003, needs to be updated to reflect current needs (WHO 2010b). In addition, mental health services are woefully
underfinanced and make up only 2 percent of the total government health budget; only 5 percent of undergraduate training hours at medical school are devoted to mental health teaching (WHO 2010b). Mental health treatment still tends to be mostly inpatient-based and concentrated in hospitals, with 15 mental health hospitals nationwide, 62 outpatient facilities, 27 community-based psychiatric units, and 2 day treatment facilities. As a result, there are twice as many inpatient as outpatient visits (WHO 2010b). Psychiatric hospitals are absent in Upper Egypt governorates such as Luxor, New Valley, Red Sea, and Qena.

**CHALLENGE 6: HIGH BURDEN OF DISABILITIES ESPECIALLY AMONG ILLITERATE AND RURAL POPULATIONS**

Estimates on disabilities are varied, but the burden of disease is likely to grow. Estimates of disability in Egypt vary from 0.7 percent (ESCWA and League of Arab States 2014) to 10 percent of the population with up to 25 percent of the population thought to be indirectly affected either as family members or caregivers (UN, date unknown). The variation in estimates could be partially due to the stigma in reporting disabilities and partially due to the lack of a standard definition or tool to measure disability. The major cause of disability is congenital and birth-related conditions, followed by injury and accidents (Figure 10). However, with the high burden of disease due to road traffic injuries in Egypt, this share is expected to increase over time (IHME 2013).

**Figure 10: Cause of disability/difficulty in Egypt (%)**

<table>
<thead>
<tr>
<th>Cause</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital</td>
<td>54.6%</td>
<td>50.4%</td>
<td>51.9%</td>
</tr>
<tr>
<td>Birth-related conditions</td>
<td>5.8%</td>
<td>5.2%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Epidemic disease</td>
<td>6.6%</td>
<td>6.8%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Other diseases</td>
<td>6.8%</td>
<td>7.0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Physical/psychological abuse</td>
<td>1.6%</td>
<td>2.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Injury/accident</td>
<td>7.2%</td>
<td>17.6%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Old age</td>
<td>13.6%</td>
<td>7.1%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Other</td>
<td>3.7%</td>
<td>4.1%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

Source: ESCWA and League of Arab States 2014.

Disabled populations are more likely to be male, unmarried, illiterate, and rural. Men have a higher prevalence of disabilities than women (64.2 percent versus 35.8 percent) and rural populations have a higher prevalence than urban ones (58.6 percent versus 41.4 percent) (ESCWA and League of Arab States 2014). In addition, disabilities disproportionately affect those who have lower education, with nearly three out of four disabled women considered illiterate compared to a female illiteracy rate of 30 percent in the general population (ESCWA and League of Arab States 2014). A disabled person is also twice as likely to be unmarried compared to his or her able peer (ESCWA and League of Arab States 2014). Healthcare for disabled populations is doubly compromised -- they have unequal access and opportunity to existing medical services to treat disabilities and lack rehabilitation services to help them regain functionality.
Egypt has a national council on disabilities and provisions in the Constitution to address disabilities, but implementation of a national strategy has been weak. Under the new Constitution, the state guarantees healthcare for all disabled people (Article 81) and prevents discrimination based on disability as a crime punishable by law (Article 53) (Arab Republic of Egypt 2014). In addition, a National Council on Disability established in June 2013 was charged with developing a national action plan for those with disabilities.

While disabled populations are entitled to certain services, disadvantaged disabled populations tend to be excluded. People with disabilities have access to mass transit buses free of charge, special subsidies to purchase household products, wheelchairs and prosthetic devices. In addition, those who are disabled in the formal sector have access to disability pension and health insurance coverage (World Bank 2015a forthcoming). However, this is only available to a minority of the population as most disabled persons are in the informal sector or do not work. Government-sponsored physical rehabilitation services are thought to reach less than 5 percent of the disabled population and only 2 percent of disabled children (World Bank 2015a forthcoming).

3.2 OBJECTIVE 2: INCREASE FINANCIAL PROTECTION FOR DISADVANTAGED GROUPS

CHALLENGE 7: LIMITED COVERAGE OF HEALTHCARE COSTS FOR DISADVANTAGED PATIENTS

Egypt spends less on healthcare than its regional peers, resulting in high OOP expenditures. Egypt only spends 4.7 percent of GDP on health and is one of the lowest spenders in the Middle East and North Africa (MENA) when it comes to public health expenditure as a percent of total health expenditure (Figure 11; MOHP 2010; Grun and Ayala 2006). As a result, more than 70 percent of all health expenditure is paid for OOP (Rafeh et al. 2011).

Figure 11: Health financing indicators in Egypt

Source: Cortez et al. 2013.
Despite the presence of multiple public and semi-public health providers, around half of the population does not enjoy any type of formal coverage, especially those who are poor or employed in the informal sector (HIO 2011). Moreover, nearly 7 percent of Egyptians are pushed into poverty each year due to catastrophic OOP health expenditures (Elgazzar 2010). It is noteworthy that the poor spend a larger portion of their income on healthcare: the lowest income quintile spend 21 percent of their income versus 13.5 percent spent by the highest income quintile (Figure 12; Rafeh et al. 2011). A study of provider choice by income quintile revealed that use of private outpatient and inpatient care, which often results in high OOP, is highest among low-income groups (Rafeh et al. 2011). A similar burden can be shown for the informal sector, irrespective of income group. If a member of the informal sector does not have any form of health insurance, he can expect to spend almost 70 percent more on healthcare OOP than a similarly insured peer (MOHP 2010).

Figure 12: Percent of household income spent on healthcare by income quintile, Egypt

![Figure 12: Percent of household income spent on healthcare by income quintile, Egypt](image)

Source: Rafeh et al. 2011.

In recent years, MOHP introduced interventions aiming to provide better access to health services targeted to disadvantaged groups, but they are not resulting in effective financial protection with further scope for improvement. Post-2011, MOHP allocated more funds to infrastructure and medical convoys in disadvantaged regions, such as the healthcare program targeting the least developed 1,000 villages, the Sinai Development Program, and the Urban Slums Program. Apart from this, improved access to healthcare services was implemented universally without targeting. After the January 25th revolution, the GoE passed two laws to expand social health insurance (SHI) coverage to female-headed households\(^6\) and children under five years of age (MOHP 2014).\(^7\) These laws were

---


\(^7\) Law 86/2012 issued on September 2, 2012 expands health insurance coverage for children under five.
indicative of the government’s commitment to the improvement of social justice and inclusion, although the extent of their effectiveness is debatable. In addition, a draft law for inclusion of informal farmers under the umbrella of HIO is being considered.

**CHALLENGE 8: LACK OF A STRATEGIC PURCHASER TO ENABLE A TRANSITION TO SHI COVERAGE FOR DISADVANTAGED GROUPS**

**Figure 13: Sources of health financing in Egypt**

| Source: MOHP 2010. |

Egypt’s current health system is fragmented with a number of financing agents. Four key financing players are present and were designed to complement each other; in some cases, there are overlaps of coverage and provision of different packages of health services. For example:

- SHI coverage, provided through HIO, covers about 48.7 million persons, representing 58 percent of the population. The majority of those covered under HIO’s coverage scheme (74 percent) are schoolchildren and children under five years old, while the smallest group (6 percent) comprises widows and pensioners. The health package is considered generous and difficult to sustain financially.

- MOHP and other government agencies that function as “insurers of last resort” provide free or substantially subsidized health services to citizens not covered under HIO.

- Program for Treatment at the Expense of the State (PTES), established to extend financial assistance to all Egyptian citizens for expenses incurred for government spending on healthcare, was originally intended to cover the uninsured. Its funding continues to grow for a defined list of secondary and tertiary healthcare services.

- Family Health Funds (FHF), governorate-level health funds, were established in a few governorates to provide a basic benefit package of family health services to the...
poor and those in the informal sector and to be the gatekeeper for a higher level of health insurance. However, FHFs have faced problems expanding coverage based on a voluntary scheme.

- Private firms and organizations (including private insurance companies, professional syndicates, and nonprofit organizations) have a small share in financing the health sector, although their share has progressively increased in recent years.

Furthermore, financing flows can be grouped into three streams, notably: (i) from MOF to MOHP and other ministries’ budgets; (ii) from the Social Insurance Organization to HIO; and (iii) from households directly to private providers and pharmacies. It is noteworthy that nearly one-fifth of OOP expenditures are incurred at public facilities (MOHP 2010).

In addition to the fragmentation of payer and purchaser functions described above, inefficiencies remain within each institution. For example:

PTES does not act as a true purchaser. It currently covers only 1.7 million Egyptians. In 2005, PTES overspent its budget by 100 percent and to date, it has accumulated a half billion pounds deficit (Table 1). PTES has also been unable to be a poor-friendly mechanism over the years.

HIO has a dual role as purchaser and provider and also suffers from deficits. HIO spends nearly 30 percent of its budget on salaries and 19 percent on administrative expenses, rendering it highly inefficient and unable to provide a comprehensive package for its beneficiaries (HIO 2011). The problem is exacerbated by the organization’s inability to increase its own sources of financing due to strict governing laws.

FHFs are a relatively new player in Egypt’s healthcare market. Developed through the World Bank-supported Health Sector Reform Project (HSRP), their purpose was to insure informal sector workers and the poor to allow them to access family health services through a contracting mechanism with accredited primary care facilities. FHFs were piloted in five governorates but faced difficulties due to: adverse selection and limited enrollment; weak referral systems, with a poorly enforced gatekeeping mechanism; low contribution rates; contradictory governorate-level decrees; and diminishing contribution rates tied to weak income measurements (Abou El- Ghar 2013).

<table>
<thead>
<tr>
<th>Group</th>
<th>Average premium</th>
<th>Average cost</th>
<th>Average deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public and private sector employees</td>
<td>217</td>
<td>141</td>
<td>76</td>
</tr>
<tr>
<td>Pensioners</td>
<td>84</td>
<td>420</td>
<td>336</td>
</tr>
<tr>
<td>Government employees</td>
<td>52</td>
<td>259</td>
<td>207</td>
</tr>
<tr>
<td>Schoolchildren</td>
<td>56</td>
<td>136</td>
<td>80</td>
</tr>
<tr>
<td>Preschool children</td>
<td>16</td>
<td>38</td>
<td>22</td>
</tr>
</tbody>
</table>

*Source: HIO 2011.*
Challenge 9: Lack of provider readiness for a strategic purchaser of services

Significant centralization, line item budgeting, and lack of service costing mechanisms have made providers unresponsive to local needs. The administrative structure and resource management system for public providers have limited the system’s ability to interact with other financing mechanisms (WHO 2006). MOHP facilities have a complicated matrix structure consisting of many vertical sectors, administrations, and units with poor horizontal coordination. Moreover, local governorate health districts are only under the technical control of MOHP, with minimal financial and administrative contacts. Authority is overtly centralized at their respective levels. Fund allocations for providers tend not to reflect burden of disease or needs in the catchment area (Rafeh et al. 2011).

Even with the creation of a strategic purchaser, most public providers lack the ability to interact effectively with such a purchaser. Provider payment mechanisms are still underdeveloped at the facility level, unable to cost provided services, generate well-structured claims, utilize information management systems, or manage contracts. Traditional line item budgeting remain the norm, with multiple sources of financing ranging from the general budget to remuneration from PTES and HIO for services provided to self-generated income through "Service Improvement Funds" at each respective facility that show great variation in financial control.

3.3 OBJECTIVE 3: IMPROVE QUALITY OF HEALTHCARE DELIVERY IN PUBLIC FACILITIES

CHALLENGE 10: LACK OF RESPONSIVENESS OF HEALTH SYSTEMS TO DISADVANTAGED GROUPS

Public health facilities are not considered responsive to patients, especially disadvantaged patients, resulting in patients paying for private sector care. While public health facilities provide most services, due to perceptions of their poor quality, patients overwhelmingly prefer private facilities, resulting in high OOP expenses. Public facilities tend to not follow protocols for chronic disease management and treatment of children; medications are not always available; and few specialists are present in facilities (World Bank 2010). Decisions are centralized regarding staffing, salaries, and procurement, giving facility managers limited autonomy to address issues like absenteeism (World Bank 2010).

Inequities persist by income, across governorates, and by gender. Poorer households have worse health status and access to poorer-quality healthcare (Figure 14). Women use private facilities for maternal care despite much higher costs because public facilities by and large do not provide good-quality delivery service (World Bank 2010). Women are less likely than men to be insured and almost half of women who say they would prefer a female provider are examined by a male doctor, despite the large proportion of female providers in public health facilities (World Bank 2010).
Supply-side payment mechanisms along with low wages for physicians and other health staff provide little incentive for better performance. Apart from the accredited primary healthcare (PHC) units contracted to FHF’s, almost all physicians are paid on salary regardless of their performance. The same applies to nurses and other health professionals. Medical providers have one-time licensing and no continuous medical education requirements. Moreover, only one public hospital in Egypt (Dar El-Shefa) is fully accredited. This contributes to the poor quality of services and suggests providers’ lack of readiness for the accreditation process (MOHP 2012b).

Dual practice remains a pressing problem: almost 80 percent of doctors work in both the public and private sector (Giuliano Russo 2013). With monthly salaries as low as US$180 for young doctors working in the public sector, many doctors seek to practice in the private, nongovernmental, or even public sector through external contracts provided by other public providers. This is not helped by the fact that Egyptian law permits dual practice with no restrictions (Figure 15; Kiwanuka et al. 2011). In most circumstances, this phenomenon has disadvantaged the poorer segments of the society, which utilize more public services than other income groups or incur a greater OOP burden trying to reach those doctors at their private practice.
Citizens’ participation in the delivery of health services is limited, hampered by the absence of formal grievance redress mechanisms (GRMs). Presently, citizens have limited participation in the delivery of healthcare. No formal mechanisms exist for inclusion of patient advocacy groups or CSOs’ perspectives in the development of health policy or in monitoring the quality of service delivery at the facility, district, governorate, or national level. In terms of GRMs, while some facilities have complaint boxes or Patient Bill of Rights (PBRs), this is not uniform across all public facilities and ways of dealing with complaints or infringements of rights are ad hoc. Even if PBRs exist, patients are often unaware of their rights or of how to ensure their enforcement. There is no medical malpractice law and if a patient has a grievance with a physician, his complaint is usually referred to the Doctors Syndicate, a semi-autonomous union of all doctors, which can at most suspend a provider’s license for a couple of months and may not be the most impartial forum. The only other pathway is to file a criminal lawsuit, often a daunting process.
4 RECOMMENDATIONS: HOW CAN EGYPT ACHIEVE SOCIAL JUSTICE IN ITS HEALTHCARE SYSTEM?
4. RECOMMENDATIONS: HOW CAN EGYPT ACHIEVE SOCIAL JUSTICE IN ITS HEALTHCARE SYSTEM?

For Egypt to achieve social justice in its healthcare system and so attain its three overarching objectives, a multi-pronged approach is proposed.

1. Providing an integrated package of family health services mapped to the growing burden of disease, and targeting the scaling up of health services to lagging areas

2. Expanding financial protection through social health insurance coverage for the poor and those in the informal sector

3. Advocating for the separation of purchasing of healthcare services from service provision to enhance accountability in the health system, especially for disadvantaged groups

4. Increasing quality of healthcare and ensuring equitable distribution of responsive health workforce through performance based incentives and accreditation; and improving citizen’s engagement in delivering, financing, and monitoring services with a focus on service delivery to disadvantaged groups

Specifically, the multi-pronged approach consists of fourteen key recommendations.

For Objective 1, the recommendations are the following: (i) creating or supporting targeted national plans to tackle high-priority health concerns; (ii) supporting an integrated family health services model care with appropriate referral mechanisms; (iii) monitoring or surveillance of high risk groups; and (iv) supporting key risk factor specific interventions, especially with respect to disadvantaged populations.

As for Objective 2, it is recommended to ensure the following, especially for coverage of disadvantaged populations: (i) separation of purchasing and provision functions; (ii) reforming existing payers; (iii) defining and costing price of package of services; (iv) defining provider payment mechanism; (v) and preparing providers for contracting.

To achieve Objective 3, the recommendations, especially for lagging regions, are: (i) training of providers in line with the new healthcare demands; (ii) attaining independent accreditation for public facilities; (iii) scaling up performance-based financing and other incentives; (iv) creating avenues for citizen’s participation in service delivery; and (v) establishing grievance redress mechanisms and progressive legislature such as Patient Bill of Rights.

Acknowledging that much needs to be done, a final proposal for an integrated family health model is presented to realize the full benefits arising from the recommendations.

Most countries’ experience shows that health sector reform is a staged process and mid-course correction of policies and programs is often required to ensure successful implementation. To assist with implementation, recommendations are, where possible, presented in chronological order. Short-term recommendations are meant to be implemented within the next two years and include possible quick wins that will make a difference in the lives of disadvantaged groups and address their immediate needs. Medium-term recommendation are meant to be implemented over the next five years and
include paving the way for reforms that will ensure an improved health system response for the needs of disadvantaged groups within the broader context of Egypt’s Health Sector Reform. For certain challenges, successful national programs are already in place and the recommendations include providing continued financial and programmatic support to them with an emphasis on prioritizing disadvantaged groups.

4.1 RECOMMENDATIONS TO IMPROVE HEALTH OF DISADVANTAGED GROUPS

Provide an integrated package of family health services mapped to the growing burden of disease with targeted scale up in lagging areas. Egypt should promote an essential package of family health services delivered at the relevant level of care that would: (i) include cost-effective interventions related to maternal health and nutrition; family planning and reproductive health, including management of sexually-transmitted diseases; child health and immunizations; outpatient management of diabetes, hypertension, and cardiovascular disease; and tuberculosis treatment; (ii) be linked to public health programs for critical diseases like Hepatitis C and NCDs; and (iii) be linked to higher level of care through referrals. This would result in a revision of the expanded primary healthcare service delivery model proposed in 1999 so as to better meet the needs of the population include the package of services which will be covered by SHI.

Specifically, this would entail adopting the following recommendations:
4.1.1 ADDRESSING MATERNAL AND CHILD HEALTH CONCERNS

Short-term recommendations include continued financial and programmatic support for the National Acceleration Plan for Child and Maternal Health, with a renewed focus on disadvantaged groups, including support for demand-creation mechanisms as an integral part of the acceleration plan. This plan aims to ultimately achieve universal coverage of cost-effective MCH interventions through an initial focus in 51 districts with poor child health outcomes and 43 districts with low maternal health outcomes. The package being implemented includes IMCI (Integrated Management of Childhood Illnesses) interventions for child health that have been successful in Egypt (Rakha et al. 2013) and focuses on ensuring skilled attendants at birth, emergency obstetric care, family planning, and nutritional supplementation to improve maternal health. This will also help address the increase in fertility in Egypt.

Support for an integrated family health services (FHS) model with an appropriate referral system for emergency obstetric care will help address critical MCH challenges. An integrated FHS model should include MCH prevention interventions (e.g., increasing contraceptive prevalence; encouraging exclusive breastfeeding; and providing tetanus toxoid vaccines, iron supplements, and contraceptives) and treatment interventions (e.g., delivery by skilled birth attendants) at the primary level, and will allow for timely referral for emergency obstetric care to secondary and tertiary level facilities. This will help reduce infant and maternal mortality by addressing drivers of neonatal mortality and maternal death.

To ensure uptake of MCH services, targeted demand-creation activities, including demand-side financing to address barriers to access, are recommended. These have been shown to be successful in the Egyptian context. For example, the World Bank-
supported Population Project financed demand-creation activities for families in Upper Egypt, including on awareness of population issues, strengthening motivation for couples to plan their families, facilitating access to and use of reproductive health services, and educating and motivating people in such related areas as child nutrition, safe motherhood, male awareness, and delayed age at marriage. This resulted in a doubling of the contraceptive prevalence rate as well as an average four-fold increase in the use of family planning clinics (World Bank 2005). Targeted demand creation can also be implemented through employing female community workers (World Bank 2012b) and by considering voucher for MCH or conditional cash transfer schemes for nutrition which have shown success in Africa, Asia, and Latin America (Bellows et al. 2011).

Medium-term recommendations include scale-up of monitoring and surveillance systems of disadvantaged groups to guide future investment and a targeted program of awareness and behavior change around FGM/C in rural populations. The National Acceleration Plan emphasizes the establishment of a perinatal and neonatal surveillance system to be integrated into the maternal mortality system, which is critical to collect timely data on maternal and child deaths. In addition, given the cultural context around FGM/C, it will take a sustained effort over the medium term to affect changes in attitude through media and awareness campaigns, especially those targeted to religious and community leaders in rural Egypt.

4.1.2 TACKLING HEPATITIS C

Short-term recommendations include incorporating a focus on disadvantaged groups into the Plan of Action for the Prevention, Care and Treatment of Viral Hepatitis in Egypt (2014-2018) with appropriate budget allocations and endorsement of this plan at the
earliest to ensure continued support (MOHP 2012a). The plan should include prevention efforts targeted to populations at direct or high risk of HCV exposure in Egypt, including viral hepatitis patients, multi-transfused patients, thalassemia patients, schistosomiasis patients, and patients on hemodialysis, as well as populations at indirect or intermediate risk of exposure including diabetic patients, hospital outpatient attendees, hospitalized populations, household contacts of index cases (HCV positive cases), sexually transmitted infection (STI) patients, periodontal disease patients, prisoners, and populations working in select professions (Mahmoud et al. 2013).

Prevention interventions should include continued support for safe injecting practices, blood safety, and implementation of infection control practices at medical facilities, especially those that deal with blood transfusions and dialysis. Information, education, and communication (IEC) campaigns should continue to target providers in the public and private sector who deal with blood or blood products, including dentists, doctors, barbers, and tattoo artists, and especially facilities that largely cater to the poor or are based in poor regions. In addition, IEC should specifically target poor populations to increase awareness on modes of transmission.

Treatment options must ensure that newer drugs with high cure rates are available to all infected individuals in Egypt at affordable prices with a system in place to financially protect the poor, a path that Egypt is embarking on. The availability of new Hepatitis C drugs such as simeprevir and sofosbuvir suggest a greater chance of a cure, easier admission (oral versus injectables), shorter periods of treatment, and fewer side effects than older, interferon-based drug regimens. With the cost of chemotherapy regimens becoming more affordable, Egypt is encouraged to continue procuring and making available drugs to the most vulnerable populations at the earliest in a transparent manner (Ahram online 2014). The creation of a national database of patients to ensure
access to care to all patients in need is a step in the right direction. Care should be taken to ensure that the most vulnerable, who may be unable to register via the government website, are not excluded from this process.

Finally, national surveillance of HCV must continue through testing viral DNA as part of the DHS (as done in 2008) and through support of sentinel surveillance systems among high-risk groups as well as surveillance of chronic and acute HCV in the general population.

4.1.3 UNDERSTANDING THE DRIVERS OF UNDERNUTRITION

Short-term recommendations to address undernutrition include a package of interventions to address micro- and macronutrient deficiencies in high prevalence areas such as those in rural Upper Egypt. For children, these include: support of infant and young child feeding practices (IYCF); growth monitoring and promotion; and screening programs for acute malnutrition and therapeutic feeding practices in primary health centers. For pregnant women, recommendations include continuing support for iron supplementation during antenatal care visits and changing key behaviors through nutrition communication on topics such as use of iodized salt, promotion of diet diversity, and the importance of exclusive breastfeeding in the first six months after birth.

Fortification of breads and cooking oils with micronutrients can help improve nutritional status, especially if targeted to poor populations. Since consumption of both iron- and Vitamin A-rich foods is lower among mothers in the lowest wealth quintile, a cost-effective way to provide micronutrients to these poorer populations is through the bread subsidy program supported by the GoE and fortification of cooking oils with Vitamins A and D. This program is piloting a new smart card system to ensure that subsidized bread reaches the poor (Box 2). The government should: continue its program of fortifying
subsidized wheat flour with iron and folic acid and subsidized cooking oil with Vitamins A and D; roll out fortification to the commercial sector; and revise and enforce food-quality standards, particularly for wheat flour and baladi bread (IFPRI 2013).

Medium-term recommendations include: scaling up the package of interventions described above to the entire population; training more nutritionists, especially in rural and remote areas; and conducting further studies to better understand the drivers of undernutrition in Egypt. The latter is especially important since undernutrition among children in Egypt seems not to be linked to household wealth or geography, which may seem counterintuitive. The underlying causes behind undernutrition in Egypt are not well understood and could suggest that a number of complex factors interfere with the proper nutrition of children, including unhealthy feeding habits, lack of awareness about the importance of dietary diversity, and limited food availability for the poor (UNICEF 2011). To ensure that a more focused national nutrition plan is developed, more research on the causes behind the high rates of wasting and stunting in the Egyptian context is required.

4.1.4 ADDRESSING NCDS

Recommendations to deal with the growing challenge of NCDs deal with primary, secondary, and tertiary prevention and chronic care. All interventions involve reorienting the present healthcare system from one developed to mostly treat communicable diseases to one that deals with NCDs through active prevention, screening, and chronic care, including disease management and referral over a patient’s lifetime.

In terms of primary prevention, the two major population-level risk factors are tobacco use and obesity.

Primary prevention for tobacco use includes further raising cigarette taxes, creating and enforcing “smoke-free” legislation, and considering plain packaging of tobacco products. While Egypt increased tobacco taxes by 44 percent from LE 3.51 (US$0.62) per pack to LE 5.05 (US$0.89) per pack in 2010 (WHO 2010a), the price of cigarettes in Egypt is still well below global averages. Cigarettes cost twice as much in other MENA countries like Algeria and Morocco (Tobacco Atlas 2014). Given the price elasticity of demand for cigarettes in Egypt (-0.397, -0.412, and -0.385 at the national, urban, and rural levels, respectively, according to data from 1999/2000), further increases in tobacco taxes should be considered as a way to reduce tobacco consumption and increase government revenues to create more fiscal space for health (Nasser 2003). While Egypt has ratified the Framework Convention on Tobacco Control (FCTC), and has regulations governing smoking in public places, bans on advertising on television and radio, maximum limits on tar content, and guidelines regarding warning labels on cigarette packets, more needs to be done regarding enforcement. Recommendations for primary prevention include extending legislation to “creating a 100 percent smoke free environment in all indoor workplaces and public places” with simultaneous creation of strong enforcement mechanisms for this legislation, including high penalties and rewards (for whistle blowers), and considering plain packaging for cigarette boxes (De Walque 2013).

Primary prevention for obesity includes promoting physical activity, including creating “safe spaces” for physical activity and increasing the number of awareness
campaigns through public-private partnerships with the media. This can include ads and TV programs like talk shows promoting healthy lifestyles. Other interventions include creating a standardized curriculum on NCD prevention to be integrated into school health programs (De Walque 2013).

Secondary prevention recommendations include screening and case detection for tobacco use and obesity, especially for youth in schools and colleges, as well as for women (for obesity) and men (for smoking) at workplaces and during primary healthcare visits. This would also include integrating national surveillance systems to better capture risky behaviors both at health facilities and at the community level.

Tertiary prevention and chronic disease management should be targeted to high-risk groups and include: medication management for seniors and high-risk patients; update and enforcement of guidelines for management of NCDs by primary care doctors; creation of an integrated referral system; and expansion of physicians’ performance incentives for NCDs linked to quality-of-care indicators. For example, providing physicians with payment incentives if, adjusted for case mix, their patients’ blood sugar and cholesterol levels fall within certain ranges has been found to be successful in several countries (Scott et al. 2011).

Therefore, in the short term these recommendations should be included in a costed National NCD Plan with the support of MOHP’s NCD unit. This multisectoral plan would include several components linked to primary, secondary, and tertiary prevention and chronic disease management and include sections on enforcement, surveillance, human resource requirements, information and referral systems, funding, and evaluation especially targeted to vulnerable populations. Medium-term recommendations include implementation and financial support for the plan.

### 4.1.5 PRIORITIZING MENTAL HEALTH AND ADDICTION

Short-term recommendations include reorienting the present mental healthcare system from one that prioritizes inpatient care to one that focuses on more cost-effective outpatient care, especially for the most vulnerable groups. Given the high burden of disease of depression and anxiety among those with mental health problems in Egypt, the outpatient model is especially suited for treatment. Prevention, screening, and basic treatment for mental health can be integrated into the package of FHS. In addition, the National Mental Health Plan should be updated to take into account the growing burden of addiction.

Medium-term recommendations include scaling up resources for mental health, especially in poor and lagging areas. This includes increased training hours devoted to mental health in the medical school curriculum and financing for facilities in rural areas that currently lack any services. In addition, further studies are required to map the prevalence of the mental health disease burden and to overlay a concurrent mapping of provider availability to determine if needs are being adequately met.
4.1.6 ADDRESSING THE NEEDS OF THE DISABLED

Short-term recommendations to address disabilities include creating a National Action Plan for disabled populations and a national registry of disabled persons to better allow for targeting of programs (WHO 2011). This will allow for a concentrated effort to meet the needs of disabled populations in a targeted and systematic manner.

Medium-term recommendations include increased funding for addressing disabilities, improved access to disability-friendly services and spaces, and campaigns to increase public awareness on disabilities (WHO 2011). This will help create an enabling environment for those with disabilities and allow them to fully participate in daily life.

4.1.7 MAIN STRATEGIES FOR MOVING FORWARD

A synthesis of the key recommendations across the different health challenges is summarized below.

RECOMMENDATION 1: CREATING OR SUPPORTING TARGETED NATIONAL PLANS TO TACKLE HIGH-PRIORITY HEALTH CONCERNS

To prioritize the six health status challenges, it is important to either support existing national plans or develop new costed national action plans where they do not exist. For example, the existing National Acceleration Plan for Child and Maternal Health and the recently launched National Plan for Hepatitis C should be supported and enhanced to include a renewed focus on disadvantaged groups. However, at present national action plans for NCDs and disabilities do not exist and their drafting should be prioritized.

RECOMMENDATION 2: SUPPORTING AN INTEGRATED FAMILY HEALTH SERVICES MODEL OF CARE WITH APPROPRIATE REFERRAL MECHANISMS, WITH A FOCUS ON DISADVANTAGED GROUPS

To effectively and efficiently tackle the six priority health issues, an integrated family health service delivery model is required which has a focus on disadvantaged groups. This would result in a revision of the expanded primary healthcare service delivery model proposed in 1999 and include a comprehensive package of services for MCH, NCDs, nutrition, mental health, and disabilities. Prevention, screening, and basic treatment (e.g., antenatal care visits, growth monitoring and promotion, and screening for NCDs and mental health) would take place at the primary level with a robust referral system to secondary and tertiary care facilities for more complicated cases (e.g., emergency obstetric care and NCD-linked complications).

RECOMMENDATION 3: MONITORING AND SURVEILLANCE OF HIGH-RISK GROUPS

To effectively combat high-priority health conditions, it is important to have reliable, up-to-date estimates of baseline disease prevalence and changing trends in incidence. These need to be representative at the governorate and, if possible, district level, and available for vulnerable subgroups. As described earlier, this would include: a perinatal and neonatal surveillance system for maternal deaths; surveillance of NCDs (both risk
factors and disease prevalence), nutrition, mental health, and disabilities; continued national surveillance of HCV among general and high-risk groups as part of the DHS; and creation of a national registry of disabled persons.

RECOMMENDATION 4: SUPPORTING KEY RISK FACTOR SPECIFIC INTERVENTIONS AMONG DISADVANTAGED POPULATIONS

Apart from the general recommendations summarized above, each disease also requires risk factor specific actions targeted to disadvantaged groups. Some examples include: targeted demand creation through labor-intensive approaches employing female community workers, and voucher or conditional cash transfer schemes for MCH; awareness campaigns around FGM/C, disabilities, mental health, and addiction; promotion of physical activity and good nutrition practices, including exclusive breastfeeding; distribution of new chemotherapies and promotion of infection control and blood safety for HCV; continuing food fortification programs for iron and Vitamins A and D in government food subsidy programs and encouraging the roll-out of fortified foods in the commercial sector; raising tobacco taxes further and extending legislation to create a “100 percent smoke-free environment” in all indoor workplaces and public spaces; screening for tobacco use and obesity among high-risk groups; increasing the number of training hours devoted to mental health and the number of nutritionists and dieticians to deal with the growing dual burden of undernutrition and obesity; and creating disability-friendly accessible spaces.

4.2 RECOMMENDATIONS TO INCREASE FINANCIAL PROTECTION FOR DISADVANTAGED GROUPS

Expanding financial protection through SHI coverage for the poor and those in the informal sector, and ensuring separation of payment and provision of care. To reduce OOP expenses, a strategic purchaser should be established to expand coverage for the poor and then those in the informal sector. In addition, to increase system efficiency, payment and provision of care should be separated through demand-side financing using strategic purchasing and contracting, or through supply-side financing using performance-based financing schemes, or both.

To ensure financial protection to Egypt’s most disadvantaged groups, the system must provide adequate coverage plans for Egypt’s poor and those working in the informal sector. This coverage should be dual: (i) state funded health coverage plans for a package of essential family health services; and (ii) support for enrollment in SHI to cover higher levels of service. This approach aims to mitigate the financial impact of enrolling those groups in any pooled funding mechanism, providing them with financial protection against healthcare costs while minimizing costs incurred by the community.
4.2.1 EQUITABLE REVENUE COLLECTION

While equality suggests that all citizens contribute equally in bearing the cost of the health system, equity implies that each individual’s contribution to the cost is solely dependent on his/her ability to pay, regardless of his/her health needs. This concept could be incorporated in the mechanics of both financing schemes envisioned in Egypt. Public funding will rely mainly on allocations from MOF that are collected through tax-based revenues. These taxes should be progressive, pooled from a wide tax base, and preferably contain earmarked components for health from tobacco consumption, polluting industries, unhealthy habits, etc. The poor will either pay less taxes or will be tax-exempt altogether.

SHI financing, on the other hand, must be designed in a way that provides universality (with no opting out), combats moral hazards, and prevents adverse selection. The premium structure must be correlated with income, with the lowest income groups’ costs paid for by the state. A bottleneck to overcome is formalization and inclusion of the informal sector in the, but targeting mechanisms are available for this purpose. Copayments, if any, should be restricted to higher-income groups and for accessing only secondary and tertiary services, and should serve as a tool to discourage overutilization rather than as a direct financing tool for the system.

4.2.2 POOLING FOR EQUITABLE DISTRIBUTION

It is essential to reduce the number of active payers and purchasers of health services in the Egyptian market for more equitable pooling. Egypt may consider having a few –
and not necessarily a single– payers in the market. This will have to be done in a phased approach to ensure those payers’ financial viability and sustainability. Consolidating the pooling in one massive fund right away runs the risk of collapsing the whole system if the fund is not able to cope with the demand.

A recent World Bank analysis estimated the costs associated with fully operationalizing a typical Primary Care Unit to provide a comprehensive package of family health services at an adequate quality level along with its required capacity development to be approximately LE 250,000/year (approximately US$35,000). Egypt might consider paying the extra costs through public funds. The first step would be to provide this package for the poorest 40 percent of the population in the short (5-10 year) term, with nationwide scale-up by 2030. This would ensure comprehensive services for all citizens. The net present value is estimated to be LE 2.5-3 billion for full implementation.

In addition, providing UHC for a family health package of services at the gatekeeping primary care level, with an adequate referral mechanism, alleviates many of the logistical and financial burdens incurred at the secondary and tertiary level. As these higher levels are the main consumers of SHI funds, this system would reduce pressure on SHI finances and its premium structure, allowing both systems to be financially viable.

4.2.3 PURCHASING STRATEGICALLY

Strategic purchasing will be a decisive factor in the viability of any health financing mechanism. Strategic purchasing will have to answer three main questions: (i) what to purchase, given patients’ needs and national priorities?; (ii) from whom to purchase?; and (iii) how should purchases be made? While the third question is answered later in the paper, the first two questions are of paramount importance. Services purchased should be subject to certain criteria, including: cost-effectiveness (offering best value for money); pertinence to the target population’s health needs; quality; priority given to catastrophic and emergency cases; and contribution to a national health goal in general. On the other hand, provider selection should be left as much as possible to patients’ own preferences based on a rationalized map of service providers that offer the minimum acceptable standards of healthcare. Purchasing may allow for some preference for public providers in the initial stages to compensate for the huge investments incurred, but active participation of private and nonprofit providers is mandatory to avoid collusive and non-market practices from distorting the system.

4.2.4 MAIN STRATEGIES FOR MOVING FORWARD

RECOMMENDATION 5: SEPARATION OF PURCHASING AND PROVISION FUNCTIONS TO INCREASE ACCOUNTABILITY AND EFFICIENCY FOR DISADVANTAGED POPULATIONS

Separation of functions aims to improve efficiencies in service delivery. This is most relevant for the largest two players in the market, MOHP and HIO. HIO should separate its internal payment and provision functions. The “Payer” division would assume the roles of contributions management, provider management, claims processing, utilization
management, and reporting. The “Provider” division would work on achieving efficient and quality services in HIO facilities. For example, this could be better achieved by aligning financing with burden of disease and patient need. While this separation is challenging in a fiscally constrained environment, it must be prioritized to increase efficiencies in the system and allow for transition to a strategic payer. On the other hand, MOHP should restructure the mechanisms governing its facilities towards more internal accountability (as an owner) and external accountability to other purchasers in the market. This will ensure more efficient use of funds received. The new SHI organization should be established to assume the responsibilities of a payer without service provision.

RECOMMENDATION 6: REFORMING EXISTING PAYERS WHO PROVIDE COVERAGE TO DISADVANTAGED POPULATIONS

Egypt is committed to achieving UHC as reflected in language on the “Right to Health” in the Constitution, and expanding SHI coverage is one way to achieve this aim. A multi-payer scheme could be introduced to upgrade the existing payers in preparation for a future merge into a strategic purchaser. During the transition, HIO could continue as the payer for formal sector workers, while another payer could be responsible for the poor and informal sector workers. The latter could be the Program for Treatment at the Expense of the State (PTES) as it was established to serve the uninsured. This requires introducing short- to medium-term reforms in all these organizations. This system is similar to ones used in other countries that have worked towards achieving UHC, such as Mexico, Chile, Thailand, and Colombia. In the long term, these two payers could be merged once their packages and rules and regulations are unified.

For PTES: Upgrade purchasing functions to contract service providers based on different providers’ prices instead of providing financial support; improve targeting mechanisms to limit access of the financially better off segments of the population; and gradually become a purchaser for informal sector workers (based on contributions that could be partially subsidized for the near poor) and the poor (based on non-contributory government subsidies).

For FHFs: Become the entry governorate-level structures for strategic purchasing of a defined package of essential family health services at the primary and secondary healthcare levels based on payment for performance especially for disadvantaged populations; become the entry point for access to services provided under PTES and HIO, and later the national SHI fund; unify rules, regulations, and payment schemes at regional FHFs; and improve their efficiency by decreasing administrative cost.

For HIO: Improve efficiency of HIO to create fiscal space to allow for an increase in coverage for the poor. To achieve this create a preliminary internal separation between purchasing and provider functions within the organization; introduce provider payment mechanisms applied uniformly and equally between HIO providers as well as with other public, university, and private providers; expand contracting practices to more fairly select both public and private providers based on a competitive process for those meeting minimum quality standards; upgrade health insurance functions such as beneficiary management, provider management, claims processing, and utilization management; move from a scheme dependent on individual enrollment to one based
on family enrollment with the possibility of expanding coverage to formal sector workers’
dependents; unify the premium structure for formal workers, especially those covered
under Law 32 and Law 79; encourage those who opted out of the system to return for
coverage against catastrophic illness; and establish partnerships with private health
insurance companies to provide complementary packages.

RECOMMENDATION 7: DEFINING AND COSTING PRICE OF PACKAGE OF SERVICES,
ESPECIALLY FOR HEALTHCARE NEEDS OF DISADVANTAGED POPULATIONS

Egypt already enjoys a basic package of family health services at the primary care
level as defined in 1999. Yet insufficient roll-out, lack of financial sustainability, and
segregation into different vertical programs prevent it from providing UHC. Reviving the
package requires efforts more on the operationalization level and adjustment of the
package of services included to be responsive to the needs of disadvantaged populations.
Costing of the different components must be revisited to determine actual unit costs that
could be translated into programmatic budgets through MOF allocations. In addition, the
package should be upgraded to meet the new health needs of Egypt including prevention
and treatment of NCDs, disabilities, and mental health conditions.

Specifically, the family benefits package should be integrated to provide three groups
of services, selected based on priority problems and cost-effectiveness of interventions:

● Maternal healthcare services:
  - Family planning
  - Safe motherhood interventions
  - Nutrition
  - Child health services:
    - IMCI – acute respiratory illness, diarrhea, and malnutrition
    - Immunization

● Adult and all age group services:
  - Outpatient management of NCD’s (diabetes, hypertension, and cardiovascular
disease)
  - Tuberculosis treatment
  - Sexually-transmitted disease management
  - Basic mental health services
  - Disabilities
  - Emergency care
RECOMMENDATION 8: DEFINING PROVIDER PAYMENT MECHANISM, ESPECIALLY FOR SERVICES REQUIRED BY DISADVANTAGED GROUPS

The optimal provider payment mechanism for Egypt depends on several factors, ranging from the historical and current development of the health financing system, to patients’ ability to pay premiums and contribute, to the available public funds realized through subsidy reforms and allocation pledges of the Constitution. This is coupled with another Constitutional mandate for implementing SHI. Therefore, based on the earlier proposed method of dual mechanisms to finance healthcare, it is recommended that: (i) primary care services offering the comprehensive FHS package be paid in fixed capitation amounts that cover the fixed costs of operations; while (ii) a complementary pay-for-performance scheme finances the variable costs based on volume, quality, and incurred hardship for services provided. Preventive and regular public health services would keep their public health financing mechanism. On the other hand, all secondary and tertiary services would eventually be paid on the basis of contractual agreements based on specific price lists, per the new SHI.

RECOMMENDATION 9: PREPARING PROVIDERS FOR CONTRACTING, ESPECIALLY THOSE TARGETING DISADVANTAGED GROUPS

Given their historical reliance on line item budgeting, self-generated revenues, and less attention toward efficiency, Egyptian hospitals (public and private alike), especially those which provide services to largely disadvantaged groups, must develop the ability to cost their provided services. This would entail training of fiduciary staff; and introduction of HMIS to track expenses, capture physician behavior, prescribing practices and ancillary costs. Although readiness for contracting is preferred for any foreseen SHI system, it is still possible to roll out SHI with no well-articulated contracts in place. For example, this could be done by paying providers through an annual negotiated global budget for costs incurred, as is done in Turkey. However, this will not motivate providers
to be cost-conscious or to provide more services than they already do. Skills required for providers’ financial management staff include costing, contracting, claims generation, and auditing. Purchasers’ skills needs include claims management, actuarial analysis, price-setting, fraud detection, utilization, and medical audits.

### 4.3 Recommendations to Improve Quality of Care in Health Facilities, Especially in Lagging Regions

The quality of healthcare can be increased through performance-based incentives, accreditation, and citizens’ engagement, especially for disadvantaged populations. Structuring a payment system with performance-based incentives for providers has been shown to be successful at improving quality of care both globally and in Egypt through reforms introduced as part of the Family Health Model in 2001. This should be scaled up to lagging regions. In addition, citizens should be more directly engaged in the provision of care by establishment of grievance redress mechanisms (GRMs) and active monitoring of the quality of and satisfaction with health services. Finally, quality and safety can be further improved through mandatory accreditation for FHSs and improved training resulting in greater compliance with clinical guidelines, standards, and treatment protocols in health facilities.

Specifically, this would entail adopting the following recommendations:

**Figure 18: Recommendations to improve quality of healthcare in public facilities**

<table>
<thead>
<tr>
<th>AIM</th>
<th>OBJECTIVES</th>
<th>KEY CHALLENGES</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Justice in Health</td>
<td>Improve health of disadvantaged groups</td>
<td>Lack of responsiveness</td>
<td>Training of providers</td>
</tr>
<tr>
<td></td>
<td>Increase financial protection for disadvantaged groups</td>
<td>Limited citizen’s participation</td>
<td>Independent accreditation</td>
</tr>
<tr>
<td></td>
<td>Improve quality of health care in public facilities</td>
<td></td>
<td>Performance based financing</td>
</tr>
</tbody>
</table>

*Source: Authors.*
Responsiveness to patients' needs should be a primary focus for the Egyptian healthcare system. The term includes – but is not restricted to – providing patients with quality, affordable, accessible, well-governed, and safe healthcare services provided by an adequate number of skilled health professionals. The system should be flexible enough to adjust to patients' health needs, demands, and feedback. This is optimally performed under an umbrella of mutual accountability.

Egypt should strive to raise the quality of its public providers. To increase quality of care areas to be improved relate to governance and leadership; professionalism and patient rights; quality measurement and improvement; patient safety; and facility safety and emergency management. Furthermore, MOHP should work closely with the medical syndicates to develop a system for re-credentialing of medical licenses for health providers on a regular basis.

Although a great proportion of “lagging” regions are “remote,” these terms should not be synonymous. Lagging regions are defined to include those areas with the greatest need for medical services, and may encompass areas with the greatest poverty rates (rural Upper Egypt and slum areas), where factors other than the mere presence of human resources may affect utilization rates or acquisition of health benefits. Other lagging areas include those with the worst national health outcome measures or those deemed more prone to health risks. Providing incentives to attract adequate talent and numbers of professional healthcare workers to those areas may be challenging, and not merely an issue of salary and/or bonuses.
4.3.2 INCREASE CITIZEN’S PARTICIPATION IN FINANCING, SERVICE DELIVERY AND MONITORING OF QUALITY AND SATISFACTION, ESPECIALLY IN LAGGING REGIONS

Citizen’s participation in the delivery of health services can be increased through enabling local communities. Such mechanisms would involve citizens’ in financing decisions, service delivery and monitoring of quality of care. To be effective, evidence suggests that local communities be authorized to find the appropriate solutions and central governments need to allow a degree of autonomy at the local level (World Bank 2015b forthcoming). To do so, information must be perceived as actionable and citizens perceive that an enabling environment is in place to reduce fear of reprisals (World Bank 2015b forthcoming). With no response and no observed performance improvements, trust and engagement are likely to decline, and participation—whether spontaneous or induced—will not be sustained (World Bank 2015b forthcoming). On the other hand, positive results observable by citizens can generate trust and legitimacy for the state as well as for agencies and lead to concrete reforms. Such work has been pioneered in several countries, both in MENA (e.g., Tunisia, Jordan) and globally (e.g., South Korea, Brazil), and has been shown to increase quality of healthcare delivered (World Bank 2015b forthcoming).

4.3.3 MAIN STRATEGIES FOR MOVING FORWARD

RECOMMENDATION 10: TRAINING OF PROVIDERS IN LINE WITH NEW HEALTHCARE DEMANDS

The current skill mix of Egypt’s medical workforce may not allow them to adequately respond to increasing healthcare demands, therefore task shifting and retraining is necessary. Innovative approaches for optimizing the benefits of the current workforce structure are greatly needed. This will have to be done by mapping out existing and future available capacity versus required needs at a regional level. Subsequently, a rationalization plan should be adopted per specific regions’ needs. This plan could entail innovative measures, some of which have already been implemented in Egypt (e.g., assistant nursing staff at large hospitals). Others include expanding the role of local health-visitor workers beyond their primary role of disseminating health awareness in their respective areas to include basic screening and preventive services. In Upper Egypt, where physicians’ availability is lowest, nursing staff could be further trained to perform basic health procedures to improve health outcomes, after appropriate training and legal frameworks are in place. This model has shown success in Iran, where a chronic shortage of doctors is the norm.

Training providers on domains of responsiveness is essential to increase patient satisfaction. Medical curriculum and continuing medical education should include trainings on responsiveness to ensure that patients are more satisfied, especially in public facilities. Such trainings would include modules on understanding the patients’ perspective to ensure that provider-patient interactions include dignity, autonomy, confidentiality, communication, prompt attention, social support, choice and quality of basic services.
Regulate dual practice through different staggered “global fixes” such as allowing private practice in public hospitals, increasing basic wages and incentives, and then gradually banning dual practice. Other policy tools that have been tried to reduce dual practice and were met with mixed results include limiting services allowed in the private sector; self-regulating dual practice; completely banning the practice; restricting private earnings; creating exclusive contracts in public facilities; and enforcing licensure restrictions (Rabie 2014). Turkey increased the number of clinicians working full time in the public sector from 20 percent to 80 percent in less than a decade of reforms through gradual implementation of a pay-for-performance system and a steady increase in basic wages. Only after progress was achieved was the law banning the practice passed.

**RECOMMENDATION 11: ATTAINING INDEPENDENT ACCREDITATION FOR PUBLIC FACILITIES**

Egypt should start working towards foundation-level accreditation for its public providers to ensure better quality and as a prerequisite for eventual contracting with a strategic payer(s). Egypt’s SHI scheme will expand health insurance coverage to the uninsured population (the poor and informal sector workers) by introduction of two related important laws. The first is the Social Health Insurance Law; the second law establishes an independent public entity responsible for accreditation of health facilities. Accreditation of health facilities will be a prerequisite for contracting with SHI payers. Only facilities that meet at least the Foundation Accreditation Level for hospitals and the Provisional or Full Accreditation Level for primary healthcare units and centers will be eligible for contracting.

**RECOMMENDATION 12: SCALING UP PERFORMANCE-BASED FINANCING AND OTHER INCENTIVES**

Structuring a payment system with performance-based incentives for providers has been shown to be successful at improving quality of care (Scott et al. 2011). Through the reforms introduced as part of the Family Health Model in 2001, Egypt integrated pay-for-performance incentives in FHF-contracted facilities in five governorates. As per this system, facilities can get between 10-20 percent of their pay based on achieving certain performance incentives. An evaluation of this program showed it was successful in improving the quality of care and resulted in increased satisfaction levels for both healthcare providers and beneficiaries, especially in the fields of family planning, antenatal care, and child care services (Huntington et al. 2009). In addition, with the growing burden of NCDs, it would be useful to include NCD-based quality indicators among the targets providers must achieve. Examples of such indicators for treatment of diabetes include providing physicians with performance incentives if they perform regular foot exams, if they prescribe metformin according to guidelines, and if patients’ Hemoglobin A1c, and blood cholesterol levels are within certain acceptable levels. Furthermore, any pay-for-performance scheme adopted should factor in the following important dimensions to ensure its fairness and sustainability: volume of work load, quality of services provided, hardship incurred (remoteness, geographical, etc.), size of performance bonus, level to whom payments are made (individual or facility), and negative externalities due to incentivizing certain behaviors in delivering service.
Positive and negative methods for incentivizing the workforce should be sought. Positive methods include but are not limited to pay-for-performance methods as discussed before. Other positive incentives include accelerated career progression, exposure to training facilities at nearby centers of excellence, and government-guaranteed and pre-negotiated contracts for working within or outside of the country for higher pay after a set number of years in service. Negative incentives to discourage professionals from working in non-lagging regions include caps on available job openings, staff rotations, and stipulation of service in a lagging region for a set period of time as a precondition for eligibility for payment bonuses.

RECOMMENDATION 13: CREATING AVENUES FOR CITIZEN’S PARTICIPATION IN SERVICE DELIVERY

Citizen’s participation in service delivery can be increased by drafting a national strategy for citizen’s engagement in healthcare which includes creating an office for engagement with civil society at the national level; and establishing a Committee for Patient Rights at the facility level. The latter should include patients and members of civil society as part of the Board of Trustees at the facility with provisions for such groups to be involved in the monitoring of service quality in the medium term.

Information on performance must be linked with mechanisms that allow citizens, service providers, and officials to share and act on it. The public can be brought in as partners to assess needs, establish priorities, and consider solutions. Health boards can seek the participation of clients, providers, community stakeholders, and officials. Town hall meetings and consultations can be effective at establishing community priorities and also strengthening social cohesion. Virtual consultations are also possible, such as those used in a “Government Asks” initiative in the Brazilian state of Rio Grande do Sul, where citizens were given an opportunity to give policy input, either choosing between pairwise policy choices or suggesting solutions, via mobile phone, Internet, or (in poor areas) face-to-face consultations (World Bank 2015b forthcoming). Such processes can have an enormous impact—the Government Asks initiative alone yielded more than 1,300 citizen policy proposals, with over 120,000 votes cast on prioritization, and led to higher budget allocations for primary healthcare, family health programs, and regional hospitals (World Bank 2015b forthcoming).

Collecting feedback on public services from users, benchmarking service delivery and local governance performance and disseminating information on performance can also provide a rigorous basis for citizen action. Citizens, civil society organizations, state officials, and service providers require systematically collected information on the quality and adequacy of public services in order to benchmark performance and measure improvements. Citizen report cards (CRCs) implemented in Tunisia, Tanzania, and elsewhere are a simple but powerful tool to provide public agencies with systematic feedback from users of public services (World Bank 2015b forthcoming). More complex instruments, similar to the Public Administration Performance Index (PAPI) developed in Vietnam, use citizen surveys to benchmark local governance issues across a range of issues, allowing the relevant parties to consider the relationship between service delivery outcomes and other governance issues (World Bank 2015b forthcoming). Information
also provides a rigorous basis and a proactive agenda for communities, civil society organizations, or local governments to pursue a dialogue with service providers to improve the delivery of public services. Extensive public campaigns through community meetings, websites, and social media can generate a constant stream of information that invites the public and public officials to recognize both obstacles and successes.

RECOMMENDATION 14: ESTABLISHING GRIEVANCE REDRESS MECHANISMS AND PROGRESSIVE LEGISLATURE SUCH AS A PATIENT BILL OF RIGHTS, ESPECIALLY IN LAGGING REGIONS

Legislative recommendations should be considered to provide grievance redress including considering the development of a medical malpractice law, creation of a uniform Patient Bill of Rights, and harmonization of existing laws and decrees related to health. Development of the medical malpractice law should be based on a comprehensive review of medical malpractice laws in other countries paying attention to ways to balance citizen’s rights with provider autonomy.

Based on global best practice, the Patient Bill of Rights should consider including areas on patient’s right to accurate and easily understandable information; choice of health provider; emergency services; taking part in treatment decisions; respect and nondiscrimination; confidentiality and privacy of health information; and fair, fast, and objective review. The patient also has a responsibility in terms of adherence to prescribed treatment regimens; timely payment; and treatment of providers with respect.

The current health system is also governed by a series of outdated and sometimes contradictory decrees and laws which should be aligned. This can be done by creating a representative committee of major stakeholders of the sector. The current fragmentation in the legal infrastructure should be kept to a minimum with windows for future flexibility.

4.4 THE FAMILY HEALTH MODEL: SUPPORTING ONE SOCIAL JUSTICE PROGRAM IN HEALTHCARE FOR EGYPT

4.4.1 ENVISIONING A MODEL OF “FAMILY HEALTHCARE SERVICES FOR ALL BY 2030”

An integrated solution to the recommendations proposed is for Egypt to adopt a family health services model by 2030. This package should offer essential levels of quality family health services pertaining to different programs in an integrated, interrelated, and affordable manner by a well-trained, available workforce. The package should include services for MCH, family planning services, preventive services and vaccinations, diagnosis and follow-up of NCDs, simple mental health interventions, and basic curative and surgical procedures. Expanding and uniformly implementing Egypt’s existing package of family health services would be a good starting point for the program (Figure 19).
While Egypt’s infrastructure development and distribution are adequate, the inputs needed to operationalize those services may not be sufficient for their proper delivery. Issues of supply and pharmaceutical shortages, adequate supervision, and lack of maintenance of facilities and equipment must be addressed to achieve the full benefits from those integrated services (IMS Heath 2012). It is also mandatory to ensure that this package of services creates no financial barriers for the intended beneficiaries. Evidence has shown that utilization rates—especially for poorer segments of the society—are very price elastic, even for the most trivial of user fees (World Bank 2009).

The package of services must include an emphasis on quality improvement. Continuous and adequately funded quality improvement and repeated corrective action processes must become the norm. Moreover, integrated clinical and corporate governance mechanisms must be gradually introduced to ensure efficacy and flexibility of the family healthcare package. Finally, an independent accreditation scheme through an independent accreditation body must be strengthened to foster a culture of accountability and permit future eligibility for any contractual agreements for sustaining quality post accreditation. Through a decentralized governance structure at the district and moderaya level, quality can be further improved through unannounced visits to confirm compliance with infection control, staff attendance, safe disposal of biohazards etc.

**Figure 19: Model of “Family Healthcare Services for All by 2030”**

Source: Authors.
Availability of an adequate quantity and quality of trained healthcare workers is a cornerstone of the model’s success. This will be guaranteed by conducting: a healthcare workforce planning exercise for the short and medium term; and appropriate training and continuous professional development on providing the package of family health services, as well as related trainings on quality improvement practices. Adequate incentives must be instituted to attract a healthcare workforce to lagging regions. It is imperative that any incentive scheme incorporate indicators of quantity, quality, and hardship incurred for the services provided. Healthcare workforce behavior can change rapidly, so regular and periodic (optimally every three years) reassessments of implemented incentives are needed to adapt accordingly.

Finally, the model should mount an increasing focus on helping lagging regions achieve the MDG targets and tackle NCDs and Hepatitis C. Curbing neonatal and maternal mortality could be addressed by improving and upgrading services for neonatal and obstetric emergencies in lagging regions, potentially by tackling services at the secondary and tertiary levels in those areas. This may be achieved through the roll-out of improved, regionally well-placed, operational, and adequately staffed units in key specific lagging regions. Furthermore, trainings and procedural support for infection control practices – coupled with a strong treatment program using recent antivirals – inside all health facilities and blood banks in lagging regions must be strengthened to ensure patient safety and curb the transmission of HCV (Figure 19).

The model will serve as an integral part of the Egyptian health system reform strategy. The model will first help the separation of functions by enabling purchasing capacities, providing payment mechanisms, contracting providers, and instituting pay-for-performance mechanisms. Second, it will develop an integrated service delivery model by providing essential services, improving facility autonomy, improving medical record usage, and instituting a referral system. Lastly, the model will boost citizens’ engagement by activating adequate GRMs, supporting patients’ rights, instituting independent verification, and ensuring client satisfaction.

The “Family Healthcare Services for All by 2030” model is a supply-side mechanism. Therefore, adequate measures to enhance demand for its services should be sought. These vary from instituting a SHI system, distributing targeted and/or conditional cash transfers, providing vouchers to the lagging populace, or simply providing services free of charge through a strong tax-based national health system.

4.4.2 HOW SHOULD EGYPT IMPLEMENT THE MODEL?

In the short term (2017), Egypt should aim to provide the package of family health services to the most lagging regions in terms of health outcomes and financial protection, covering an estimated 20 percent of the poor. Following the footsteps of the GoE’s program to upgrade and enhance the living conditions in the poorest 1,000 governorates would be a good start. This immediate measure would provide a much needed sense of equity among the population. In the medium term (2020), Egypt should start expanding the service to include the poorest 40 percent of the population, covering nearly all of Upper Egypt with gradual introduction of a referral system. In the long term (2030), all citizens should enjoy family health services as an integral part of their basic rights (Figure 20).
The financial cost of the model should optimally be borne by the state through tax-based pooled funds. This would guarantee an essential package of health services offered to citizens irrespective of other factors. It would also guard against the uncertainties of the financing and implementation procedures of any proposed SHI system. Moreover, a robust family healthcare system would certainly lower the costs of secondary and tertiary care on any future national payer, even for higher health income quintiles of the population. A rough estimate of the net present value of the total marginal costs to be paid by the state for full implementation of the system in all of Egypt primary healthcare facilities is estimated to be LE 2.5-3 billion, a small amount considering the expected budgetary increases in healthcare over the coming years.
Figure 20: Short-, medium-, and long-term strengthening of the “Family Healthcare Services for All by 2030” model

FHS By 2017

- Primary care and 1st level of referral services
- Family healthcare service for the poorest 1,000 villages (poorest 20% in ten governorates)
- Funded by the state

FHS By 2020

- Primary care and 1st level of referral services
- Family healthcare service for the poorest 40% in ten governorates
- Funded by the state

FHS By 2030

- Primary care and 1st level of referral services
- Secondary and Tertiary care
- Universal Family Healthcare Services for all Egyptians
- Funded by the state and SHI
5 IMPLEMENTATION: HOW SHOULD THESE RECOMMENDATIONS BE IMPLEMENTED?
5. IMPLEMENTATION: HOW SHOULD THESE RECOMMENDATIONS BE IMPLEMENTED?

Implementation of these recommendations requires several components to be in place—seven which are laid out below. Implementation considerations include the creation of enabling conditions, definition of roles for different actors, commissioning of further research and studies, promulgation of new legal provisions, creation and strengthening of different government bodies, and agreement on a uniform set of metrics to track overall progress. This concluding section describes each of these essential seven components required to ensure social justice in health in Egypt.

Figure 21: Implementation arrangements for proposed roadmap

<table>
<thead>
<tr>
<th>CONSIDERATIONS FOR IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling conditions</td>
</tr>
</tbody>
</table>

Source: Authors.

5.1 CONSIDERATION 1: WHAT ARE THE ENABLING CONDITIONS TO BE ADDRESSED?

Data, expert opinion, and patient views suggest that reforms in two cross-cutting areas – healthcare market regulation, referral systems, and pharmaceutical reform – are important to enable implementation of the recommendations discussed in the previous section.

CROSS-CUTTING CONDITION 1: DEVELOPING AN INTEGRATED REFERRAL SYSTEM

Barring a few examples, an integrated referral system is absent from the public sector, providing opportunities for service abuse and supply-induced demand (WHO 2011). This has created what can be referred to as a “hospital culture” among Egyptians, whereby individual patients decide directly upon the level and specialty of care when seeking healthcare (Fayyad 2012). For acute illnesses, nearly 62 percent of Egyptians seek specialists for their first medical visit; in contrast, only 5 percent go to a general practitioner or a family health specialist (Rafeh et al. 2011). Existing referral systems at HIO show signs of potential “rubber stamping” (HIO 2011) and those at FHFs can be easily bypassed due to lack of enforcement and local governorate interventions.

Creating an integrated referral system with incentives to refer patients by creating lower copayments should be encouraged. This could be achieved by expanding FHS coverage, especially in the most disadvantaged governorates, to allow for a seamless referral system. At the primary care level, a comprehensive package of services would be offered in accordance with the FHS model described earlier. This would include
prevention and screening of NCDs and treatment of basic illnesses. Patients would be referred to secondary and tertiary facilities, as disease complexity increases, through an integrated referral system. In the medium term, any strategic purchaser of services should ensure that a gatekeeping mechanism is upheld when contracting with providers.

**CROSS-CUTTING CONDITION 2: REFORMING THE PHARMACEUTICAL SECTOR TO REDUCE COSTS AND IMPROVE QUALITY**

Pharmaceutical expenses comprise 34.2 percent of total health expenditures and 42.6 percent of OOP spending on healthcare (MOHP 2010). Despite being well regulated (WHO 2011), the pharmaceutical industry suffers from a range of problems (WHO 2006). For example, the rising market for counterfeit medicines reflects the weak supply chain and poorly regulated pharmaceutical system (WHO 2010c; Imber 2011). The drug management system is not based on needs, so shortages of some drugs and surpluses of others are not uncommon (WHO 2010). As a result, patients often do not obtain their medication at the healthcare facility where it is prescribed due to it being out of stock: 86 percent of patients reported buying medication at a pharmacy, but only 21 percent obtained medication at the facility itself (World Bank 2010). Coupled with the absence of prescribing regulations, this often results in drug overuse. For example, the sale of antibiotics alone represents nearly 20 percent of all pharmaceutical sales (IMS 2012). This has caused entry into the market of low-priced, low-quality generics, which are often unregulated (MOHP 2012b).

In the short term, support for implementation of WHO’s rational drug use policy should continue, with support to the new national supply chain program (WHO 2014). While an essential drugs list has been developed and a Drug and Therapeutics Committee established, many reforms are yet to materialize, including creation of rational prescribing practices. Moreover, the new national supply chain program should be enforced to mitigate drug shortages due to inappropriate ordering, transportation, storage, and use within public facilities.

In the medium term, Egypt should create a national pharmaceutical regulator to track supply, demand, and quality. Pricing of drugs should move from a centralized statutory pricing system referenced to other countries to a value-based pricing system. In addition, appropriate automated tracking systems with tighter legislation and controls should be initiated to reduce the availability of counterfeit medicines.

**5.2 CONSIDERATION 2: WHO ARE THE ACTORS AND WHAT ARE THEIR ROLES FOR IMPLEMENTATION?**

MOHP should not be considered the sole actor involved in shepherding the health system through a transformation process in a climate of social and economic uncertainties. Each of the multiple actors involved in the regulation, financing, and provision of healthcare should have a clear role and responsibilities in the reform process. This will provide for complementarities, synergies, and a national sense of ownership, all of which will enable smooth implementation. Some of the anticipated roles and responsibilities are presented in Table 2:
<table>
<thead>
<tr>
<th>Actor</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Minister’s Office</td>
<td>• Gathering political support for the Roadmap and its subcomponents</td>
</tr>
<tr>
<td>Ministry of Health and Population</td>
<td>• Allocating resources • Setting policies and guidelines • Ensuring overall stewardship and governance • Monitoring service provision • Providing avenues for redress • Scaling up pay-for-performance systems, coupled with gradual wage increases and eventual legislative action to manage dual practice</td>
</tr>
<tr>
<td>Ministry of Finance</td>
<td>• Executing Constitutional mandate for additional funding to health • Risk-pooling of funds of various coverage mechanisms • Raising increased resources for healthcare programs for the poor and informal sector workers • Monitoring efficiency and fighting corruption in dispersed funds • Shifting to program budgets in healthcare.</td>
</tr>
<tr>
<td>Ministry of Planning and Administrative Development</td>
<td>• Creating a unified database for beneficiary targeting • Establishing grievance redress hotlines • Creating an interactive web-based platform for all stakeholders to track implementation progress • Decentralizing provision of healthcare services • Supporting service allocations in terms of infrastructure and vertical health programs</td>
</tr>
<tr>
<td>Ministry of Labor</td>
<td>• Registering workforce in private and civil society and their dependents</td>
</tr>
<tr>
<td>Ministry of International Cooperation</td>
<td>• Coordinating development partners’ support for finance and technical assistance • Tracking, monitoring, and evaluating projects</td>
</tr>
<tr>
<td>Ministry of Higher Education</td>
<td>• Providing training and continuous education for medical cadres • Aligning university hospitals with the reform agenda</td>
</tr>
<tr>
<td>Ministry of Education</td>
<td>• Registering schoolchildren in pertinent health insurance schemes • Supporting school health and feeding programs</td>
</tr>
<tr>
<td>Ministry of Defense</td>
<td>• Aligning armed forces hospitals with the reform agenda • Upgrading healthcare infrastructure</td>
</tr>
</tbody>
</table>
| Ministry of Telecommunications | • Implementing a unified HMIS system  
• Creating an e-finance mechanism  
• Training the healthcare workforce on IT systems |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Local Development</td>
<td>• Targeting and registering informal sector workers at the district and village level</td>
</tr>
<tr>
<td>Ministry of Interior</td>
<td>• Linking the national civil ID database, to identify family members and dependents, with health databases</td>
</tr>
<tr>
<td>Ministry of Foreign Affairs</td>
<td>• Providing for and monitoring international bilateral health agreements</td>
</tr>
<tr>
<td>Ministry of Agriculture</td>
<td>• Identifying and registering farmers and landowners</td>
</tr>
<tr>
<td>Medical syndicates</td>
<td>• Creating a committee to develop a medical malpractice law and Patient Bill of Rights with MOHP</td>
</tr>
</tbody>
</table>
| Supreme Health Council | • Set the overall strategy, oversee the functionality of the health system, and ensure that the privileges and obligations of all players are respected and maintained.  
• Monitoring provided services at their pre-agreed fixed prices; upholding the governance and social accountability rights of citizens and workers; and providing relevant feedback to policymakers to ensure smooth operation of the system. |
| Healthcare private providers | • Ensuring quality in healthcare delivery  
• Ensuring financial, administrative, and legal readiness to a new regulator and strategic purchaser of services |
| Healthcare CSOs | • Tracking financial protection for all citizens, especially those most vulnerable residing in remote and slum areas  
• Advocating health reforms  
• Campaigning for health rights  
• Aligning service provision with reform  
• Implementing certain programs (directly or indirectly)  
• Monitoring client satisfaction with and quality and performance of health facilities |
| International development partners | • Aligning financial and technical assistance  
• Harmonizing efforts  
• Providing technical expertise and best country practices |
| Citizens | • Ensuring adequate feedback and voicing concerns when appropriate |

In the longer run, MOHP should place itself as chief executive regulator of the health system. Only then can MOHP perform its mandates of promoting national health policies, advocating for adequate funding resources for healthcare, promoting competition
between providers, assuring public health duties, enforcing health and labor laws, and most importantly, rationalizing services according to national health maps (Soeters 2014).

5.3 CONSIDERATION 3: HOW WILL THE RECOMMENDATIONS BE FUNDED?

In general, fiscal space for health can be increased in five ways: a favorable macroeconomic climate, resulting in overall increases in government revenue; reprioritization of health within the government budget; an increase in health-specific foreign aid; an increase in health-specific resources; and increased efficiency of government outlays (Tandon 2010). Given the current economic climate in Egypt, the first way may not be realistic in the next five years. However, the latter four are all possible ways to finance the short- and medium-term recommendations proposed in this paper, as discussed next.

Reprioritization of health within the government budget through the Constitutional mandate. A simple model projecting how the Constitutional mandate to spend 3 percent of the GDP on health will be translated into future spending is demonstrated in Table 3. The projections are based on MOF data for FY 2013/14 and FY 2014/15 (MOF 2014) and on conservative assumptions for the country’s overall economic situation. GDP and budget expenditure growth rates were estimated at a conservative 3 percent and 13.7 percent, respectively. The deflator was set at 11 percent. Note that the health budget includes all areas of public expenditures directed to health services provided for all public entities (university hospitals, armed forces hospitals, etc.), not just MOHP expenditure.

The model shows that although public expenditures on health will grow by an average annual rate of 30 percent, by FY 2016/17 the amount spent on healthcare as a percent of the budget will be only 8.7 percent, putting Egypt far below comparable Low and Middle Income (LMIC) countries. This opens room to find other ways to finance healthcare in Egypt.

Table 3: Current and expected future fiscal space for health based on the Constitutional mandate

<table>
<thead>
<tr>
<th></th>
<th>FY 2013/14</th>
<th>FY 2014/15</th>
<th>FY 2015/16</th>
<th>FY 2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (billion LE)</td>
<td>2,008.0</td>
<td>2,289.1</td>
<td>2,609.6</td>
<td>2,974.9</td>
</tr>
<tr>
<td>Amount pledged for health via Constitutional mandate (3 percent GDP; billion LE)</td>
<td>--</td>
<td>68.7</td>
<td>78.3</td>
<td>89.3</td>
</tr>
<tr>
<td>Phased annual increase to health (billion LE)</td>
<td>--</td>
<td>9.5</td>
<td>17.2</td>
<td>22.4</td>
</tr>
<tr>
<td>General budget (billion LE)</td>
<td>697.0</td>
<td>789.0</td>
<td>901.1</td>
<td>1,024.5</td>
</tr>
<tr>
<td>Health budget (billion LE)</td>
<td>40.0</td>
<td>49.6</td>
<td>66.8</td>
<td>89.2</td>
</tr>
<tr>
<td>Healthcare as a % of budget</td>
<td>5.7%</td>
<td>6.3%</td>
<td>7.4%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Healthcare as a % of GDP</td>
<td>2.0%</td>
<td>2.2%</td>
<td>2.6%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>
Increases in health-specific foreign aid and the ability to raise revenues from private sector collaboration. A convincing case can be made for increases in development assistance from Gulf Cooperation Council countries and bilateral and UN aid agencies earmarked for the health sector, based both on current need in the health sector and spillover effects from investments in health leading to increases in wealth. In addition, by forging public-private collaborations in the development of hospitals and health facilities, new sources of revenue can be injected into the health sector.

Increases in health-specific resources. Health-specific resources can be increased through the creation of a strategic single payer, or a reduced number of payers, with mandatory premiums for certain segments of the population based on ability to pay. Furthermore, Egypt should consider introducing the concept of additional resources for health. Excise taxes on tobacco, polluting industries, and unhealthy foodstuff are all examples supported by WHO (WHO 2010a).

Increasing efficiencies of health spending. Egypt can achieve efficiencies in current spending by implementing the recommendations presented in this paper. For example, efficiency gains in the health system could be realized by: splitting the payer and provider functions of HIO; investing in preventive programs for HCV, nutrition, and NCDs; disqualifying from PTES those who are able to pay in favor of the poor; and implementing a pharmaceutical supply chain program.

In addition, there is often unused capacity, which can be better utilized to increase efficiencies. For example, a recent World Bank study shows that providing the poor with a benefit package of full primary care and major secondary care services with increased accessibility to the current PTES system will cost an average of LE 70 per individual at a utilization rate of 2.5 visits per year. This system utilizes the current structure of the Family Health model with few modifications and will enable a sound referral system. Currently, the FHFs in Alexandria and Menoufya have utilization rates of 1.4 and 1.2, respectively (Abou El-Ghar 2013). It is noteworthy that any cross subsidies for this system through HIO contracts for its own beneficiaries will markedly reduce the average cost per individual.

Egypt has previous success stories in achieving efficiencies in piloted projects that can be replicated. The manual for supply chain guidelines implemented at Suez and ‘6 October’ during 2009-2011 provided for savings of up to 20 percent of procurement costs with an increased availability of quality drugs (Eldebeiky 2012). The PTES reforms of 2010 cut down corruption, gradually decreased budget deficits, and boosted the number of beneficiaries without the need for any extraordinary increases in budget allocations from MOF (MOHP 2012b).

5.4 CONSIDERATION 4: WHAT LEGAL PROVISIONS ARE RECOMMENDED?

As presented in the recommendations section, Egypt may need to harmonize and modify its various laws and governing decrees related to healthcare. Such changes must be carried out in a prioritized manner. In the short and medium term, Egypt may
consider the following:

● **Social health insurance law:** Egypt must move towards passage of the Social Health Insurance Law after many years of drafting by experts. Nevertheless, it is imperative that the law first undergoes extensive community dialogue, especially with regard to the provisions dealing with financing and the benefits package. While new laws are increasing coverage to specific sub populations (female headed households, children under five, farmers), it is important to harmonize the laws and ensure that the risk pool is not fragmented. Key provisions of the law should include:

  - A system that is universal and mandatory
  - Separation of payer and provider functions
  - Flexibility of the benefit package
  - Freedom in choosing providers
  - Ensured financial and actuarial sustainability
  - Gradual phased implementation
  - Role of private sector in the provision of complementary services, especially for those opting out

● **Medical malpractice law:** To ensure social accountability and allow for citizen redress mechanisms, a medical malpractice law should be drafted based on global best practice. This law will have to balance citizens’ rights with providers’ autonomy to allow for just outcomes.

● **Unified National Patient Bill of Rights and Responsibilities.** A basic list of assurances to patients regarding their interaction with the medical care system, this may take the form of a law or a binding decree. The list should at least guarantee patients universal rights to access to information, choice of health provider, confidentiality and privacy of health information, fair treatment, and self-autonomy over any medical decision pertaining to their cases. Patients have a responsibility in terms of: adherence to prescribed treatment regimens; timely payment; and treatment of providers with respect. Such a document is ideally unified nationally across all healthcare providers, adequately communicated to the population, and regularly checked by enforcement and regulatory bodies.

● **Medical cadre law:** The current law outlines much needed career pathways, an administrative framework, and financial compensation for medical professionals. These include physicians, dentists, pharmacists, nurses, physiotherapists, laboratory scientists, and medical technicians. The law was accelerated due to pressing demands by the medical profession. However, it is recommended that the law become a live document with space for further enhancements and reviews later on. The law must provide for suitable working conditions and adequate financial and other non-tangible compensation for those who work in rural and remote areas where health needs are great. It must also include provisions for a performance-based payment
system, the details of which should be left to the accompanying implementation decrees to allow flexibility as the need arises.

- **FHF legal framework**: The governing decrees must be unified and streamlined to provide for uniform implementation schemes and financial sustainability of the FHF system.

- **PTES legal framework**: A new wave of reforms is required (subsequent to the reforms undertaken in 2010) to align PTES toward providing coverage to disadvantaged groups, namely the poor and those suffering from diseases with catastrophic expenses. A targeted database of beneficiaries must be established to exclude richer segments of the population currently taking advantage of PTES.

5.5 CONSIDERATION 5: WHAT GOVERNING BODIES NEED TO BE CREATED OR STRENGTHENED?

To ensure implementation of the short- and medium-term recommendations, two governing bodies in particular need to be created and or strengthened:

- **Supreme Health Council**: This body will set the overall strategy, oversee the functionality of the health system, and ensure that the privileges and obligations of all players are respected and maintained. Major roles of the council will pertain to: monitoring provided services at their pre-agreed fixed prices; upholding the governance and social accountability rights of citizens and workers; and providing relevant feedback to policymakers to ensure smooth operation of the system. Further analysis of the structure, mandate, powers, and flexibility of the council must be agreed upon at a societal level, not forsaking the rights of representation of any major participant in the health sector. Great care should be made in crafting the council's mandates so as not to compromise the ability of elected government officials to pursue the health political agenda upon which they were elected.

- **Quality accreditation organization**: Although MOHP has a national accreditation committee, it lacks much needed capacity and a mandate for a national scale accreditation scheme. Any strategic payer will demand that services be based on acceptable quality levels; hence, the need for an independent quality accreditor capable of assessing, grading, and accrediting different providers. This can be achieved in a phased manner, enabling providers to achieve and maintain contractual eligibility with the new payer. The accreditor's mandate must also extend to private facilities to raise service standards nationwide. The foreseen organization, under any perceived structure, should maintain inherit functional independence from any dominant political influence to sustain the validity and integrity of its assessments.

- **National Independent Regulatory Authority**: An independent regulatory body should be created at the national level to ensure that providers: maintain a certain level of quality of care at facilities; provide services at pre-agreed fixed prices; uphold the governance and social accountability rights of citizens and workers; and provide relevant feedback to policymakers towards a smooth running of the
system. The nature, authority, powers, and housing of such a body should respect the sociopolitical as well as the administrative structure of the current system. At the minimum such a body should be an umbrella body for regulation for health organizations, professionals, and food and drug supplies.

5.6 CONSIDERATION 6: WHAT FURTHER RESEARCH AND STUDIES ARE NEEDED?

Although several studies have examined the major challenges facing the Egyptian health system, critical gaps remain in the understanding of their root causes:

- **Causes and determinants of malnutrition**: While it is documented that Egypt has high levels of malnutrition, it does not vary significantly by income or maternal education as witnessed in several other countries. Therefore, further research is required to understand the unique drivers of malnutrition in the Egyptian context.

- **Drivers and cost of NCDs**: With increasing prevalence and escalating costs associated with NCDs, more research specific to the Egyptian context must be developed to understand drivers and the feasibility of different cost-effective interventions to address them.

- **Disease burden and provider mapping for mental health**: With a growing burden of mental health disease and the need to switch from inpatient-based services to outpatient care, it is important to have better data on disease burden due to different mental health conditions, overlaid with a mapping of providers to treat such conditions.

- **Allocative efficiency of healthcare programs**: Although Egypt has several vertical and horizontal programs within its health system, their efficiency is not well studied. Important unanswered questions include: Which program has the highest health benefit for each pound spent?; What group of people should be targeted for each specific program?; Where should this service be delivered? Further analysis is warranted, especially in light of the anticipated budgetary increases.

- **Decentralization of the health system**: The need for decentralization has long been agreed upon and is now a Constitutional mandate. However, further research is required to understand at what level and to what extent decentralization should take place. The process should safeguard disadvantaged groups and provide them with adequate services while protecting their rights of accountability and inclusion.

5.7 CONSIDERATION 7: HOW WILL IMPLEMENTATION BE MEASURED?

Continuous monitoring and periodic evaluations of the reform program will be critical to its success. Monitoring and evaluation will help track the reforms’ progress and alert policymakers if mid-course corrections are required. Implementation measurement
will be achieved by tracking a set of predefined input, process, output, and outcome indicators at the district and governorate level related to each of the three objectives and developed through a consensus method with key stakeholders. To ensure transparency and facilitate accountability, data on all indicators should be made publicly available (for example, on MOHP’s website).

At the national level, key performance indicators (KPI) will track higher-level outputs and outcomes that measure health status, financial protection, and quality of care both at the national level and disaggregated for disadvantaged populations. In selecting indicators, it is important to consider data that can be feasibly collected and which will vary over the five-year period. Given the reforms’ focus on disadvantaged groups, it is important to disaggregate data to a predefined subpopulation of the “disadvantaged” defined by income, education, and geography. In addition, it is important to limit the number of KPIs to ensure that data reporting is not unwieldy and a coherent story can be told. Thirteen suggested indicators are presented below—specific targets and timelines should be set based on consultations with stakeholders, who will both implement programs and closely monitor their progress.

- **Objective 1: Improve health of disadvantaged groups (national aggregate and among disadvantaged groups)**
  1. Child mortality rate
  2. Maternal mortality ratio
  3. Percent of children immunized
  4. Percent of women assisted during delivery
  5. Number of doses of new Hepatitis C drug regimens (simeprevir or sofosbuvir) distributed
  6. Percent of children classified as stunted (height-for-age)
  7. Percent of adult women classified as obese
  8. Percent of male tobacco smokers

- **Objective 2: Increase financial protection for disadvantaged groups (national aggregate and among disadvantaged groups)**
  9. Incidence of catastrophic health expenditure due to out of pocket payments
  10. Incidence of impoverishment due to out of pocket payments
  11. Poverty gap due to out of pocket payments

- **Objective 3: Improve quality of healthcare delivery in public facilities (national aggregate and among disadvantaged groups)**
  12. Number of public sector facilities accredited
  13. Number and percentage of complaints to grievance redress channels that are solved.
CONCLUSION
6. CONCLUSION

Despite several gains in healthcare in previous decades, Egypt has progress to make still to ensure that social justice is realized in healthcare. While the “Right to Health” is recognized in the new Constitution, health outcomes continue to be unequally distributed and certain populations (defined by income, education, gender, or geography) remain excluded from gains in health outcomes, increases in financial protection, and improvements in healthcare quality. By supporting a “Family Healthcare Services for All by 2030” model with a focus on disadvantaged populations and commitment to ensure that all Egyptians have mandatory health insurance by 2030, current challenges to achieving social justice in health can be addressed.

Based on evidence from pilots in Egypt and global best practice, short- and medium-term recommendations to achieve these objectives can be feasibly implemented (World Bank 2013b). Coupled with the commitment of multiple stakeholders with well-defined roles, increases in fiscal space through improvements in prioritization and efficiency, and a rigorous and regular monitoring and evaluation system, social justice in healthcare can be a reality to all.

The World Bank stands committed to partnering with Egypt to assist with the development and implementation of these reforms, in line with its strategy of creating fair and accountable health systems in the region and overarching commitment to reduce poverty and increase shared prosperity (World Bank 2013a).
REFERENCES


- El-Zanaty and Associates. (2014). Egypt Demographic and Health Survey 2014. Cairo,


• IMS Health. (2012). Egypt Pharmaceutical market data. IMS.


- MOHP. (2012b). Egypt’s Strategic Health Outlook. Cairo: MOHP.


- MOHP. (2014). Law draft by the National Committee for Drafting the Social Health Insurance Law. Cairo.


• Rakha, M.A., A.N. Abdelmoneim, S. Farhoud, S. Pieche, S. Cousens, B. Daelmans, and R. Bahl. (2013). “Does implementation of the IMCI strategy have an impact on child mortality? A retrospective analysis of routine data from Egypt.” BMJ Open 3(1), 1-6. Available at http://bmjopen.bmj.com/content/3/1/e001852.long


• World Bank. (2013b). The impact of universal coverage schemes in the developing
