Input to the Yemen Policy Note no. 4. on Inclusive Services Delivery

Yemen: Immediate Priorities for Post-Conflict Recovery of the Health Sector

WOLD BANK GROUP

Table of Contents

Acknowledgements

The outcome of this note has been a collective work produced through insightful reviews, advices and guidance received from colleagues inside the Bank. Most notable, Dr. Ernest Massiah, Practice Manager, Middle East and North Africa Global Practice Health, Nutrition and Population, Mr. Wilfried Engelke, Sr. Economist, and Mr. Balakrishna Menon Parameswaran, Lead Urban Specialist, GSU12 and others including the Peer Reviewers. The author is most grateful for their valuables comments and contributions. A word of thanks and gratitude is also due to Ms. Raghada Abdelhamied and Ms. Fowzia Yahya Musleh Al-Qobi for their excellent typesetting.

Acronyms

DALYs	Disability Adjusted Life Years
DNA	Damage Needs Assessment
EPI	Expanded Program for Immunization
FCV	Fragility, Conflict and Violence
HESAS	Health Sector Advisory Survey
HFs	Health Facilities
IDPs	Internally Displaced Persons
IMR	Infant Mortality
MAM	Moderate Acute Malnutrition
MDG	Millennium Development Goal
MNCH	Maternal Neonatal and Child Health
MNH	Maternal and Newborn Health
MOPHP	Ministry of Public Health and Population
NCDs	Non-communicable diseases
OOP	Out of Pocket
SAM	Severe Acute Malnutrition
THE	Total Health Expenditure
U5MR	Under Five Mortality
UNICEF	United Nations Children's Fund
WHO	World Health Organization

A. Background

1. This note is a part of a series of policy notes prepared by the World Bank in anticipation of a post-conflict transition in Yemen. These notes aimed to identify immediate priorities for stabilization, recovery and restoration of services and infrastructure in the aftermath of Yemen's current conflict. A subset within these notes focused on ways to restore service delivery in an inclusive manner immediately after conflict. As such, these notes examined short-to-medium-term institutional challenges facing the restoration and improvement of service across sectors. They focused on the immediate post-conflict priorities and challenges facing Energy, Water, Telecommunication, Education, Health, and Transport sectors in restoring services while also contributing to higher-level objectives of addressing systemic inequities and reinforcing trust in the state. The notes make practical suggestions to the Government of Yemen and international development partners to provide immediate post-conflict support to ensure empowerment, accountability, and better governance in service delivery.

2. The current paper focuses specifically on how support to the Health Sector can be supported more effectively to restore services immediately after the conflict in Yemen a more inclusive manner with the threefold objectives of improving health status of the population, providing financial protection against health shocks, and making available high quality care.

B. Introduction: sector situation before conflict

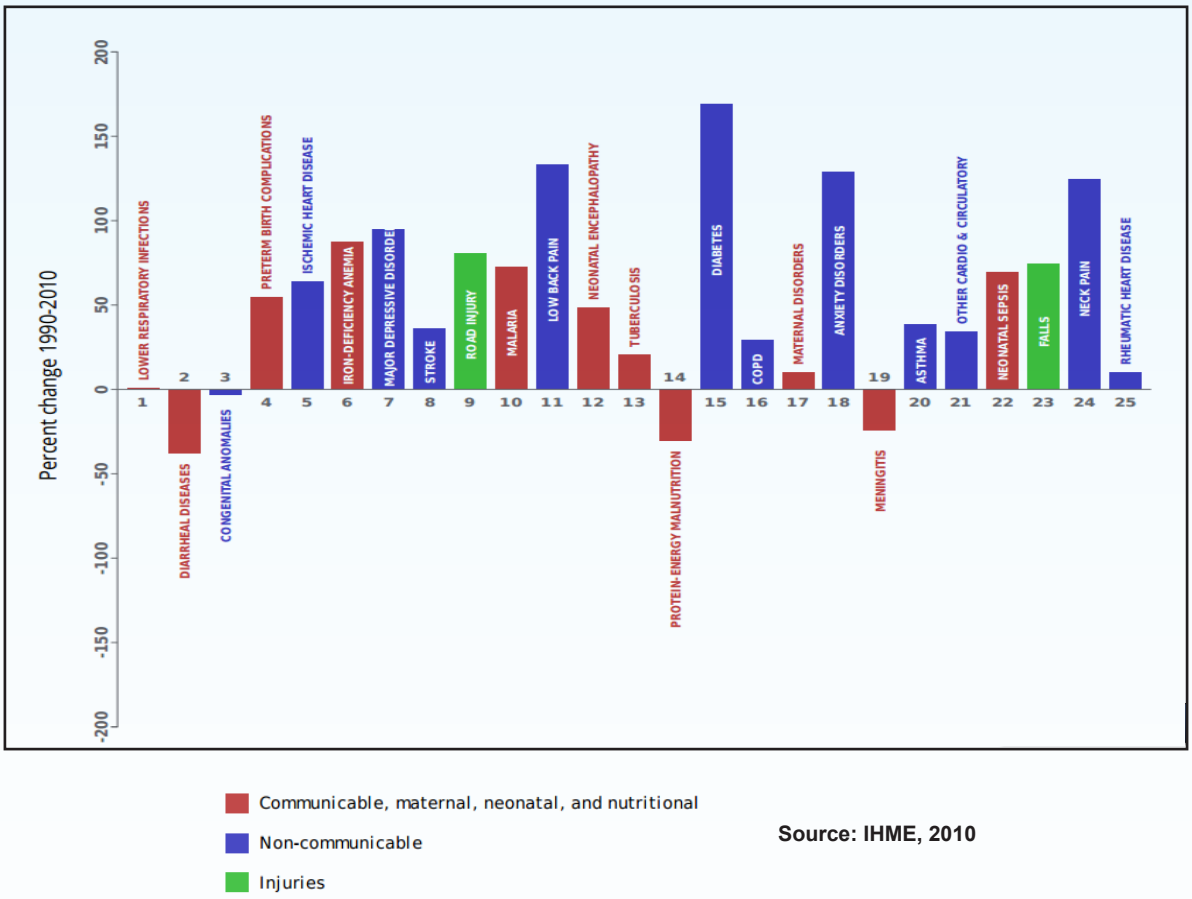
3. Prior to the conflict, the health system in Yemen had significant variations in health status coupled with poor financial protection and an inequitable distribution of resources. Data from 2014, prior to the start of the ongoing conflict, shows a health system with inequitably distributed health outcomes, very limited financial protection, and a lack of needed infrastructure and health workers. The conflict has only exacerbated and worsened the already ailing health system and status in Yemen.

1. Health status

4. Non-communicable diseases (NCDs) are on the rise, yet communicable diseases are still the main cause of death. The leading causes of disability adjusted life years (DALYs) in 2010 in Yemen were lower respiratory infections, diarrheal diseases, and congenital anomalies (Figure 1). Together they account for around 43 percent of all mortalities. Two causes that appeared in the ten leading causes of DALYs in 2010 and not 1990 were road traffic injuries and malaria. Overall, the three risk factors that account for the most disease burden in Yemen (suboptimal breastfeeding, childhood underweight and dietary risks) are avoidable. The leading risk factors for children under 5 and adults aged 15-49 years were childhood underweight and dietary risks, respectively, in 2010.

5. Yemen has made strides with respect to the maternal and child mortality, and is on track to meet the Millennium Development Goal (MDG)-5. The maternal mortality ratio (MMR) remains high at 210 deaths per 100,000 live births and some 6 women die every day due to pregnancy and birth-related complications. While some progress has been made in the last four years to provide women with antenatal healthcare services, most mothers still deliver at home with little or no support. Across the region, Yemen continues to have the lowest level of antenatal care coverage, although according to a recent

Figure 1: Leading causes of DALYs, Yemen, 1990-2010



Source: IHME, 2010

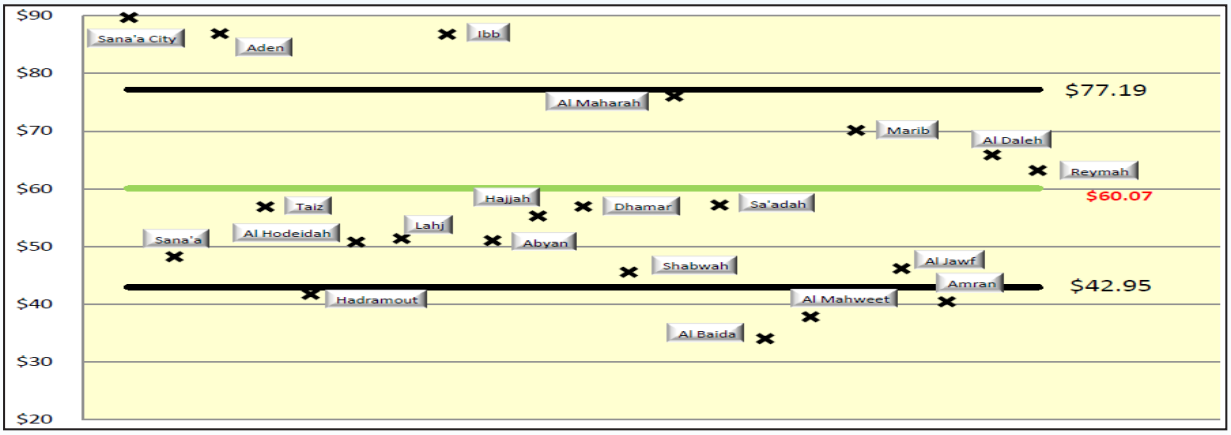
report from the Ministry of Public Health and Population (MOPHP), the proportion of women benefiting from antenatal healthcare services increased from 40 percent to 55 percent between 2006 and 2010. The majority of maternal mortality in Yemen is concentrated among poor women living in rural areas. Poverty is one of the main risk factors for maternal mortality in Yemen. The poorest mothers, compared to the wealthiest, are 75-86 percent less likely to receive prenatal care and have institutional deliveries. Currently, around 40 percent of the population, particularly poor women, has no access to health services. An estimated 84 percent of women nationwide deliver at home, and only 22 percent of women have skilled assistance during delivery. Given the young age at which many girls marry, particularly in rural areas, the adolescent fertility rate is high at 80 births per 1,000 girls aged 15–19 years. In 2011, contraceptive prevalence was low at 28 percent.

6. Malnutrition rates among children in Yemen is one of the highest in the world and characterized by patterns of socio-economic and geographic inequality. Around 58 percent of children under age 5 are stunted (double the global average of 1 in 4). According to United Nations Children's Fund (UNICEF), stunting affects the most marginalized children in Yemen. Rural stunted children account for 55.5 percent of the population as compared to 44.2 percent in urban areas. Similarly, the poorest under-5 children are twice as likely to be stunted compared to those in the

richest communities. Infant (IMR) and under five mortality (U5MR) rates (69/1000 and 78.2/1000 respectively) are among the highest in the world. Another pattern of inequality is manifested through domestic violence, particularly against females and widespread female genital mutilation (38.2 percent).

government's share (WB, 2013) Patterns of geographical and socioeconomic inequity persist. Although the average per capita health expenditure stood at US$ 60, the picture becomes different once stratified by governorates (NHA, 2007). Allocation of resources has been inequitable due to the fact that around 30 percent of

Figure 2: Average per capita Health Expenditures by Governorate, Yemen, 2007



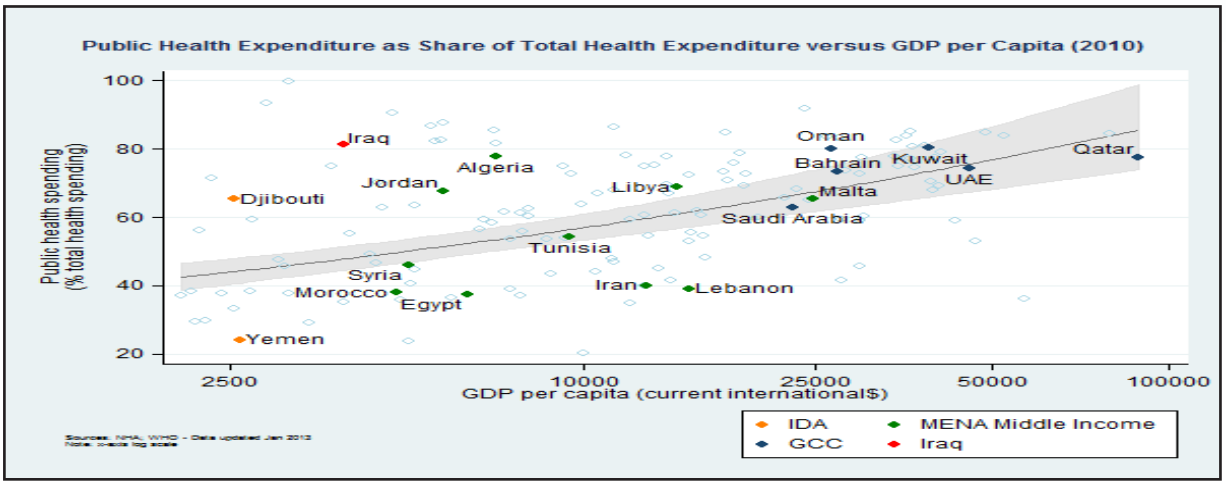
Source: NHA, 2007

2. Financial Protection

7. Spending on health in Yemen was characterized by a low government contribution before the conflict (Figure 2). 5.5 percent of GDP was spent on health expenditure, of which 27 percent was the

total health expenditure (THE) gets spent on treatment abroad for a small number of patients, primarily from better-off families. A number of small-scale and often informal solidarity schemes have developed, and a group of public and private companies have set up health benefit schemes

Figure 3: Public Health Expenditure as % of Total Health Spending, Yemen, 2010

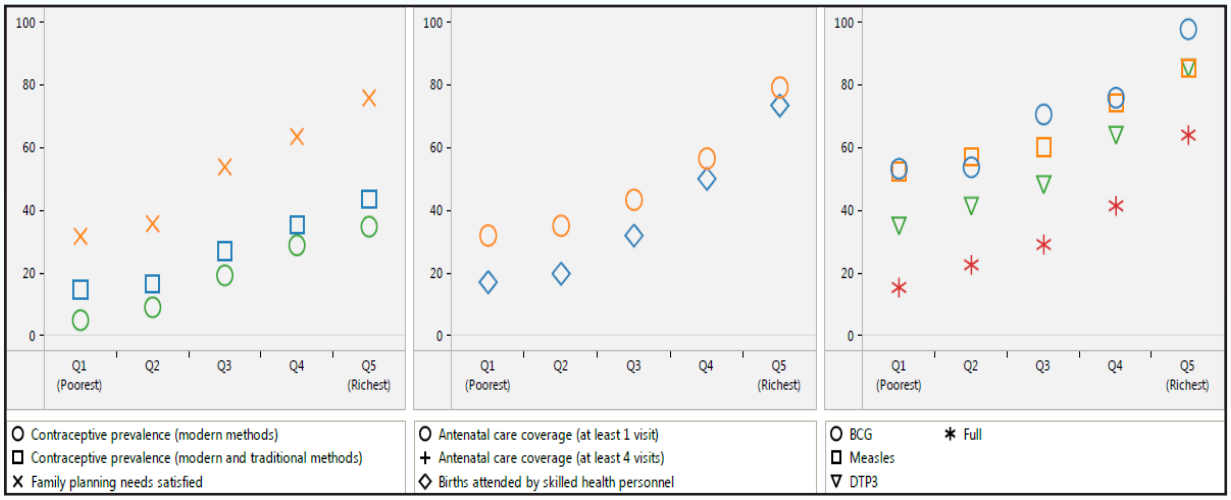


for their employees. Employment-based insurance schemes offer reasonable health services at an average annual cost of YR44 000 (US$200) per employee.

8. In the face of declining public health expenditure, the last decade was characterized by a sharp increase in the share of out of pocket (OOP) in Yemen (Figure 3). Public health expenditure as a percent of the THE has dropped from 55 percent in 2000 to just over 23 percent in 2010 (Pande, et al, 2013). This could be partially attributed to the difficult economic performance and the growth rate of the population. This decrease in the percentage of public health expenditures implies that more services are to be covered through OOP. This is reflected in the persistent upwards trend of OOP expenditures as a percent of THE. Currently, OOP expenditures exceed 70 percent of THE compared to 42 percent in 2000. Among other MENA countries, Yemen has the lowest share of public health spending, as a percent of THE (Pande, et al, 2013).

9. Socioeconomic and geographic disparities of the services provided are evident (Figure 4). The World Health Organization's equity country profile reveals an insightful picture of maternal neonatal and child health (MNCH) services. The poorest quintile is the least privileged for all MNCH services. Similarly, women with low levels of education are receiving less health services compared to those with higher levels. Geographically, rural citizens continue to be disadvantaged in all services (WHO, 2006).

Figure 4: MNCH services by wealth quintiles, Yemen, 2006



Source: WHO, 2006

10. Health insurance in Yemen is limited while pre-paid schemes are unaffordable. Due to the lack of facilities, more than half of Yemenis do not have access to healthcare services, particularly in rural areas where more than two out of three people are excluded from any health care. Although the majority of morbidities and mortalities are avoidable, the resource allocation for primary healthcare does not appear to be a priority. The patterns of gender and geographic inequality become very clear when it comes to the distribution of facilities and services among Yeminis.

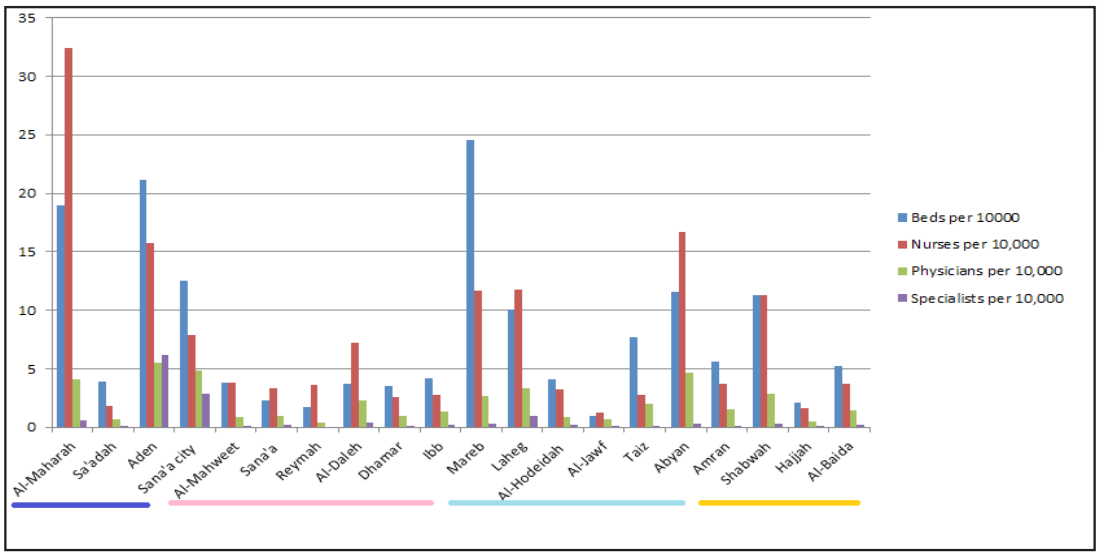
3. Service Delivery and System Responsiveness

11. Healthcare services are characterized by significant levels of dissatisfaction among both patients and providers. According to the Health Sector Advisory Survey (HESAS), this discontent is mainly related to both poor quality and lack of access. The poor quality and quantity of health services are deemed to be one reason that contributes to the ongoing civil unrest and secessionist movements. This could be attributed to the poorly equipped facilities, the acute shortages of drug and supplies, the low coverage of health services, the limited budget allocated for operational costs and staffing, and the low institutional capacity in health management skills and systems.

12. The MOPHP is the government organization responsible for the health sector and is one of the largest public employers in the country. Prior to the conflict and as the main provider of healthcare at all levels of services, the public sector had around 16,695 beds inequitably distributed among the country (2 referral hospitals, 54 general hospitals, 183 district hospitals, 852 health centers, 2929 primary health care units, and 39 health units). Recently, the private sector has been developing fast, mainly in the urban areas. In 2011, it comprised of 175 hospitals, 323 polyclinics, 580 health centers, 1793 clinics, and 770 dental clinics, 99 radiology clinics, 3315 pharmacy, and 4133 drug stores.

13. Yemen was already facing a human resource crisis in public healthcare (Figure 2). There was an overly urban distribution of human resources prior to the conflict. Around 42 percent of physicians are concentrated in only four governorates with a clear shortage of employed female staff. A recent report commissioned by MOPHP before the conflict revealed serious shortages in staff skilled in maternal, neonatal and child health (MNCH). Nationwide, only 60 percent of the 261 obstetricians and only 5 percent of the 794 neonatal nurses needed to staff government health facilities were available.

Figure 2: Health Resources per Province, Yemen, 2011



Source: MOPHP, 2011

C. Conflict related damages and challenges

14. With the start of the current crisis, a new set of challenges emerged that jeopardized the very core foundations of the Yemeni health system and its ability to meet the most basic health and nutrition needs of the population. Essential inputs to the health facilities (HFs) and outreach teams have become scarcer and, in many places, non-existent. This is most evident in: (a) severe shortages of essential medicines and medical supplies required at all levels of care with huge disruptions in procurement, transport and supply-chain capabilities; (b) diminished, and sometimes non-existing, safe potable water from the public domain and lack of essential fuel, power, maintenance, water pumps among others; (c) insufficient operational and logistical resources for essential health and nutrition programs at first level referral centers, especially for emergency obstetric and maternal care as well as referral nutrition services, further risking the lives of hundreds of thousands. Consequently, the Expanded Program for Immunization (EPI) and national vaccination campaigns have been interrupted, threatening the re-emergence of some vaccine preventable diseases and risking the lives of millions of Yemeni children. Also, pockets of new diseases that are usually associated with conflict-stricken countries (for example, cholera and trachoma) are emerging under a health system lacking adequate surveillance and rapid response systems for early detection and treatment.

15. The availability of health services has been greatly hampered by the conflict, and malnutrition among children has worsened. Only 45 percent of HFs are fully functional and the availability of maternal and newborn health (MNH) services, as well as child health and nutrition services stand at 35 percent and 42 percent, respectively. Malnutrition rates are rising in Yemen with children under the age of five and pregnant and lactating women being the most affected. Within these groups, internally displaced persons (IDPs) are most at risk. Around 3.3 million are currently estimated to be malnourished, including 1 million children affected by Moderate Acute Malnutrition (MAM) and 462,000 children suffering from Severe Acute Malnutrition (SAM). Children suffering from MAM are three times more likely to die than their healthy peers; children with SAM are nine times more likely to die. An estimated 45 percent of deaths among children under five in Yemen are attributable to malnutrition.

16. The supply-demand equilibrium of health services has further worsened by the ongoing conflict. Many HFs were rendered non-operational because of the destruction of some or all of the infrastructure. Other facilities were left deserted by staff owing to security risks associated with working at those facilities. This has created a “service vacuum” in areas that were previously considered being stable. The conflict has also generated a new wave of IDPs in certain geographic areas that were straining the already limited resources of existing HFs. Further, the conflict has deepened the economic pressures on most citizens with increasing poverty and unemployment rates, shifting many of those who previously were used to buying health services from the private or NGO sectors to utilize the public system. Those factors have remarkably increased the demand on an already over-strained system.

17. Due to the liquidity issue at the central bank, the government couldn’t regularly cover the operating costs and salaries for civil health personnel which further compromised the system

capacity to address the immediate and urgent health needs of the population. The 1st phase of the Damage Needs Assessment (DNA) which was undertaken by the Bank and other donors indicated a significant physical damage to the already ailing health facility infrastructure across the country and an interruption of the most essential and emergency services due to the lack of medicines, fuel, and means of transportation. Using satellite imagery and social media analytics as of October 01, 2015, this Damage Needs Assessment (DNA) on Yemeni 4 cities (Sanaa, Aden, Taiz, Zinjibar) came with an evidence of a significant damage to the health assets. An approximate amount of USD 484 million will be required to rebuild/reconstruct the damaged health infrastructure in the 4 cities.

D. Key principles for in-conflict and post-conflict contexts

18. Yemen is trapped in a vicious 'cycle of conflict' with chronically weak state institutions directly contributing to the current round of violence. This violence, in turn, has further undermined state institutions thereby portending even more violence for the future. The continued weakening of national institutions has also diminished chances of sustainable peace as any peace-agreement would be undermined without a strong institutional foundation to safeguard its terms. Therefore, any recovery and reconstruction plan post-conflict would also have to mandatorily focus on reinforcing state institutions—while addressing urgent humanitarian needs—to prevent the slide back into conflict. Experiences from around are replete with instances where the singular focus on post-conflict humanitarian relief—without regard for institutional transformations—have ended up being costly missed opportunities for breaking the cycle of violence.

19. There is thus a clear need for new thinking on Yemen to support more sustainable and inclusive ways of service delivery during conflict and immediate post-conflict periods. In this context, the key challenge for Yemen's development partners is to devise new and innovative ways to support the country, to not only recognize the fundamental causes and effects of conflict and fragility but also, importantly, enhance the resilience and coping capabilities of communities and households. Therefore, these notes on inclusive service delivery—including the current note on the Health Sector—propose a new approach that focuses on attending to urgent service delivery needs in the most affected parts of Yemen while also incrementally enhancing inclusiveness, resilience and thus, the effectiveness of service delivery institutions.

20. Historically, the Yemeni health delivery system depended mainly on fixed facilities to provide health services to populations living in the vicinity of the facilities as well as vertical programs to address priority public health problems. During the 90's and 2000's, evidence showed that overdependence on public health fixed facilities was not offering the population the required health and nutrition services because of their inability to reach the entire population and meet their health needs. Further analysis has demonstrated that the system delivery model was suffering from: (a) low outpatient utilization rates; (b) underutilization of public HFs due to issues of access and quality; and (c) lack of provision of health services and essential drugs in public HFs leading to a high bypass rate.

21. For two decades, the World Bank and development partners supported interventions in the country that started introducing outreach health services to those with no or poor accesses to health services as well as making efficient use of resources spent on national vaccination campaigns. The strategy considered providing low cost essential drugs and packaging of health services through outreach interventions. It aimed to ensure coverage of the entire population, including the poor and the near-poor as an approach for poverty alleviation. It recommended payment of lower transportation and direct service provision costs. The new strategy also stressed the importance of integration of services and considered it as one of the main basic principles of decentralizing the provision of basic health and nutrition services and contended to integrate resources and activities of the different vertical programs for example, transportation and supervision visits. Service integration as well as operational cost support were identified as key areas where donor support is most needed.

22. The ongoing World Bank supported Health & Population Project has illustrated some very important lessons that any interventions in the health sector should consider during the short to medium term, notably: (a) a design that is flexible enough to accommodate for the urgent needs of the population wherever and whenever they arise; (b) establishing fast disbursing mechanisms with simple implementation modalities to reach the majority of population with the needed services and thus, ensuring the inclusion of the different population segments; (c) the prudence of preserving and supporting the technical capacity of MOPHP staff as the core element of sustaining the integrity and future prospects of the health system; (d) partnering with leading health and nutrition UN agencies in their capacity as implementing agencies providing the required level of responsiveness in operational manners and plasticity in handling fiduciary issues; and (e) the possibility of providing national public health interventions reaching vast geographic locations and showing positive results on a national scale.

23. The integration of the different service delivery models currently existing in the country is critical to ensure a wider horizontal and vertical equity of service provision and a stronger inclusion of the various segments of the Yemeni population. This integration should rely on the existing public sector structures as a basis for service delivery and bridge any service gaps through local private providers or NGOs where government facilities are not there. At the policy and planning level, a strong coordination is needed among the different stakeholders in the health sector to ensure efficient and effective use of limited resources at the various levels of care.

24. Although the humanitarian situation is dire, any intervention in the health sector should be seeking to bridge the humanitarian-development gap and focus on building the system resilience while addressing the urgent need of the population. This would ensure a smooth and speedy recovery once during the post-conflict phase. Therefore, more investments should be focusing on the local institutional capacity of the health system.

E. Way forward: short to medium term

25. The new paradigm-shift of Bank interventions in FCV contexts allowed the health team to build on the lessons

learnt from other countries and heavily engage with multiple stakeholder on the ground over the last year through the Health and Population and Schistosomiasis Control Projects. Furthermore, the successful partnerships with UNICEF and WHO under the aforementioned projects has set the basis for the new Emergency Health and Nutrition Project in Yemen where an integrated model of service delivery was customized to cater to the various and urgent needs of the vulnerable Yemenis.

26. The way forward for engagement in the health sector on the short to medium term is dependent on the security and conflict situation in Yemen.

Service Delivery

- In case of prolonged conflict; the continued deterioration of the health sector and the accumulated factors for emergence of communicable diseases would lead to a rather different set of population's health needs. This would require an innovative model of service delivery to reach out to these populations and cater to their needs in light of the limited implementation capacity and scarce resources.

- Integration of different service delivery models to provide essential health services would remain as a priority on the short to medium term. This entails a mix of fixed facility, community based, outreach, and mobile teams' services across the country. Local NGOs, in areas where there in available implementation capacity, could also play an important role to fill in the service gaps and reach out to the vulnerable populations. Another area to be considered, whenever possible, is to help people seek service or receive health promotion messages through text messages.

- In case of post-conflict scenario; a parallel focus would be on rehabilitation of the damaged health facilities and supporting the mental health services along with the secondary and tertiary health services. Based on the preliminary findings of the DNA, a significant facility infrastructure work would be needed to establish the required medical infrastructure particularly at the conflict affected areas. This will need to be accompanied by interventions in a few sectors such as, but not limited to, water and sanitation sector to ensure access to safe drinking water.

System responsiveness

- The current acute shortage of health staff in the already ailing health system requires a range of interventions at the short to medium term to address the immediate challenges such as regular payment of salaries to health staff and operating costs for the day-to-day health services.

- Another dimension that should be started immediately is building the capacity of the local institutions and health staff to cope with the current challenges and deliver the essential health services in different contexts. This will need to accompanied by continued analytical assessments and technical analysis of the health impacts of the ongoing conflict as well as the effectiveness of the various interventions along with the service delivery models