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# Lessons from the development process of the Afghanistan integrated package of essential health services

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#### ABSTRACT

In 2017, in the middle of the armed conflict with the Taliban, the Ministry of Public Health decided that the Afghan health system needed a well-defined priority package of health services taking into account the increasing burden of non-communicable diseases and injuries and benefiting from the latest evidence published by DCP3. This leads to a 2-year process involving data analysis, modelling and national consultations, which produce this Integrated Package of Essential health Services (IPEHS). The IPEHS was finalised just before the takeover by the Taliban and could not be implemented. The Afghanistan experience has highlighted the need to address not only the content of a more comprehensive benefit package, but also its implementation and financing. The IPEHS could be used as a basis to help professionals and the new authorities to define their priorities.

#### INTRODUCTION

Despite an increasing number of armed conflict attacks on civilians since 2015, Afghanistan is on the path to universal health coverage (UHC).<sup>1</sup> Between September 2017 and August 2021 (prior to the arrival of the Taliban in power), the Ministry of Public Health (MoPH) set up context-specific health, disease and inter-sectoral priorities. This work was carried out within the framework of Afghanistan's National Health Policy 2015–2020<sup>2</sup> which includes revising its basic package of health services (BPHS) and essential package of health services (EPHS) using data from a number of national surveys, reports, journal articles, a costing study and the strengthening of coordination and cooperation with key partners and line ministries. This work was finalised prior to the arrival of the Taliban regime in August 2021 and was not implemented by the Taliban regime.

#### SUMMARY BOX

- ⇒ The development of a priority package in a country requires evidence and political negotiation.
- ⇒ In Afghanistan, the leadership from the Ministry of Public Health helped build trust, ownership and consensus amongst national actors.
- ⇒ Afghanistan requires to introduce basic management of diabetes and hypertension and emergency care to better address the current burden of disease.

The context for the development of a revised health package is one in which the Afghan government, since 2002, has achieved substantial improvements in the health status of its population despite serious episodes of insecurity. Between 2000 and 2017, the maternal mortality ratio reduced from 1100 to 638 deaths per 100 000 live births,<sup>2</sup> and under-five mortality has reduced from 257 to 55 per 1000 live births between 2000 and 2018.<sup>3</sup>

There is clear evidence that the high level of insecurity in some provinces during the pre-Taliban regime period had a negative effect on the delivery and coverage of health services, especially for maternal health and childhood vaccines,<sup>4</sup> which was later further exacerbated by sanctions post takeover by the Taliban government. Although all provinces in the country increased the coverage of maternal and child health services between 2005 and August 2021,5-7 there remained significant differences between the poorest and the wealthiest populations, between rural and urban areas, and between provinces in terms of health outcomes and utilisation and coverage of health services.<sup>8</sup> <sup>9</sup> Direct out-ofpocket expenditure by households was also high nationally, accounting for 76.5% of total health expenditure in 2018. Donors and the

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government contributed to 19.7% and 3.9% of total health expenditure in 2018, respectively.<sup>10</sup>

Key weaknesses in population health observed in Afghanistan since 1990 were the high burden of communicable diseases, poor status or maternal and newborn health, nutritional conditions and largely neglected non-communicable diseases (NCDs).<sup>11</sup> Among NCDs, ischaemic heart disease, congenital defects and cerebrovascular disease all ranked among the leading causes of premature death,<sup>12</sup> with the additional high burden of mental health disorders.<sup>13 14</sup>

In 2014, injuries from conflict and road injuries ranked second and fifth, respectively, as causes of premature death.<sup>11</sup> Furthermore, deaths from conflict and terror notably rose by almost 1200% between 2005 and 2016.<sup>12</sup> 2017 recorded the highest number of civilian casualties from suicide and complex attacks in a single year in Afghanistan since the United Nations mission in the country began systematic documentation of civilian casualties in 2009. Suicide and complex attacks accounted for 22% of all attacks with 16% of the casualties taking place in Kabul in 2017. In just one attack in the city on 31 May 2017, over 200 people were killed and nearly 600 injured.<sup>15</sup>

#### Priority health packages in Afghanistan

In 2001, after the end of the first Taliban regime, the MoPH had the challenging task of rebuilding the health system including how best to address the key health challenges in the country; especially given that its population's maternal mortality and child mortality rates represented the highest mortality rates in the world.<sup>16</sup> In 2002/2003, the MoPH designed a unique package of health services that helped bring coherence among the health stakeholders in what was then a fragmented health

d 3.9% of total system. Towards the end of 2003, the MoPH supported by its international partners, put in place the BPHS for the primary healthcare level throughout the country. This was followed in 2005 by the Essential Package of Health

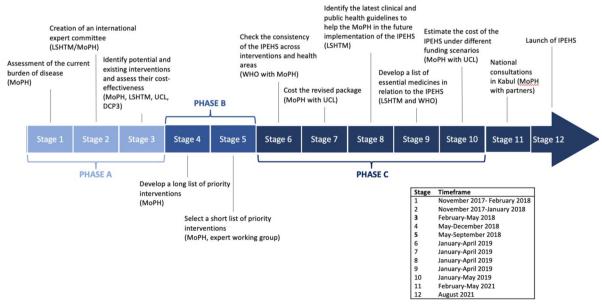
> Services (EPHS) for hospitals up to provincial level.<sup>17</sup> The MoPH and health economists included in the Expert Committee advising the MoPH estimated that US\$235M were spent by government and donors on the BPHS and EPHS in 2018, equivalent to US\$6.7 per capita. The BPHS accounted for 72% (US\$172M) of total spending, whereas the EPHS accounted for around 28% (US\$63M) of total spending.<sup>18</sup> Maternal and child health accounted for around 45% of total BPHS spending. Combined, government and donor spending on the BPHS and EPHS averted an estimated 1.04M disabilityadjusted life years (DALYs). Almost 60% (605 000) of DALYs averted by the BPHS and EPHS were related to maternal and child health interventions.<sup>19</sup>

> In 2018, the MoPH decided that the BPHS and EPHS needed revising in light of the increase burden of disease since 2006 related to NCDs (+2.5% annually) and injuries (+4.4% annually), the international drive towards UHC.<sup>20</sup> and the publication of DCP3.<sup>21</sup> In August 2021 (see figure 1), the new priority package, the Integrated Package of Essential Health Services (IPEHS) was finalised.

#### **PRIORITY SETTING PROCESSES**

#### The various trade-offs

The difficult decisions made in Afghanistan when starting working on the IPEHS in 2018 were about responding both to the epidemiological transition and level of violence generated by armed conflict, while maintaining gains in maternal and child health, ensuring equitable



**Figure 1** The timeline of the development process of the IPEHS in Afghanistan. DCP3, Disease Control Priorities 3; IPEHS, Integrated Package of Essential Health Services; LSHTM, London School of Hygiene and Tropical Medicine; MoPH, Ministry of Public Health; UCL, University College London, universal health coverage.

**BMJ Global Health** The selection criteria defined by the Expert Committee in May 2018 to guide decisions of MoPH and experts included the following: (1) effectiveness: What has been proven to work? (2) local feasibility: local resources exist to deliver? Are there staff in place? Are they trained? Is the intervention supported by existing infrastructure? (3) affordability: Are new drugs and equipment required? Is there a large setup cost?; and (iv) Equity: Will the intervention improve access to care? For whom? The Expert Committee and MoPH also agreed on a set of priority conditions and risk factors to address the current burden of disease in Afghanistan. The priority conditions included reproductive, maternal, newborn and child health, injuries (conflict and road traffic accidents), mental health (substance use, suicide, posttraumatic stress disorder), cardiovascular diseases (heart attack, stroke), undifferentiated emergency presentation (difficulty breathing, shock, meningitis, diarrheal disease, lower respiratory diseases) and diabetes. The priority risk factors identified included undernutrition, over-nutrition, smoking, water sanitation and hygiene, air pollution and hypertension. The MoPH designed a flexible process to examine in-depth the bigger picture that is internal and external to the setting of priorities by the institution to reflect the connection and relationship between the different parts of the health system, and in doing so: 1. MoPH research teams conducted an analysis of the health needs and the health system capacity. 2. An expert committee was established, chaired by the Minister of Public Health and composed of 12 national and international experts including from the DCP3

- task force.
  3. Nine local working groups were formed (one for each of the nine health volumes of DCP3),<sup>21</sup> to create an initial draft of priority interventions based on field experience.
- 4. A number of opportunities created for a wide range of stakeholders to help decide the priorities through consultative workshops and meetings with NGOs, UN agencies, Donors and Presidential office.
- 5. Defined clear selection criteria for the setting of priority interventions and opportunities.
- 6. Costed the existing and new package of health services and the identification of relevant global cost-effective interventions.
- 7. Projections of the fiscal space between 2018 and 2030 conducted on different scenarios.
- 8. Enhancing advocacy and negotiation to mobilise domestic revenue.
- 9. Rigorously examined the short-term and long-term implications of the new package of health services and developing relevant implementation approaches and systems including a tailored monitoring and information system.

At the same time, MoPH determined which of the DCP3 early intersectoral policy interventions was addressed as a priority using standardised and transparent criteria.

access to interventions and providing financial protection—within a highly constrained government and donor budget envelope. Two key questions for the MoPH guided the priority setting process. First, in the current BPHS and EPHS, which interventions are no longer justified as a top priority and which additional health interventions are needed? Second, how to ensure the new package of health services is accessible to the most underprivileged that is, the poorest and the groups of populations living the furthest from primary healthcare facilities?

Priority setting in Afghanistan between 2028 and 2021 was about making trade-offs not only between different health interventions from different disease groups but also between health services, public health interventions and interventions tackling determinants of health. These decisions carried with them value judgements and efficiency (cost-effectiveness)-equity trade-offs. A priority setting process usually takes place in an environment where societal values are at stake and where tensions exist between different perspectives and interests.<sup>22</sup> This process required legitimacy in order to gain any prospect of public and political acceptance. As a result, all decision was justified with rigorous documentation to make sure that every step in the process was cumulative from the previous one.<sup>23</sup>

In terms of governance, the MoPH, led by the Minister of Public Health, drove the revision process. In their role of overseeing this activity, the MoPH core team created and managed nine in-country Working Groups and 'integrated expert opinion from members of the Ministry and the local stakeholder community including international organisations such as United Nations agencies. In Afghanistan, nine multistakeholder Working Groups were set up according to health domains (reproductive, maternal, child and adolescent health; mental health; surgery; cardiovascular health; infectious disease; surgery; cancer; palliative care; rehabilitation and inter-sectoral policy) to provide expertise in reviewing the shortfalls in the BPHS and EPHS. An advisory mechanism in the form of an international Expert Committee was put in place to maximise the use of data and evidence, ensure the adequacy of the methodology, encourage creativity in data analysis and provide accountability for use of the results by the Afghan government as well as by national and global stakeholders'.[24 Page 3]

## A multi-criteria approach

MoPH adopted a multicriteria approach to enable them to have a fair, transparent and mutual process to set priorities.<sup>24</sup> This approach was based on the following principles: (1) use of the latest global and national evidence on burden of disease and cost-effectiveness of interventions, (2) well-defined selection criteria agreed by all key stakeholders, (3) transparent and documented process of selecting interventions and (4) recognition that decisions made are reasonable, combining both analysis of evidence and expert discussions. It also worked on minimising financial risks to people, especially the poor in Afghanistan.

The priority setting process was conducted within the available and projected fiscal space. According to the Ministry of Finance and the 2020 National Health Accounts, more than half (52%) of the national budget was funded by foreign aid, 44.8% by domestic revenue and 3.2% by loan.<sup>25</sup> From the total budget, 5% was allocated to MoPH, of which about 79% was funded by donors covering the BPHS and EPHS. Through the MoPH's budgetary prospect exercise, three possible realistic scenarios for budget expansion were developed in order to cover the potential expansion of services provided under the High Priority Programme for Afghanistan.<sup>26</sup> Based on stable support from international donors, stable economic growth and a slight reduction in out of pocket expenditure, it was estimated that in a low variant projection, the per capita expenditure will increase by one per cent per year. In a medium variant projection, it was estimated that the total health spending per capita will increase by 5%, and in a high variant projection by 8%.<sup>26</sup> Of course, these projections did not include the scenario that the Taliban would take over in August 2021.

#### **ANALYSIS AND TOOL**

#### The use of DCP3 data

The third edition of Disease Control Priorities published between 2015 and 2018 in nine volumes provides a review of evidence on cost-effective interventions to address the burden of disease in low and middle-income countries.<sup>21</sup> It does so by drawing on systematic reviews of economic evaluations, epidemiological data and clinical effectiveness studies, and on the expertise and time of over 500 authors.<sup>27</sup> While DCP3 data are generally considered thorough and to have been constituted in a transparent manner, considerable adaptation must be undertaken when applying it at the country level, especially in those countries, like Afghanistan, where contextually adapted evidence was especially needed given the complexity brought about by sectarian violence and armed conflict. National health officials are advised by DCP3 that its packages of interventions needed to be modified based on local priorities, and that country-specific analyses as to costs and impact should be carried out.

To inform each health system building block, team members consulted additional sources, including the most recently available national health information systems data and results from the<sup>28</sup> Mental Health survey and other national surveys.<sup>29</sup> To develop the list of interventions, working groups compared the DCP3 list of interventions with the existing BPHS and the EPHS. The MoPH decided that the revised package of health services would be unique from community level to provincial level—instead of two distinct packages. This involved prioritising the interventions in DCP3 and assigning them to the different categories of health system level, categorised by health facility type. Contextual knowledge and specialist assessment as to which interventions would be possible given government and partner support at each level were critical for this task.

#### **DALY-driven rationale**

DALYs are a measure of the burden of disease accounting for the number of years lost due to ill health, disability or early death. DALYs 'measure the gap between a population's health and a hypothetical ideal for health achievement'<sup>30</sup> and are used in setting health research priorities, identifying disadvantaged groups and targeting health interventions. While estimates, projections and modelling that are based on mortality—how many deaths could be averted due to a health service being offered are popular and compelling, unlike DALYs they do not capture morbidities such as chronic diseases, mental health, injuries and disabilities, that will have an impact on quality of life.

The Expert Committee took the decision to use DALYs through the Health Interventions Prioritisation tool (HIPtool),<sup>31</sup> a health resource optimisation tool, using context-specific data on burden of disease and intervention cost-effectiveness to help stakeholders identify funding priorities and targets. The reference point of this expert committee consultation, the Essential Universal Health Coverage package published by DCP3, is based on evidence of cost-effectiveness, presenting data in the form of 'cost per DALY averted' (an incremental cost-effectiveness ratio, ICER).<sup>21</sup> DALYs provided a single measure for which to compare interventions across the entire BPHS and EPHS packages. Given the amount of diseases and interventions considered, it is important to note that results might have been less clear to interpret if a variety of outputs were used.

#### Summary of analysis findings

In the first comprehensive list, 149 interventions were included for consideration. For the international expert committee meetings, HIPtool generated estimates of DALYs averted by: (1) existing spending, (2) additional spending projections based on fiscal space assessments, (3) scaling-up existing Reproductive, Maternal, Newborn and Child Health (RMNCH) interventions in the package and (4) optimised spending based on intervention costeffectiveness and burden of disease. The HIPtool optimised spending scenario supported recommendations on the inclusion of emergency and trauma care as well as cost-effective mental health interventions in the IPEHS package.

The IPEHS was organised by seven platforms of the health system: (1) community health post; (2) mobile health teams (MHT); (3) subhealth centre (SHC); (4) basic health centre (BHC); (5) comprehensive health centre (CHC); (6) first referral hospital and (7) second referral hospital. In order to highlight the level of integration and continuum between the various levels of the health system, the interventions were defined by level based on the resources and skills available at the level with an explicit link with the previous or next level of referral (see Annex 1 for the full list of IPEHS interventions).

Nine domains were defined to help structure the interventions: (1) reproductive, maternal and newborn health; (2) child and adolescent health and development; (3) infectious diseases; (4) chronic NCDs; (v) mental, neurological and substance use disorders; (vi) emergency care; (vii) surgical interventions; (viii) palliative care and (ix) rehabilitation.

These nine domains were completed by 11 populationbased interventions such as mass media campaign promoting healthy diet and physical exercise or preparedness strategy in case of infectious disease outbreak.

Finally, the IPEHS was composed of 15inter-sectoral interventions such as regulate transport, industrial, power and household generation emissions to reduce air pollution or ban smoking in public places.

#### **Cost of IPEHS**

Healthcare access, quality and outcomes vary widely across geographies in Afghanistan. Variations in the financing and provision of healthcare services along with population displacements, geographic remoteness, difficult terrain, sociocultural isolation and health awareness contribute to these differences. To address this, a number of provinces were carefully selected for inclusion in the cost analysis to achieve good geographic spread and sufficient representation from each region: Dikundi, Faryab, Takhar, Nangarhar, Paktya, Urzgan and Herat based on geographical representations from Central, North West, North East, East, South, South West, and West, respectively.

The BPHS cost analysis was carried out using the Cost Revenue Analysis Tool Plus (CORE Plus) for MHT, SHC, BHC, CHC and district hospital (DH) levels of the health system. Expenditure data were collected from NGOs from 534 health facilities in seven selected provinces in AFN currency, and it was converted to USD based on an exchange rate of 2020 at 78 AFN.<sup>18</sup> The studied health facilities covered 21% of the total population in 2020. Provincial hospitals (PH) and higher levels of the health system, for the EPHS, were costed separately using hospital data.

The difference between the costs of BPHS and EPHS and IPEHS 2021 was also assessed to understand the costs of supplementary interventions under IPEHS 2021. The health facilities were categorised into two groups primary healthcare services and secondary healthcare services, which included PH. The total additional cost of the supplementary interventions was estimated at US\$39141581. The additional costs of IPEHS compared with BPHS at the primary healthcare level (Community level, Mobile Health Tesm, sub-Health Centre, BHC, CHC, DH) and compared with EPHS at secondary healthcare level (PH and above) were US\$30334630 and US\$8 808 951, respectively. In other words, primary healthcare accounted for 77.5% of the total required increase in IPEHS cost, whereas the cost of the additional secondary service share was 22.5% of the total cost. The overall average per capita cost of IPEHS was US6.9.<sup>18</sup>

#### **METHODOLOGICAL LIMITATIONS**

Getting access to data was a tremendous challenge for the working groups and the international expert committee. As a result, consensus panels were applied to capture expert opinion. This approach can synthesise expert opinion when other data are not available. However, such method is prone to various types of biases. Therefore, more studies on benefit-incidence analysis and cost-effectiveness were necessary for future exercises in Afghanistan to better assess implications on equity and allocative efficiency.

Given the number of interventions, project budget and time constraints to meet a policy reform window, no cost-effectiveness study was conducted in Afghanistan for this prioritisation exercise. HIPtool drew on national cost-analysis data, available by intervention and costeffectiveness data published by DCP3 to estimate existing and potential population health impact for each intervention and for different health packages as a whole. One justification was that DCP3 volumes had just been released providing up-to-date reviews on effectiveness and cost-effectiveness of health interventions at global level-with a focus on low and lower middle income countries. The analysis of these reviews was discussed in the international expert committee to verify the relevance of the DCP3 findings. Using existing evidence and HIPtool enabled us to carry out analyses to quantify trade-offs of different decisions, in terms of population health, iteratively throughout the process and to inform three key discussions on IPEHS design.

The prioritisation exercise was a heavy process mobilising a lot of resources in country and outside. It required more than 2 years to finalise the high-priority package and make sure that concerned parties (senior staff at MoPH, provincial authorities, development partners) were properly engaged. One possibility of reducing these transaction costs could be to regularly update the priority package and organise a review of the package around every 3 years or in line with 5-year national plans.

This prioritisation process greatly benefited from the experience of the two successive ministers as Afghanistan had conducted a similar exercise in 2012. With the arrival of the Taliban, many individuals with high level expertise in Afghanistan left the country. The revision or conduct of such processes in the near future will require political willingness and rebuilding expertise in the country on health economics and public health as well as availability and modality of resource allocation.

#### **LESSONS LEARNT**

The prioritised package, IPEHS, contained 144 health interventions and 14 intersectoral interventions that address the burden of communicable diseases, reproductive, maternal, newborn and child health, chronic diseases and injuries due to armed conflict. It included for the first time cost-effective services for chronic conditions, such as diabetes and hypertension, emergency trauma care and palliative care, while maintaining focus on addressing the high maternal and neonatal mortality rates. The package was finalised in August 2021, just before the Taliban took over the country.

The IPEHS development was supported by Bill and Melind Gates Foundation as well as UN agencies and Sehatmandi donors (World Bank, USAID, European Union, Canada). While there was high-level commitment at the MOPH, the budgetary prospect was very limited and it was met with hesitancy from international donors. The emergence of a new package raised questions among donors on the financial capacity of the government to increase financial commitment to cover the new interventions and ensure no increased out-of-pocket payments.

A set of challenges and needs were identified in revising the health benefits package in Afghanistan. The team faced difficulties in knowing how and when to start the process of revising the BPHS, citing lack of clear vision from the start of what the government thought was most needed in Afghanistan. There was also a clash between the political and health agendas, which led to increased pressure to deliver the revised package before the 2019 elections. This relative short timeline (18 months) to deliver a full revised package leads to a shortened consultation process in country expressed by national stakeholders as a missed opportunity to create ownership. While several governmental departments and provincial health directors were involved in the process of revising the benefit package, there was a realisation that information on the prioritised package was not cascading effectively from top leadership across the health system. Two national consultations were organised in February and May 2021 to overcome this communication gap and receive feedback on the revised package. As a result, the 2019 IPEHS was left aside after the departure of the Minister. It was not until the end of the 2020 that there was revived interest in the IPEHS by the President of Afghanistan. The MoPH decided to finalise the IPEHS by emphasising the national consultation process. University of Geneva was called back to provide guidance and help integrate feedback from national stakeholders into the IPEHS, which resulted in the 2021 IPEHS. A detailed account and review of the priority setting process as a whole was published by Lange *et al.*<sup>23</sup>

Change of MoPH leadership in the middle of the project in 2019 impeded the finalisation of costing the package, its implementation and sustainability. Inadequate commitment and engagement of the Ministry of Finance, low budget allocation and overdependency on donor funding remain major challenges for UHC in Afghanistan. In 2021, the costing of the IPEHS was finalised, but this time, the arrival of the Taliban prevented the MoPH and University of Geneva from developing a realistic implementation plan. Since the Taliban took control over Afghanistan, implementation of the IPEHS is on hold due to the current political situation. The experience in revising the Afghanistan IPEHS highlighted the need to address not only the development of a more comprehensive benefit package but also its implementation, with careful deliberation on the pre-requisites for implementing and financing the HBP and health systems strengthening. The IPEHS can be used as a foundation to define a new priority package under the Taliban rule.

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## Islamic Republic of Afghanistan Ministry of Public Health

## Integrated Package of Essential Health Services

2021

Health for All



#### Ministry of Public Health, Afghanistan

## Integrated Package of Essential Health Services 2021: Health, Medical, and Surgical Interventions

Table 1

Community health post 16,510*	Mobile health teams 309*	Sub-health centre (SHC) 1,001*	Basic health centre (BHC) 874*	Comprehensive health centre (CHC) 433*	First referral hospital 85*	Second referral hospital 27*
2 Community health workers (CHWs), one female and one male	*Staff: 1 male physician; 1 Community Midwife; 1 vaccinator; 1 Nutrition Nurse; 1 Driver (with vehicle) *Can provide Family Health Home (FHH) as alternative for MHTs in remote areas with difficulties in physical access	*Staff: 1 male nurse; 1 community midwife; 1 cleaner/guard, 1 Nutrition counsellor, 1-2 vaccinators	*Staff: 1 female physician; (To be optional) 1 male nurse; 1 community midwife; 1 pharmacy technician; 1 CHS; 1 Nutrition Counsellor; 2 Vaccinator; 2 cleaner/guard	counsellors (nurse); 2 community midwives; 1 Nutrition counsellor; 1 community health supervisor; 2 vaccinators; 1 laboratory technician;	*Staff: 1 Hospital Director; 1 Nursing Director; 1 Administrator; 2 Surgeons; 1 Obstetric and Gynaecologist; 1 Pedestrian; 3 General Practitioners; 3 Operating theatre and sterilization (nurse); 5 Midwives; 8 Ward Nurse; 2 Aesthetic Nurse; 2 nurses for emergency room and outpatient department; 2 Physiotherapist; 2 Pharmacist; 2 x-ray technician; 3 Laboratory Technician; 1 blood bank	*Staff: 1 Hospital Director; 1 Nursing Director; 1 Administrator; 4 surgeons; 2 anaesthetist; 4 obstetrician /gynaecologists; 2 paediatricians; 3 medical specialists; 1 ophthalmologist; 1 orthopaedist/traumatologis t; 10 general practitioners); 1 dentist; 5 nurses; 9 midwives; 16 ward nurses; 3 anaesthetic nurses; 6 nurses for emergency room and outpatient department; 1 psychiatrist; 2 psychologist

A. Reproductive, Maternal an	d Newborn Health Intervention	as = 33 of which 20 are MoPF		drivers (with ambulance)	technician, 1 Dental Technician;2 Nutrition counsellor; 2 psychosocial counsellor; 4 Vaccinator; 2 Administration (procurement, accounting, human resource, medical record, clerk); 1Community Health Supervisor; 1 Maintenance; 5 Cleaner, waste management and grounds (gardener); 3 Laundry; 2 Cook; 2 Driver; 4 Guard (porter)	(1 male and 1 female), 2 psychosocial counsellor; 4 physiotherapist; 4 pharmacists; 1 radiologist; 2 x-ray technicians; 4 laboratory technicians; 2 blood bank technician; 2 dental technician; 2 Nutrition counsellor; 4 vaccinators; 2 technical assistants; 4 Administration; 2 Storekeeper; 4 Maintenance; 20 Cleaners, waste management, and grounds (gardeners); 4 Laundry; 4 Cook; 2 tailor, 1 mullah, 4 Drivers (and porters); 2 tailors; 8 Guards
**C1. Family health action groups especially for support when there is domestic violence, for newborn care, and nutrition education	See also mental health section	See also mental health section	See also mental health section	See also mental health section		

Îr			1	1		1
<sup>^</sup> C2. Provision of appropriate vitamin and mineral supplementation (including vitamin D), iron folic acid tablets, albendazole, and vitamin A to pregnant and lactating women and refer eligible women for tetanus vaccination	MHT1. Provision of mineral supplementation (including vitamin D and calcium), iron folic acid tablets, albendazole, and vitamin A and tetanus vaccination	S1. At least 4 antenatal care visits by pregnant women that includes essential education on maternal health and family planning, support for those experiencing domestic violence, recognition of danger signs for hypertensive disorders and gestational diabetes, promotion of healthy diet and relevant vitamin and mineral supplementation (including vitamin D), iron folic acid tablets, albendazole, and vitamin A. HIV education and counselling, and tetanus vaccination	B1. At least 4 antenatal care visits by pregnant women that includes essential education on maternal health and family planning, support for those experiencing domestic violence, recognition of danger signs for hypertensive disorders and gestational diabetes, promotion of healthy diet and relevant vitamin and mineral supplementation (including vitamin D), iron folic acid tablets, albendazole, and vitamin A. HIV education and counselling, and tetanus vaccination	<sup>^</sup> CHC1. Comprehensive antenatal care for complicated pregnancy including management of hypertensive disorders, gestational diabetes, PMTCT of HIV, vitamin and mineral supplementation (including vitamin D), iron folic acid tablets, albendazole, and vitamin A and nutrition interventions	<sup>^</sup> DH1. Comprehensive antenatal care for complicated pregnancy, including management of hypertensive disorders, gestational diabetes, PMTCT of HIV, vitamin and mineral supplementation (including vitamin D), iron folic acid tablets, albendazole, and vitamin A and relevant nutrition interventions	<sup>^</sup> PH1. Comprehensive antenatal care for complicated pregnancy, including management of hypertensive disorders, gestational diabetes, PMTCT of HIV, vitamin and mineral supplementation (including vitamin D), iron folic acid tablets, albendazole, and vitamin A and nutrition interventions
C3. Information on recognition of signs of pre- term labour	<sup>^</sup> MHT2. Early detection of pre-term labour and premature rupture of membranes with timely referral and first dose of antibiotic if indicated	^S2. Early detection of pre- term labour and premature rupture of membranes with timely referral and first dose of antibiotic if indicated	<sup>^</sup> B2. Early detection of pre- term labour and premature rupture of membranes with timely referral and first dose of antibiotic if indicated	<sup>^</sup> CHC2. Early detection of pre-term labour and premature rupture of membranes with timely referral and first dose of antibiotic if indicated	<sup>^</sup> DH2. Management of preterm labour and pre- term pre-labour rupture of membranes with antenatal corticosteroids and antibiotic as indicated	<sup>^</sup> PH2. Management of pre- term labour and pre-term pre-labour rupture of membranes with antenatal corticosteroids and antibiotic as indicated
		S3. Early detection of signs of pre-eclampsia with timely referral	<sup>^</sup> B3. Initial stabilization and management of eclampsia with intra-muscular injection of magnesium sulphate, and transfer to hospital	<sup>^</sup> CHC3. Initial stabilization and management of eclampsia with intra- muscular or intravenous loading dose of magnesium	<sup>^</sup> DH3. Comprehensive management of eclampsia [FLH4]	^PH3. Comprehensive management of eclampsia

	<sup>^</sup> MHT4. In remote areas, initial treatment of obstetric or delivery complications prior to transfer	delivery in low-risk women and adolescents (BEmONC), including	<sup>^</sup> B4. Management of labour and delivery in low-risk women and adolescents (BEmONC), including initial treatment of obstetric or delivery complications prior to transfer	sulphate, and transfer to hos[ital ^CHC4. Management of labour and delivery in low-risk women and adolescents (BEmONC), including initial treatment of obstetric or delivery complications prior to transfer	risk women and adolescents including caesarean delivery	<sup>^</sup> PH4. Management of labour and delivery in high- risk women and adolescents including caesarean delivery (CEmONC)
^C4. Promotion of kangaroo care and early breastfeeding and helping babies breathe interventions	MHT5. Helping babies breathe interventions	^S5. Helping babies breathe interventions	^B5. Helping babies breathe interventions	<sup>^</sup> CHC5. Helping babies breathe interventions and management of newborn complications, including jaundice, neonatal meningitis, and other very serious infections requiring continuous supportive care (intravenous fluids, oxygen, etc.)	<sup>^</sup> DH5. Helping babies breathe interventions and management of newborn complications, including jaundice, neonatal meningitis, and other very serious infections requiring continuous supportive care (intravenous fluids, oxygen, etc.)	^PH5. Helping babies breathe interventions and management of newborn complications, including jaundice, neonatal meningitis, and other very serious infections requiring continuous supportive care (intravenous fluids, oxygen, etc.)
C5. Post-natal home visit within 24 hours	<sup>^</sup> MHT'6. Referral for clinical signs of pre and post natal maternal and neo-natal danger signs especially maternal sepsis	<sup>^</sup> S6. Early recognition and referral for clinical signs of pre and post natal maternal and neo-natal danger signs especially maternal sepsis	<sup>^</sup> B6. Early recognition and referral for clinical signs of maternal sepsis	<sup>^</sup> CHC6. Early recognition and referral for clinical signs of maternal sepsis	<sup>^</sup> DH6. Management of maternal sepsis, including early detection	^PH6. Management of maternal sepsis
C6. Post-natal reproductive health visit in home or family health house (FHH) that includes distribution of family planning commodities, resumption of	MHT7. Distribution of family planning commodities	S7. Post-natal visit that includes advice about birth spacing, family planning, resumption of sexual activity and pelvic floor	B7. Post-natal visit that includes advice about birth spacing, family planning, resumption of sexual activity, and pelvic floor exercises, and	CHC7. Post-natal visit that includes advice about birth spacing, family planning, resumption of sexual activity, and pelvic	spacing, family planning,	PH7. Post-natal visit that includes advice about birth spacing, family planning, resumption of sexual activity, and pelvic floor exercises

sexual activity and pelvic floor exercises		exercises, and complete the TD vaccine schedule	complete the TD vaccine schedule	floor exercises, and complete the TD vaccine schedule		
	MHT8. Counselling and referral for miscarriage or incomplete, or missed abortion	S8. Counselling and referral for miscarriage or incomplete, or missed abortion	<sup>^</sup> B8. Management of miscarriage or incomplete or missed abortion and post abortion care [HC2]	<sup>^</sup> CHC8. Termination of pregnancy for medical reasons including by manual vacuum aspiration	<sup>^</sup> DH8. Surgical termination of pregnancy for medical reasons by manual vacuum aspiration and dilation and curettage	<sup>^</sup> PH8. Surgical termination of pregnancy for medical reasons by manual vacuum aspiration and dilation and curettage
					<sup>^</sup> DH9. Operative treatment for ectopic pregnancy or ovarian cyst torsion	^PH9. Operative treatment for ectopic pregnancy or ovarian cyst torsion [
					<sup>^</sup> DH10. Hysterectomy for uterine rupture or intractable postpartum haemorrhage	^PH10. Hysterectomy for uterine rupture or intractable postpartum haemorrhage
C7. Provision of condoms and hormonal contraceptives including emergency contraceptives	MHT9. Administration of long-acting contraceptive methods	^S9. Referral for, or where available, administration of, long-acting contraceptive methods	^B9. Insertion and removal of long-acting contraceptives	<sup>^</sup> CHC9. Insertion and removal of long-acting contraceptives	0	<sup>^</sup> PH12. Surgical methods of contraception including tubal ligation and vasectomy
					DH12. Repair of obstetric fistula	PH13. Repair of obstetric fistula
				^C10. Post gender- based violence care, including provision of emergency contraception, and rape response referral (medical and judicial) [	<sup>^</sup> DH13. Post gender-based violence care, including provision of emergency contraception, and rape response referral (medical and judicial)	^PH14. Post gender-based violence care including provision of emergency contraception, and rape response referral (medical and judicial)
C8. Promotion of maternal nutrition by nutrition situation assessment through BMI, MUAC, and height, weight measurement	MHT10. Promotion of maternal nutrition by nutrition situation assessment through BMI, MUAC, and height, weight measurement and giving	SHC10. Promotion of maternal nutrition by nutrition situation assessment through BMI, MUAC, and height, weight measurement and giving	B10. Promotion of maternal nutrition by nutrition situation assessment through BMI, MUAC, and height, weight measurement and giving	CHC11. Promotion of maternal nutrition by nutrition situation assessment through BMI, MUAC, and height, weight	maternal nutrition by	PH15. Promotion of maternal nutrition by nutrition situation assessment through BMI, MUAC, and height, weight measurement and giving

and giving proper nutrition counselling accordingly	proper nutrition counselling accordingly	proper nutrition counselling accordingly	proper nutrition counselling accordingly	measurement and giving proper nutrition counselling accordingly		proper nutrition counselling accordingly
	-		I high priority for implementation			
For treatment of acute injection C9. Monthly growth monitoring and health promotion for children under 5 with referral for malnutrition or other complications and screening (oedema, MUAC measurement)	(oedema, MUAC, weight per height measurement) and referral for malnutrition or other	S11. Screening (oedema, MUAC, weight per height measurement) and monthly growth monitoring and health promotion for children under 5 with referral for complicated malnutrition cases	B11. Screening (oedema, MUAC, weight per height measurement) and monthly growth monitoring and health promotion for children under 5 with referral for complicated malnutrition cases	CHC12. Screening (oedema, MUAC, weight per height measurement) and monthly growth monitoring and health promotion for children under 5 with referral for complicated malnutrition cases	DH15. Screening (oedema, MUAC, weight per height measurement) and monthly growth monitoring and health promotion for children under 5 with referral for malnutrition or other complications	PH16. Monthly growth monitoring and health promotion for children under 5 with referral for malnutrition or other complications
C10. Recognition of danger signs per IMCI protocols and referral as indicated	MHT12. Recognition of danger signs per IMCI protocols and referral as indicated	S12. Recognition of danger signs and management per IMCI protocols and referral as indicated	B12. Recognition of danger signs and management per IMCI protocols and referral as indicated	CHC13. Recognition of danger signs and management per IMCI protocols and referral as indicated	DH16. Triage of children on arrival with validated instrument (e.g., WHO/ICRC triage tool) and syndromic management as indicated	PH17. Triage of children on arrival with validated instrument (e.g., WHO/ICRC triage tool) and syndromic management as indicated
		S13. Routine visits to promote early child development, monitoring for expected developmental milestones and referral for delay in development	B13. Improve early child development through introduction of early child development services	CHC14. Improve early child development through introduction of early child development services	DH17. Targeted therapeutic programmes for children referred with developmental delays including motor, sensory, and language stimulation	PH18. Targeted therapeutic programmes for children referred with developmental delays including motor, sensory, and language stimulation
C11. Promotion of relevant childhood nutrition interventions		S14. Promotion of relevant childhood nutrition interventions and	<sup>^</sup> B14. Management of moderate and severe acute malnutrition	<sup>^</sup> CHC15. Management of moderate and non- complicated severe acute malnutrition	<sup>^</sup> DH18. Management of moderate and severe acute malnutrition associated with serious infection	<sup>^</sup> PH19. Management of moderate and severe acute malnutrition associated with serious infection

		management of moderate acute malnutrition		associated with serious infection		according to clinical feeding protocols
C12. Promotion of initial breastfeeding, complementary breastfeeding, food demonstration, complementary feeding and micronutrient powder distribution and maternal nutrition	MHT13. Promotion of initial breastfeeding, complementary breastfeeding, food demonstration, complementary feeding and micronutrient powder distribution and maternal nutrition	SHC15. Promotion of baby friendly initiative (BFI)	B15. Promotion of baby friendly initiative (BFI)	CHC16. Promotion of baby friendly initiative (BFI)	DH19. Promotion of baby friendly initiative (BFI)	PH20. Promotion of baby friendly initiative (BFI
^C13. Education on hand washing and safe disposal of children's faeces	<sup>^</sup> MHT14. Basic treatment of acute diarrhoea including oral fluids and zinc tablet	^S16. Basic treatment of acute diarrhoea including oral fluids	^B16. Basic treatment of acute diarrhoea including oral fluids	<sup>^</sup> CHC17. Advanced treatment of severe diarrhoea including IV fluids	<sup>^</sup> DH20. Advanced treatment of severe diarrhoea including IV fluids	<sup>^</sup> PH21. Advanced treatment of severe diarrhoea including IV fluids
C14. Periodic outreach initiatives for age appropriate child vaccination or refer for vaccination	<sup>^</sup> MHT15. Routine age appropriate immunization or refer for vaccination	^S17. Routine age appropriate immunization	<sup>^</sup> B17. Routine age appropriate immunization	<sup>^</sup> CHC18. Routine age appropriate immunization	<sup>^</sup> DH20. Routine age appropriate immunization	<sup>^</sup> PH22. Routine age appropriate immunization
C15. Promotion of child safety including prevention of road traffic injury, falls and poisoning		S18. Promotion of child safety including prevention of road traffic injury, falls and poisoning	B18. Promotion of child safety including prevention of road traffic injury, falls and poisoning	CHC19. Promotion of child safety including prevention of road traffic injury, falls and poisoning		
			B19. Early identification of lead poisoning and counselling of families to reduce or prevent exposure to lead in the environment	poisoning and	DH21. Early identification of lead poisoning and counselling of families to reduce or prevent	PH23. Early identification of lead poisoning and counselling of families to reduce or prevent

C16. Treatment of acute pharyngitis in children to prevent rheumatic fever	MHT16. Treatment of acute pharyngitis in children to prevent rheumatic fever	S19. Treatment of acute pharyngitis in children to prevent rheumatic fever	B20. Treatment of acute pharyngitis in children to prevent rheumatic fever	CHC21. Treatment of acute pharyngitis in children to prevent rheumatic fever	DH22.Treatment of acute pharyngitis in children to prevent rheumatic fever	PH24.Treatment of acute pharyngitis in children to prevent rheumatic fever
C. Infections Diseases Interver	ntions = 18 of which 11 are M	oPH high priority for implement S20. Targeted age based and risk-based vaccinations for adults including tetanus, pneumococcus, influenza, hepatitis B, and any other relevant vaccinations	B21. Targeted age based and risk-based vaccinations for adults including tetanus, pneumococcus, influenza, hepatitis B, and any other relevant vaccinations	CHC22. Targeted age based and risk-based vaccinations for adults (including tetanus, pneumococcus, influenza, hepatitis B, and any other relevant vaccinations	DH23. Targeted age based and risk-based vaccinations for adults including tetanus, pneumococcus, influenza, hepatitis B, and any other relevant vaccinations	PH25. Targeted age based and risk-based vaccinations for adults including tetanus, pneumococcus, influenza, hepatitis B, and any other relevant vaccinations
^C17. Mass helminthiases medicine administration	<sup>^</sup> MHT18. Mass helminthiases medicine administration	^S21. Mass helminthiases medicine administration				
		^S22. Early detection and treatment of leishmaniasis	^B22. Early detection and treatment of leishmaniasis	CHC23. Clinical diagnosis and treatment of Leishmaniasis with sodium stibogluconate (SSG) based on guideline	DH24. Clinical diagnosis and treatment of Leishmaniasis with sodium stibogluconate (SSG) based on guideline	PH26. Clinical diagnosis and treatment of Leishmaniasis with sodium stibogluconate (SSG) based on guideline
		^S23. HIV education and counselling, and provision of condoms for high-risk individuals	^B23. Provider initiated testing and counselling for HIV, sexually transmitted infections, and hepatitis, including for adolescents, with rapid treatment of sexually transmitted infections, and referral for the immediate starting of treatment for those testing positive for HIV	^CHC24. Provider initiated testing and counselling for HIV, sexually transmitted infections, and hepatitis, including for adolescents, with immediate treatment of sexually transmitted infections, provision of PrEP where	<sup>^</sup> DH25. Provider initiated testing and counselling for HIV, sexually transmitted infections, and hepatitis, including for adolescents, with immediate treatment of sexually transmitted infections, provision of PrEP where relevant, preventive therapies for children born to mothers	<sup>^</sup> PH27. Provider initiated testing and counselling for HIV, sexually transmitted infections, and hepatitis, including for adolescents, with immediate treatment of sexually transmitted infections, provision of PrEP where relevant, preventive therapies for children born to mothers

		relevant, and starting and on-going monitoring of appropriate treatment for those testing positive for HIV	with HIV, and starting and on-going monitoring of appropriate treatment for those testing positive for	with HIV, and the starting and on-going monitoring of appropriate treatment for those testing positive for HIV
		CHC25. Following a new diagnosis of HIV, initial and annual screening for latent tuberculosis infection, initiation of isoniazid preventive therapy among all with positive screen but no evidence of active tuberculosis	DH26. Following a new diagnosis of HIV, initial and annual screening for latent tuberculosis infection, initiation of isoniazid preventive therapy among all with positive screen but no evidence of active TB	PH28. Following a new diagnosis of HIV, initial and annual screening for latent tuberculosis infection, initiation of isoniazid preventive therapy among all with positive screen but no evidence of active tuberculosis
		<sup>^</sup> CHC26. Provider initiated diagnosis of tuberculosis using sputum smear, and initiation of first line and second line treatment per current WHO guidelines for drug susceptible tuberculosis; referral for confirmation, assessment of drug resistance, and treatment of drug resistant tuberculosis	<sup>^</sup> DH27. Confirmation, further assessment of drug resistance, and treatment of drug resistant tuberculosis	<sup>^</sup> PH29. Drug susceptibility testing for cases of treatment failure and tertiary referral as needed; enrolment of those with MDR-TB for treatment
		CHC27. For PLHIV and children under 5	DH28. For PLHIV and children under 5 who are close contacts of individuals	PH30. For PLHIV and children under 5 who are close contacts of individuals

				of individuals with active TB, perform symptom screening, chest x-ray, and preventive therapy	with active TB, perform symptom screening, chest x-ray, and preventive therapy	with active TB, perform symptom screening, chest x-ray, and preventive therapy
	MHT19. Referral for HIV testing for diagnosed TB cases	S24. Referral for HIV testing for diagnosed TB cases	B24. Referral for HIV testing for diagnosed TB cases	<sup>^</sup> CHC28. Screening for HIV in all individuals with a diagnosis of active tuberculosis; if HIV present, initiation of ARV treatment and HIV care	<sup>^</sup> DH29. Screening for HIV in all individuals with a diagnosis of active tuberculosis; if HIV present, initiation of ARV treatment and HIV care	^PH31. Screening for HIV in all individuals with a diagnosis of active tuberculosis; if HIV present, initiation of ARV treatment and HIV care
<sup>^</sup> C18. In high and low prevalence areas use of rapid diagnostic test for the P. vivax and P. Falciparum malaria with treatment with relevant anti-malarial medicines based on National Treatment Guideline (NTG)	<sup>^</sup> MHT20. Treatment of malaria diagnosed by rapid diagnostic test with relevant oral/rectal anti-malarial medicines based on NTG	<sup>^</sup> S25. In high prevalence areas diagnosed by rapid tests and treatment with relevant anti-malarial medicines based on NTG	^B25. Treatment of malaria diagnosed by rapid diagnostic test with relevant oral/rectal anti-malarial medicines based on NTG	<sup>^</sup> CHC29. Treatment of malaria diagnosed by microscopy with relevant oral anti- malarial medicines based on NTG	<sup>^</sup> DH30. Management of non-complicated and severe malaria including parenteral artesunate and full course of ACT based on NTG	<sup>^</sup> PH32. Management of non-complicated and severe malaria including parenteral artesunate and full course of ACT based on NTG
C19. Provision of insecticide-treated nets to households in Malaria high- risk areas through mass campaign	households in Malaria high- risk areas through mass	S26. Provision of insecticide-treated nets to children and pregnant women in high-risk areas through Ante Natal Care visits (ANC)	B26. Provision of insecticide- treated nets to children and pregnant women in high-risk areas through Ante Natal Care visits (ANC)	CHC30. Provision of insecticide-treated nets to children and pregnant women in high-risk areas through Ante Natal Care visits (ANC)	DH31. Provision of insecticide-treated nets to children and pregnant women in high-risk areas through Ante Natal Care visits (ANC)	PH33. Provision of insecticide-treated nets to children and pregnant women in high-risk areas through Ante Natal Care visits (ANC)

C20. In the context of an emerging infectious outbreak, disseminate advice and guidance on how to recognise early symptoms and signs and when to seek medical attention	MHT22. Only at time of risk for outbreak, basic case-based syndromic surveillance and reporting with contact with bodily fluids precautions	S27. Only at time of risk for outbreak, basic case-based syndromic surveillance and reporting with contact precautions	B27. Only at time of risk for outbreak, basic case-based syndromic surveillance and reporting with contact precautions	CHC31. Only at time of risk for outbreak, basic case-based syndromic surveillance and reporting with contact precautions	DH32. Case-based syndromic surveillance in emergency rooms/units and reporting with basic communicable disease isolation	PH34. Case-based syndromic surveillance in emergency rooms or units and reporting with advanced communicable disease isolation
					DH33. Diagnosis and vaccination for rabies	PH35. Diagnosis and vaccination for rabies
C21. Health education and counselling on HIV, TB and Malaria	MHT23. Health education and counselling on HIV, TB and Malaria	S28. Health education and counselling on HIV, TB and Malaria	B28. Health education and counselling on HIV, TB and Malaria	CHC32. Health education and counselling on HIV, TB and Malaria	DH34. Health education and counselling on HIV, TB and Malaria	PH36. Health education and counselling on HIV, TB and Malaria
C22. Identification and referral of presumptive TB cases	MHT24. Identification, referral, and sample transportation of presumptive TB cases	S29. Identification, referral, and sample transportation of presumptive TB cases	B29. Identification, referral, and sample transportation of presumptive TB cases	CHC33. Identification and diagnosis of presumptive TB cases, including identification of drug resistant TB strains	DH35. Identification and diagnosis of presumptive TB cases, including identification of drug resistant TB strains	PH37. Identification and diagnosis of presumptive TB cases, including identification of drug- resistant TB strains

up of diagnosed TB cases	MHT25. Treatment and follow up of diagnosed TB cases and provision of IPT to TB contacts	S30. Treatment and follow up of diagnosed TB cases and provision of IPT to TB contacts	B30. Treatment and follow up of diagnosed TB cases and provision of IPT to TB contacts	CHC34. Treatment and follow up of diagnosed TB cases and provision of IPT to TB contacts	DH36. Treatment of diagnosed TB cases and provision of IPT to TB contacts	PH38. Treatment of diagnosed TB cases and provision of IPT to TB contacts
C24. Active contact tracing of all Drug susceptible and Drug Resistant TB cases through household visits	MHT26. Active contact tracing of all Drug susceptible and Drug Resistant TB cases through household visits	S31. Active contact tracing of all Drug susceptible and Drug Resistant TB cases through household visits	B31. Active contact tracing of all Drug susceptible and Drug Resistant TB cases through household visits	CHC35. Active contact tracing of all Drug susceptible and Drug Resistant TB cases through household visits		
D. Chronic Non-Communical	ble Disease Interventions = 7 oj	f which 3 are MoPH high prior	rity for implementation			
			^B32. Screening for diabetes among at-risk adults, and continuation of prescribed treatment, including for control of glycaemia, blood pressure and lipids, and consistent foot care	<sup>^</sup> CHC36. Screening and management of diabetes among at risk adults, including initiation of prescriptions for glycaemic control, and management of blood pressure and lipids	including initiation of prescriptions for glycaemic control, and management	^PH39. Screening and management of diabetes among at risk adults, including initiation of prescriptions for glycaemic control, and management of blood pressure and lipids
	MHT27. Blood pressure measurement in those aged 40 years and above	S32. Periodic screening for hypertension for all adults and continuation of prescribed treatment	B33. Periodic screening for hypertension for all adults and continuation of prescribed treatment	hypertension, evidence of associated end	DH38. Initiation of treatment among individuals with severe hypertension, evidence of associated end organ changes or other high-risk factors	PH40. Initiation of treatment among individuals with severe hypertension, evidence of associated end organ changes or other high-risk factors
				<sup>^</sup> CHC38. On-going management and monitoring of chronic	<sup>^</sup> DH39. On-going management and monitoring of chronic	<sup>^</sup> PH41. On-going management and monitoring of chronic

	cardiovascular disease with continuation of prescribed treatment to reduce risk of further events	cardiovascular disease with continuation of prescribed treatment to reduce risk of further events	cardiovascular disease with continuation of prescribed treatment to reduce risk of further events
B34. Chronic management of asthma and chronic obstructive pulmonary disorder with low dose inhaled corticosteroids and long acting bronchodilators	CHC39. Chronic management of asthma and chronic obstructive pulmonary disorder with low dose inhaled corticosteroids and long acting bronchodilators.	DH40. Management of acute exacerbations of asthma and chronic obstructive pulmonary disorder See also emergency care section	PH42. Management of acute exacerbations of asthma and chronic obstructive pulmonary disorder
	<sup>^</sup> CHC40. Secondary prophylaxis with penicillin for rheumatic fever or established rheumatic heart disease	<sup>^</sup> DH41. Secondary prophylaxis with penicillin for rheumatic fever or established rheumatic heart disease	^PH43. Secondary prophylaxis with penicillin for rheumatic fever or established rheumatic heart disease
	CHC41. Screening for breast cancer in all chronic disease diagnosis	DH42. Screening for breast cancer in all chronic disease diagnosis	
	CHC42. Early detection by visual inspection of early- stage cervical cancer, with referral	DH43. Early detection by visual inspection and treatment by cryotherapy and colposcopy of early- stage cervical cancer	PH45. Early detection by visual inspection and treatment by cryotherapy and colposcopy of early stage cervical cancer.
suspected cancer patients to	CHC43. Awareness, screening, and referral for suspected cancer patients to the regional Hospital Oncology	DH44. Awareness, screening, and referral for suspected cancer patients to the regional Hospital Oncology Wards for diagnosis and treatment	PH46 Awareness, screening, and referral for suspected cancer patients to the regional Hospital Oncology Wards for diagnosis and treatment

				Wards for diagnosis and treatment	
E. Mental, Neurological, and	Substance Use Disorders Inter	vention $= 18$ of which 7 are N	10PH high priority for implementa	tion	
C25. Awareness, detection and referral of Common and severe mental health disorders	MHT28. Awareness, Detection, Basic psychosocial counselling, pharmacological treatment and referral of Common and severe mental health disorders				
			B36. Detection of anxiety disorders for all age groups using validated interview-based tools and referral for initiation of pharmacological treatment, referral for psychosocial support.	pharmacological	<sup>^</sup> PH47. Initiation of pharmacological and psychosocial counselling or psychotherapy for all mental health conditions
			B37. Detection of substance use disorders for all age groups using validated screening tools, and referral to drug demand reduction programme for pharmacological treatment and referral for psychosocial counselling	CHC45. Detection of substance use disorders for all age groups using validated screening tools, and referral to drug demand reduction programme for pharmacological treatment and	PH48. Referral to drug demand reduction treatment facility for pharmacological treatment and referral to mental health hospital for psychosocial counselling or psychotherapy See emergency section for clinically unstable or acute (e.g.,

			psychosocial counselling	overdose, drug-induced psychosis, suicide, self-harm, and violence)	overdose, drug-induced psychosis, suicide, self-harm, and violence)
		B38. Detection and follow up of psychotic disorders using validated interview-based tools with timely referral for management	disorders using validated interview- based tools with timely referral for management, and continuation of	for psychotic disorders especially bi-polar and schizophrenia conditions See emergency section for clinically unstable e.g., severe acute agitation, suicide, self-	<sup>^</sup> PH49. Prescription of pharmacological and psychosocial counselling for psychotic disorders especially bi-polar and schizophrenia conditions
MHT29. Active detection of exposure to gender- based violence and referral for appropriate care	S33. Active detection of exposure to gender-based violence and referral for appropriate care	B39. Active detection of exposure to gender-based violence and referral for appropriate care	<sup>^</sup> CHC47. Psychosocial counselling for those exposed to violence	<sup>^</sup> DH48. Advanced management for effects of exposure to violence	^PH50. Advanced management of effects of exposure to violence
			See also emergency care section for medical support)	See also treatment for anxiety, depression, and emergency care section for medical support	See also treatment for anxiety, depression, and emergency care section for medical support
			CHC48. Continuation of prescribed pharmacological medicines and psychosocial counselling for epilepsy <i>See emergency section for</i> <i>clinically unstable (e.g.,</i>	^DH49. Prescription and initiation of pharmacological and psychosocial interventions for epilepsy Also see emergency section for clinically unstable (e.g., active seizures)	^PH51. Prescription and initiation of pharmacological and psychosocial interventions for epilepsy Also see emergency section for clinically unstable (e.g., seizures)
	of exposure to gender- based violence and referral	of exposure to gender- based violence and referral violence and referral for	MHT29. Active detection of exposure to gender-based violence and referral       S33. Active detection of exposure to gender-based violence and referral for	counsellingCounsellingB38. Detection and follow up of psychotic disorders using validated interview-based tools with timely referral for managementCHC46. Detection, basic counselling and follow up of psychotic disorders using validated interview- based tools with timely referral for management, and continuation of psychoscial counselling for psychotic disordersMHT29. Active detection of exposure to gender- based violence and referral for appropriate careB39. Active detection of exposure to gender-based violence and referral for appropriate careCHC47. Psychosocial counselling for those exposure to gender-based violence and referral for appropriate careCHC47. Psychosocial counselling for those exposure to gender-based violence and referral for appropriate careCHC48. Continuation of prescribed pharmacological medicines and psychosocial counselling for exposure to gender-based violence and referral for appropriate careCHC48. Continuation of prescribed pharmacological medicines and psychosocial counselling for epilepsyCHC48. continuation of prescribed pharmacological medicines and psychosocial counselling for epilepsySee emergency section for section for section for epilepsy	Image: consellingsuicide, self-harm, and rivence)Side, self-harm, and rivence)S38. Detection and follow up of psychotic disorders using validated interview-based tools with timely referral for managementCHC46. Detection, basic counselling and psychosocial counselling for psychotic disorders using validated interview- based tools with timely referral for management, and counselling for psychosocial counselling for toouselling for those appropriate careDH48. Advanced management for effects of exposure to gender- based violence and referral for appropriate careDH48. Advanced management for effects of exposure to gender- based violence and referral for appropriate careDH48. Advanced management for arxiety, depression, and emergency care 

				CHC49. Initiation of self-managed treatment using migraine protocol in acute phase	DH50. Initiation of self- managed treatment using migraine protocol in acute phase	PH52. Initiation of self- managed treatment using migraine protocol in acute phase
					DH51. Psychosocial support for patients with cancer	PH53. Psychosocial support for patients with cancer
F. Emergency Care Interventio	ons = 28 of which 13 are MoP	H high priority for implementa	tion			
^C27. <i>Pre-hospital care</i> : User activated dispatch of basic ambulance services from district level	<sup>^</sup> MHT30. <i>Pre-hospital care</i> : User activated dispatch of basic ambulance services from district level	^S34. <i>Pre-hospital care</i> : User activated dispatch of basic ambulance services from district level	<sup>^</sup> B40. <i>Pre-hospital care</i> : User activated dispatch of basic ambulance services from district level	<sup>^</sup> CHC50. <i>Pre-hospital</i> <i>care</i> : User activated dispatch of basic ambulance services from district level	DH52. <i>Pre-hospital care</i> : User activated dispatch of basic ambulance services from district level	PH54. <i>Pre-baspital care</i> . User activated dispatch of basic ambulance services at provincial level
Initial syndrome-based management at scene by pre-hospital providers for difficulty in breathing,	WHO basic emergency care - Initial syndrome-based management at scene by	Initial syndrome-based management at scene by pre-hospital providers for difficulty in breathing,	<sup>^</sup> B41. <i>Pre-hospital care:</i> WHO basic emergency care - Initial syndrome-based management at scene by pre-hospital providers for difficulty in breathing, shock, altered mental status, and poly trauma	<sup>^</sup> CHC51. <i>Pre-hospital</i> <i>care:</i> WHO basic emergency care - Initial syndrome-based management at scene by pre-hospital providers for difficulty in breathing, shock, altered mental status, and poly trauma	<sup>^</sup> DH53. <i>Pre-hospital care</i> : WHO basic emergency care - Initial syndrome-based management at scene by pre-hospital providers for difficulty in breathing, shock, altered mental status, and poly trauma	- Initial syndrome-based management at scene by pre-hospital providers for difficulty in breathing,
<sup>^</sup> C29. <i>Pre-hospital care:</i> Direct provider monitoring during		^S36. Pre-hospital care: Direct provider monitoring during	<sup>^</sup> B42. <i>Pre-hospital care:</i> Direct provider monitoring during	^CHC52. <i>Pre-hospital care:</i> Direct provider	^DH54. <i>Pre-hospital care:</i> Direct provider monitoring	<sup>^</sup> PH56. <i>Pre-hospital care:</i> Direct provider monitoring

transport to appropriate health facility and structured handover to hospital personnel	during transport to appropriate health facility and structured handover to hospital personnel	transport to appropriate health facility and structured handover to hospital personnel	transport to appropriate health facility and structured handover to hospital personnel	monitoring during transport to appropriate health facility and structured handover to hospital personnel	during transport to appropriate health facility and structured handover to hospital personnel	during transport to appropriate health facility and structured handover to hospital personnel
	<sup>^</sup> MHT33. Recognition of danger signs in neonates, children and adults, including early recognition of signs of serious infection and referral	^S37. Recognition of danger signs in neonates, children and adults, including early recognition of signs of serious infection and referral	<sup>^</sup> B43. Recognition of danger signs in neonates, children and adults, including early recognition of signs of serious infection and referral	<sup>^</sup> CHC53. Recognition of danger signs in neonates, children and adults, including early recognition of signs of serious infection and referral	DH55. Triage of children and adults on arrival at facility with validated instrument (e.g. WHO/ICRC triage tool)	PH57. Triage of children and adults on arrival at facility with validated instrument (e.g. WHO/ICRC triage tool)
					DH56. Implementation of checklists for management of critically ill and injured patients in designated resuscitation area (WHO emergency and trauma care checklists)	PH58. Implementation of checklists for management of critically ill and injured patients in designated resuscitation area (WHO emergency and trauma care checklists)
<sup>^</sup> C30. First aid: Interventions include airway positioning, choking interventions, and basic external haemorrhage control (direct pressure, tourniquet)	<sup>^</sup> MHT34. First aid: Interventions include airway positioning, choking interventions, and basic external haemorrhage control (direct pressure, tourniquet), stabilization and referral		<sup>^</sup> B44. Basic syndrome-based management of difficulty breathing, shock, altered mental status, and poly trauma in dedicated emergency unit for neonates, children and adults {interventions include manual airway manoeuvres, oral/nasal airway placement, oxygen administration, bag- valve mask ventilation, temperature management, emergency administration of essential medications, including antibiotics for	<sup>^</sup> CHC44. Basic syndrome-based management of difficulty breathing, shock, altered mental status, and poly trauma in emergency unit for neonates, children and adults {interventions include manual airway manoeuvres, oral/nasal airway placement, oxygen administration, bag- valve mask ventilation,	<sup>^</sup> DH57. Advanced syndrome-based management of difficulty breathing, shock, altered mental status, and poly trauma in emergency unit, including for neonates, children and adults. (Interventions include intubation, mechanical ventilation, surgical airway, and placement of chest drain, haemorrhage control, defibrillation, administration of	<sup>^</sup> PH59. Advanced syndrome-based management of difficulty breathing, shock, altered mental status, and poly trauma in emergency unit, including for neonates, children and adults. (Interventions include intubation, mechanical ventilation, surgical airway, and placement of chest drain, haemorrhage control, defibrillation, administration of

	serious infection, stabilization and referral	temperature management, emergency administration of essential medications, including empiric antibiotics for serious infection, stabilization and referral	intravenous fluids via peripheral and central venous line with adjustment for age and condition, including malnutrition; emergency administration of essential medicines)	intravenous fluids via peripheral and central venous line with adjustment for age and condition, including malnutrition; emergency administration of essential medicines
		CHC45. Management of severe acute exacerbations of asthma and chronic obstructive pulmonary disease {using systemic steroids, inhaled beta-agonists, and, if indicated, oral antibiotic and oxygen therapy	DH58. Management of acute ventilatory failure due to acute exacerbations of asthma and chronic obstructive pulmonary disease with use of bilevel positive airway pressure preferable	PH60. Management of acute ventilatory failure due to acute exacerbations of asthma and chronic obstructive pulmonary disease; in chronic obstructive pulmonary disease use of bilevel positive airway pressure preferable
	B45. Basic management of cardiovascular emergencies, including provision of aspirin for suspected acute myocardial infarction and external defibrillation after initial survey/assessment	CHC56. Basic management of cardiovascular emergencies, including provision of aspirin for suspected acute myocardial infarction and external defibrillation after initial survey/assessment	^DH59. Advanced management of cardiovascular emergencies, including myocardial infarction, heart failure, acute arrhythmia, tamponade, and acute critical limb ischemia. {Interventions include aspirin, unfractionated heparin and thrombolytics, pacing and synchronized cardioversion, pericardiocentesis}	^PH61. Advanced management of cardiovascular emergencies, including myocardial infarction, heart failure, acute arrhythmia, tamponade, and acute critical limb ischemia. {Interventions include aspirin, unfractionated heparin and thrombolytics, pacing and synchronized cardioversion, pericardiocentesis

			B46. Recognition of, and referral for, clinical hypoglycaemia	CHC57. Recognition and initial management of hypoglycaemia and hyperglycaemia	DH60. Recognition and management of hypoglycaemia and hyperglycaemia, including treatment of diabetic ketoacidosis	PH62. Recognition and management of hypoglycaemia and hyperglycaemia, including treatment of diabetic ketoacidosis
				CHC58. Recognition of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms, with referral for management	DH61. Recognition and management of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms,	PH63. Recognition and management of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms,
<sup>^</sup> C31. Initial wound care, including bleeding control, cleaning and dressing	<sup>^</sup> MHT35. Basic wound care, including bleeding control and suturing of simple lacerations	^S39. Basic wound care, including bleeding control and suturing of simple lacerations	<sup>^</sup> B47. Basic wound care, including bleeding control and suturing of simple lacerations	<sup>^</sup> CHC59. Advanced wound care, including suturing of complex lacerations	<sup>^</sup> DH62. Advanced wound care, including suturing of complex lacerations	^PH64. Advanced wound care, including suturing of complex lacerations
				<sup>^</sup> CHC60. Minor soft tissue surgical procedure (drainage of simple abscess and removal of foreign body)	<sup>^</sup> DH63. Minor soft tissue surgical procedure (drainage of simple abscess and removal of foreign body)	<sup>^</sup> PH65. Minor soft tissue surgical procedure (drainage of simple abscess and removal of foreign body
<sup>^</sup> C32. Splinting of acute fractures and dislocations	<sup>^</sup> MHT36. Splinting of acute fractures and dislocations	^S40. Splinting of acute fractures and dislocations	<sup>^</sup> B48. Splinting of acute fractures and dislocations	<sup>^</sup> CHC61. Reduction and non-operative management of acute fractures and dislocations	<sup>^</sup> DH64. Reduction and non-operative management of acute fractures and dislocations, including traction	<sup>^</sup> PH66. Reduction and non-operative management of acute fractures and dislocations, including traction

				DH65. Management of ENT emergencies, including foreign body removal, peritonsillar abscess and epistaxis	PH67. Management of ENT emergencies, including foreign body removal, peritonsillar abscess and epistaxis
				DH66. Management of acute trauma of the eye, including acid and alkali burns	PH68. Management of acute trauma of the eye, including acid and alkali burns
See also community based first aid and pre-ho	-		CHC62. Rapid scale up of service delivery capacity through provincial coordination	DH67. Protocol based mass casualty management and rapid scale up of service delivery capacity	PH69. Advanced protocol response based on provincial coordination for mass casualty management and rapid scale of service delivery capacity
G. Surgical Interventions (not including	obstetric surgery see maternal health) = 17 of whi	ch 11 are MoPH high priority for a	implementation		
				<sup>^</sup> DH68. Burr hole to relieve acute elevated intracranial pressure	^PH70. Burr hole to relieve acute elevated intracranial pressure
				<sup>^</sup> DH69. Debridement and other treatment of soft tissue infection (including diabetic foot) and osteomyelitis	^PH71. Debridement and other treatment of soft tissue infection (including diabetic foot) and osteomyelitis
				DH70. Escharotomy or fasciotomy	PH72. Escharotomy or fasciotomy
				^DH71. Trauma related amputations	^PH73. Trauma related amputations
	See emergency ca	re section above		^DH72. Reduction of acute fractures and dislocations, placement of external fixator and use of traction for fractures	^PH74. Urgent surgical management of orthopaedic injuries (for example, by open reduction and internal fixation)

			^DH73. Irrigation and debridement of open fractures	^PH75. Irrigation and debridement of open fractures
			^DH74. Management of septic arthritis	^PH76. Management of septic arthritis
			DH75. Basic skin grafting and release of contractures, including for burns	PH77. Basic skin grafting and release of contractures, including for burns
			^DH66DH76. Relief of urinary obstruction by catheterization or suprapubic cystostomy	^PH78. Relief of urinary obstruction by catheterization or suprapubic cystostomy
				^PH79. Abdominal surgery including hernia repair, management of acute abdomen, removal of gallbladder, appendectomy, colostomy, management of hydatic cyst
			^DH78. Trauma laparotomy	^PH80. Trauma laparotomy
		B49. Early recognition and referral for congenital anomalies	DH79. Early recognition and referral for congenital anomalies	^PH81. Management of cleft lip/palate, club foot
			DH80. Simple ocular procedures e.g. foreign body removal	PH82. Basic ocular surgery, including cataract removal
H. Palliative Care Interventions = 3			DH81. Basic dental procedures (treatment of caries, extraction, drainage of simple dental abscess)	PH83. Comprehensive dental procedures (treatment of caries, extraction, drainage of simple dental abscess)

	MHT37. Oral palliative care and pain control measures with non-opioid agents		B50. Oral palliative care and pain control measures with non-opioid agents	CHC64. Oral and parenteral palliative care and pain control measures with non- opioid agents	DH82. Treatment of severe acute pain including in association with procedures, including with opioid and non-opioid agents	PH84. Treatment of severe acute pain with opioid and non-opioid agents
					DH83. Procedural sedation	PH85. Procedural sedation
I. Rehabilitation Intervention	s = 2					
	MHT38. Identification of people with disabilities and referral to nearest services for physical rehabilitation or physiotherapy treatment in mobile vehicle	S41. Identification of people with disabilities and referral to nearest services for physical rehabilitation	B51. Identification of people with disabilities and referral to nearest services for physical rehabilitation	of people with disabilities and referral	DH84. Physical mobilization and strengthening activities following acute injury or illness and guidance in use of rehabilitation equipment (e.g., crutches, wheelchair etc.)	PH86. Physical mobilization activities and provision of appropriate rehabilitation equipment (e.g., crutches, wheelchair etc.)
Sub-total number of inter	ventions at the 7 levels of the	he health system outlined in th	his table $1 = 331$	·		
25 interventions at community level: 9 = HPI *** 9 = EUHC**** 7 = country context specific	27 interventions by mobile health team: 15 = HPI 5 = EUHC 7 = country context specific	<ul> <li>34 interventions at subhealth centre level:</li> <li>16 = HPI</li> <li>8 = EUHC</li> <li>10 = country context</li> <li>specific</li> </ul>	42 interventions at basic health centre level: 17 = HPI 10 = EUHC 15 = country context specific	54 interventions at comprehensive health centre level: 27 = HPI 17 = EUHC 10 = country context specific	<ul> <li>74 interventions at district hospital level:</li> <li>41 = HPI</li> <li>23 = EUHC</li> <li>10 = country context specific</li> </ul>	75 interventions at provincial hospital level: 41 = HPI 25 = EUHC 9 = country context specific

Some of the sub-total of all 331 interventions at the 7 levels of the health system in the above table 1 are repeated at different levels of the health system e.g. see number S1 at the subhealth centre which is also an intervention (B1) at the basic health centre level in section A, the reproductive, maternal and newborn health section. So a total of the different types of interventions is given below.

TOTAL NUMBER OF DIFFERENT INTERVENTIONS = 149 (138 in table 1 + 11 population-based interventions in table 2) many of which were previously in the BPHS and the EPHS. The interventions reflect the epidemiological profile in the country and the fact that there are still too many deaths among mothers and the newborn. Of the 138 different types of interventions in table 1, 92 constitute essential universal health care interventions (EUHC as defined in DCP3), of which 81 are high priority for implementation. The 92 EUHC interventions are based on international and/or local evidence of effectiveness, cost-efficiency, and feasibility of implementation. If implemented effectively there should be an improvement in equitable access and significant outcomes; they will also contribute to adding quality to health services. The remaining 43 interventions are country context specific. Plus 15 inter-sectoral inter-ministerial policy interventions to reduce behavioural and environmental risks for early design and implementation - see table 3. The costs of the intersectoral inter-ministerial policy interventions are not included in the cost of the IPEHS. Only the interventions in tables 1 and 2 have been costed.

\* As of BPHS and EPHS staffing – the list of staff will be reviewed by the MoPH to determine if there are sufficient types and numbers of staff to implement the IPEHS. Once it is decided if, the ministry may need to have discussions with the Civil Service Commission as there may be cost and formal recognition of some disciplines of staff

\*\* The letter in capital letters at the beginning of an intervention refers to the level of the health system or type of health facility e.g. C = community, DH = district hospital etc.

**\*BOLD.** Where and/or when there is on-going armed conflict or resources are low those interventions or a component of an intervention in **bold** are **high priority interventions (HPI)** for the Ministry of Public Health – listed as highest priority platform (HPP) in tables 1-4 in DCP3 Annex 3C, 2017, Essential Universal Health Coverage: Interventions and Platforms in Disease Control Priorities. DCP3. World Bank, Washington. http://dcp-3org/2017, Essential Universal Health Coverage: Interventions http://dcp-3org/2017, Essential Universal Health Coverage: Interventions (HPI) for the Ministry of Public Health – and Platforms in Disease Control Priorities. DCP3. World Bank, Washington. http://dcp-3org/2017.

2017, Essential Universal Health Coverage: Interventions and Platforms in Disease Control Priorities. DCP3. World Bank, Washington. H \*\*\*\*EUHC = Essential universal health care in Disease Control Priorities (DCP3), World Bank, Washington. http://dcp-3org/

