Government of Pakistan
Ministry of National Health Services,
Regulations & Coordination

REVIEW OF ESSENTIAL HEALTH SERVICES IN PAKISTAN BASED ON DISEASE CONTROL PRIORITIES-3

April 2019

World Health Organization

DCP3 Disease Control Priorities

economic evaluation for health

PAKISTAN

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Review of Essential Health Services in Pakistan based on
Disease Control Priorities – Edition 3

Produced by:
Ministry of National Health Services, Regulations and Coordination and
Provincial/ Area Departments of Health

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FOREWORD

Dr. Assad Hafeez
Director General (Health)
Ministry of National Health Services,
Regulations & Coordination

The Disease Control Priorities (DCP3) project leverages the global investment to support the acceleration of progress towards Universal Health Coverage (UHC) in Pakistan and two other countries. DCP3 is a valuable resource that provides a global synthesis of evidence on a range of health interventions. DCP3 evidence can help decision makers allocate constrained budgets to maximise population health and welfare, through informing the design of UHC benefit package. DCP3 provides the institutional development and local analysis required to incorporate evidence into national priority setting processes; in a way that promotes transparency, linkages with health sector financing mechanisms, and encourages engagement with the public and civil society.

In August 2018, an international meeting on DCP3 was held in Islamabad-Pakistan and attended by Morocco, Lebanon, Iran, Jordan, Pakistan, WHO EMRO, University of Washington and other stakeholders including provincial departments of health. Later on, the project in Pakistan was initiated with two national consultative meetings with DCP3 collaborators in Pakistan that have laid the basis for joint Roadmap to define Pakistan's UHC benefit package.

Prior to the project, there was substantial engagement among stakeholders in Pakistan, resulting in the explicit recognition of DCP3 in the draft 12th five-year plan (health chapter) of Pakistan and the National Action Plan for health sector. DCP3 was formally recognised as the evidence base that Pakistan could use to define its 'UHC Benefit Package'. The Secretariat of the DCP3 project is currently based at the London School of Hygiene and Tropical Medicine (LSHTM). Within Pakistan, LSHTM aims to support the Government of Pakistan, in collaboration with the World Health Organisation, the Aga Khan University and the Health Services Academy.

As per agreed roadmap with the collaborators, initial step for the Ministry of National Health Services, Regulations & Coordination (NHSR&C) was to conduct a comprehensive review of current essential health services in Pakistan based on DCP3 recommended interventions. This review report not only gives a summary of the general status of essential health services in Pakistan but also highlights which interventions may be included in the generic UHC benefit package of Pakistan.

Most worrying findings of the review are that only 135 (61.6%) of the 219 DCP3 recommended EUHC interventions are being currently implemented, out of which only 42 (19.1%) are expected to be available generally, while 93 (42.4%) are available with partial coverage. Furthermore, availability of DCP3 recommended platform services at PHC centre level and Community level are not available at satisfactory level. This justifies prioritizing future efforts on re-defining and implementing PHC/ community level packages.

The next step, needing more determination and deeper involvement of academic institutions, would need to complete further analysis and produce a well-developed costed UHC benefit package by the end of 2019. The same should be implemented initially in Islamabad and other 'Family Practice Approach' districts. It would be essential to ensure the substantive engagement and agreement of

all stakeholders responsible for developing, financing and implementing the UHC benefit package in Pakistan.

In UHC benefit package, there will be specific sets of services that warrant more local data or economic analysis. Likewise, within a year, it may not be fully possible to develop capacity, processes or final agreements with all stakeholders within Pakistan. Therefore, in 2020 and 2021, the ministry with support of collaborators will:

a) continue to engage stakeholders in the UHC BP
b) institutionalise a formal process for updating and further developing the UHC BP
c) conduct detailed analysis of selected areas of the UHC BP
d) evaluate the implementation of the UHC BP in selected districts

In summary, developing capacity on costing / economic analysis of health services in Pakistan along with estimating burden of disease at national and provincial level, would be major reform initiatives towards evidence-based policy and strategic decision making and improved delivery of health services in Pakistan.

My gratitude is due to the Disease Control Priorities -3 secretariat and more specifically Dr. Ala Alwan and Dr. Anna Vassall for their valuable guidance and support.

I am also grateful to Dr. Zafar Mirza, Director of Health System Development at WHO EMRO, Dr. Nima Saeed Abid, Head of WHO Office in Pakistan and Dr. Sameen Siddiqi, Chair of Department of Community Health Sciences, AKU in providing technical and all possible support to successfully complete the review and consultative process.

My gratitude is due to Directors General Health Services and their technical staff, Academicians, Health managers, Health service providers both from public & private sector, the development and UN agencies, Civil society & non-governmental organizations and colleagues from line ministries for their effective participation in the consultative workshops. Special thanks are due to the Peer Reviewers who provided detailed inputs on the draft documents.

I am especially thankful to the Review Team in the Ministry of NHSR&C, for completing a worthy job with dedication and in a professional manner. It is worth mentioning the coordinating efforts of the Health Planning, System Strengthening and Information Analysis Unit (HPSIU) under the leadership of Dr. Malik Muhammad Safi, technical support of Dr. Raza Zaidi and inputs from all members of the review team.

Many more individuals and organizations gave their time to this review and I am thankful to all of them. However, the task is not over yet and we have a long road to travel for successful development and implementation of UHC benefit package in Pakistan.

Dr. Assad Hafeez
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EXECUTIVE SUMMARY

Universal Health Coverage (UHC) is based on the principle that all individuals and communities have equitable access to their needed health care, in good quality, without suffering financial hardship. A set of policy choices about benefits and their rationing are among the critical decisions for moving towards UHC. The three dimensions of UHC are: i) which services are covered and which needs to be included; ii) covered population and extension to non-covered; iii) reducing cost sharing and fees.

Designing a comprehensive package of health services considering burden of disease, cost effectiveness of interventions and social context is critical to define which services are to be covered through different platforms: i) community level; ii) health centre level; iii) first level hospitals; and iv) referral level hospital; and v) population based. In addition, interventions related to inter-sectoral prevention and fiscal policies play a key role in moving towards UHC.

Disease Control Priorities – Edition 3 (DCP3) finalized in 2017 defines a model concept of essential universal health coverage (EUHC) that provides a starting point for country-specific analysis of priorities considering country-specific cost structures, epidemiological needs, and national priorities.

This review was carried out by the Ministry of National Health Services, Regulations & Coordination (NHSR&C) jointly with the Provincial Departments of Health and other key stakeholders to compare the current scope of Essential Health Services in Pakistan against the DCP3 recommended interventions for Essential UHC (EUHC) - **a model benefit package for UHC which at least all middle income countries should strive to achieve by 2030**) and Highest Priority Package (HPP) - **subset of interventions with the highest-priority to be achieved by all low income countries by 2030**).

Results are based on general consensus among participants and gives a glimpse of health services in the country. However, there would be **significant variation in service provision** not only among provinces/ areas but also expected worse coverage in hard to reach/ socio-economically poor districts. Summary results of the review indicate that:

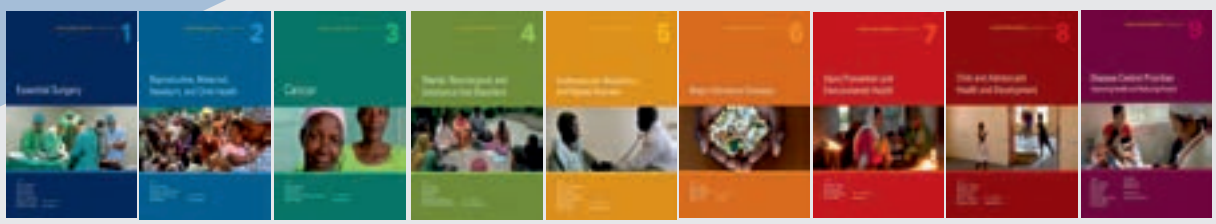
- Overall **135 (61.6%) of the 219 DCP3 recommended EUHC interventions are being currently implemented** out of which 42 (19.1%) are expected to be available generally, while 93 (42.4%) are available at limited level.
- **Availability of DCP3 recommended platform services at PHC centre level and Community level are at the worst with 48.4% and 48.3% respectively**, while more than 80% of population is expected to get services from PHC centre level and Community. Ninety-five percent of the recommended EHUC platform services are available at Tertiary level, followed by First level hospital at 76.7% and then Population level at 73.3%. This justifies prioritizing / concentrating future efforts on defining and implementing PHC/ community level packages.
- Analysis of cluster-based results indicate that maximum of DCP3 recommended services are expected to be available for RMNCH and age-related cluster (at 74.6%), followed by infectious diseases cluster (at 61.5%) and then health services cluster (at 64.9%). **Non-communicable diseases and injuries cluster appears to be a neglected area at 35.5%,** while burden of disease for this is more than 56%. The results correspond to the breakdown of results for UHC index of Pakistan in 2016.

- Implementation of the **highest priority package** is only with 27 (**27.2%**) of the 99 recommended interventions.
- **169 (77.1%) out of 219 recommended EUHC interventions were proposed by participants to be included on priority basis in the generic EPHS**, while others may be included at a later stage. However, before that importance should also be given to scale up those interventions which are available with limited coverage, while ensuring **access**, **equity** and **quality**. Discontinuation of any current services was not proposed at this stage.
- It was strongly recommended that while developing a generic EPHS, platform of **PHC Centres** should be further divided into Rural Health Centre, Basic Health Unit, MCH Centre, Health Centre and Dispensary. Similarly, platform of **First level hospitals** should be divided into DHQ and THQ hospitals. Role of public and private sector should be considered not only for the development of EPHS but also in the implementation.
- Stakeholders recommended **50 (70.4%) of the 71 DCP3 inter-sectoral policies to be considered for inclusion in the UHC Benefit Package** for Pakistan, in the first stage – 6 are fiscal, 27 are regulatory, 7 are Info & Education and 10 are related to building environment.

The review concludes that

- Current services are not sufficient to make significant progress towards achieving UHC. While developing & implementing a UHC benefit package, priority should be given first to scale up those cost-effective services which are being implemented with limited coverage.
- Two platforms – community based and PHC centre level should have scaled up services. A more integrated approach should be adopted as implementation of selected interventions individually would not only be costly but also less efficient.
- Where services are included in the package they should be provided with the appropriate technology and to a high quality.
- EPHS should be a live document and should be reviewed regularly by stakeholders and updated as improved evidence on the costs and health impact of these interventions becomes available.
- UHC benefit package should consider inter-sectoral interventions, which are mostly cost-effective and have long lasting impact on the health outcomes.

Accordingly, a plan has been proposed in this report to develop a generic UHC benefit package for Pakistan.



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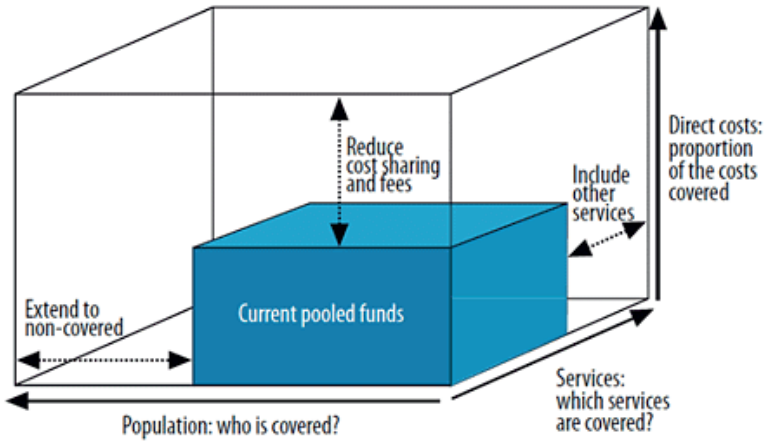
Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AJK	Azad Jammu & Kashmir
AKU	Aga Khan University
ARV	Anti-Retro-Viral therapy
BEmONC	Basic Emergency Obstetrical and Neonatal Care
BOD	Burden of Disease
CEmONC	Comprehensive Emergency Obstetrical and Neonatal Care
CKD	Chronic Kidney Disease
COPD	Chronic Obstructive Pulmonary Disease
CVD	Cardio Vascular Diseases
DALYs	Disability Adjusted Life Years
DCP3	Disease Control Priorities – Edition 3
DFID	UK's Department for International Development
DOH	Department of Health
EIP	Early Inter-sectoral Prevention Policies
EPHS	Essential Package of Health Services
EUHC	Essential Universal Health Coverage
GAVI	Global Alliance on Vaccine & Immunizations
GB	Gilgit Baltistan
GDP	Gross Domestic Product
GFATM	Global Alliance to fight against AIDS, TB and Malaria
GNI	Gross National Income
GPEI	Global Polio Eradication Initiative
HIV	Human Immuno-Deficiency Virus
HPP	Highest Priority Package
HPV	Human Papilloma Virus
ICPD	International Conference on Population & Development
IP	Inter-sectoral Prevention Policies
IHR	International Health Regulations
IMCI	Integrated Management of Childhood Illnesses
JEE	Joint External Evaluation
KP	Khyber Pakhtunkhwa
LMIC	Low-income and middle-income countries
LSHTM	London School for Hygiene and Tropical Medicine
MCH	Maternal and Child Health
MDGs	Millennium Development Gaols
MDR	Multi Drug Resistance
M/o NHSR&C	Ministry of National Health Services, Regulation & Coordination
NTD	Neglected Tropical Diseases
PMTCT	Prevention of Mother-to-Child transmission
RH	Reproductive Health
RUTF	Ready to Use Therapeutic Food
SDGs	Sustainable Development Goals
STI	Sexually Transmitted Infections
TB	Tuberculosis
UHC	Universal Health Coverage
UN	United Nations
UNICEF	United Nations Children Fund
WASH	Water, Sanitation & Hygiene
WB	World Bank
WHO	World Health Organization

REVIEW OF
ESSENTIAL HEALTH SERVICES IN PAKISTAN
BASED ON DISEASE CONTROL PRIORITIES-3

Universal Health Coverage (UHC) is based on the principle that all individuals and communities have equitable access to their needed health care, in good quality, without suffering financial hardship. A set of policy choices about benefits and their rationing are among the critical decisions in the reform of health financing system towards universal coverage. Choices need to be made about proceeding along each of the three dimensions, in many combinations, in a way that best fits their objectives as well as the financial, organizational and political contexts. The three dimensions are: i) which services are covered and which needs to be included; ii) covered population and extension to non-covered; iii) reducing cost sharing and fees.



Three dimensions to consider when moving towards universal coverage

Designing of a comprehensive package of health services considering burden of disease, cost effectiveness and social context are critical to define which services are to be covered through different platforms: i) community level; ii) health centre level; iii) first level hospitals; and iv) referral level hospital; and v) population based. In addition, interventions related to inter-sectoral prevention and fiscal policies can play an important role in moving towards UHC.

The review of essential health services in Pakistan is the first step towards defining a UHC benefit package based on DCP3 – a critical step for the Roadmap towards UHC.

BACKGROUND

The 2030 Agenda for Sustainable Development has given impetus to Universal Health Coverage (UHC) as an overarching target to guide health systems transformations to achieve the health-specific and health-related Sustainable Development Goals (SDGs) targets.[1] Specifically, SDG 3.8 calls for achieving universal health coverage, through access to quality essential health care services for all, including financial risk protection.

Identifying what to cover, and not to cover for essential health care services is a critical step for the roadmap towards achieving UHC. However, the socioeconomic diversity, the various stages of

[1]: Kieny MP, Bekedam H, Dovlo D, Fitzgerald J, Jarno Habicht, Harrison G, et al. Strengthening health systems for universal health coverage and sustainable development. Bull World Health Organ 2017; 95:537–539.

demographic and epidemiological transitions, and the multiple acute and chronic emergencies characterizing different provinces/ areas, makes it difficult to have a one-size-fit-all provinces/ areas to have a uniform package of health services. However, there is a relevance of defining a core set of health services and interventions based on global best practices and local needs, to constitute a 'UHC benefit package' for achieving UHC by the country.

Disease Control Priorities – Edition 3 (DCP3)[2] defines a model concept of essential universal health coverage (EUHC) that provides a starting point for country-specific analysis of priorities. DCP3 is intended to be a model starting point for analyses at the country level, but country-specific cost structures, epidemiological needs, and national priorities generally lead to EUHC that differ from country to country.[3]

The Disease Control Priorities–3 provide an excellent opportunity to review and revisit the Essential Health Services in Pakistan by comparing the same with the DCP3 recommended EUHC services to map out the current position and facilitate a decision for future on what needs to be covered for achieving UHC in Pakistan.

WHAT ARE THE DISEASE CONTROL PRIORITIES?

In 1993, along with World Development Report '*Investing in Health*', the World Bank (WB) published 'Disease Control Priorities in Developing Countries (DCP1)', an attempt to systematically assess value for money (cost-effectiveness) of interventions that would address the major sources of disease burden in low-income and middle-income countries (LMICs).[4]

One motivation for DCP1 was to identify reasonable responses in highly resource-constrained environments to the growing burden of non-communicable disease and of HIV & AIDS. The dual burden paradigm remains valid to this day and countries with high burden of communicable diseases have started showing some early signs of a slow but gradual increase in the burden of non-communicable diseases.[5] Another attempt to define a basic package of health services was also made by the Commission on Macroeconomics and Health in 2002.

The second edition of Disease Control Priorities (DCP2), published in 2006, updated and extended DCP1 most notably by explicit consideration of the implications for health systems of expanded coverage of high-priority interventions.[6] One important linkage to health systems was through examination of selected platforms for delivering related interventions that might be addressing quite heterogeneous sets of problems. Platforms often provide a more natural unit for investment (and for estimating costs) than do individual interventions.

The WB and the Disease Control Priorities secretariat, University of Washington have now published nine volumes of Disease Control Priorities, 3rd edition (DCP3)[2] between 2015 and 2018. The analysis in DCP3 is built around essential packages that were developed in nine volumes. Each essential package addresses the concerns of a major health professional communities (e.g. child health or surgery) and contains a mix of inter-sectoral policies and health sector interventions.

These 400+ interventions based on global scientific evidence provide good value for money, are feasible to implement in developing countries and address a significant disease burden.

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[2] http://dcp-3.org/

[3] Dean T Jamison, Ala Alwan*, Charles N Mock*, et al, Lancet 2018; Universal health coverage and inter-sectoral action for health: key messages from Disease Control Priorities, 3rd edition

[4] Jamison DT, Mosley WH, Measham AR, Bobadilla JL, eds., 1993; Disease control priorities in developing countries, 1st edn. New York: Oxford University Press, 1993

[5] https://vizhub.healthdata.org/gbd-compare/

[6] Jamison DT, Breman JG, Measham AR, et al.2006; Disease Control Priorities in developing countries, 2nd edn. New York, Washington, DC: Oxford University Press, World Bank, 2006.

- 219 EUHC interventions within the health sector were grouped to five platforms
    - Community level (62 interventions),
    - Health centre (66 interventions),
    - First-level hospital (56 interventions),
    - Referral hospital (20 interventions) and
    - Population based (15 interventions),
- 99 of the 219 interventions within health sector are considered as the Highest Priority Package (HPP)
- 71 inter-sectoral prevention interventions were identified in total, 29 of which are early introduction priorities (EIP)

Estimated total cost of EUHC is substantial - about 9·1% of (current) gross national income (GNI) in low-income countries and 5·2% of GNI in lower-middle-income countries. Mortality reduction from implementing the UHC benefit package can reach about half the mortality reduction in non-communicable diseases called for by the Sustainable Development Goals. Full achievement will require increased investment and sustained inter-sectoral action. In summary:

- DCP3 recommended interventions intended to be a starting point for analyses at the country level, but country-specific cost structures, epidemiological needs, and national priorities will generally lead to definitions of UHC benefit package that will differ from country to country.
- DCP3 is particularly important, as achievement of UHC benefit package relies increasingly on greater domestic finance, with global developmental assistance in health focusing more on global public goods.
- The other objectives included financial protection (potentially better provided upstream by keeping people out of the hospital rather than downstream by paying their hospital bills for them), stillbirths averted, palliative care, birth spacing, and child physical and intellectual growth.
- The first 1000 days after conception are highly important for child development, but the next 7000 days are equally important and often neglected.

As part of DCP3 there is now an effort to use DCP3 as starting point to UHC benefit package development and that Pakistan is leading the way in this.

HISTORY OF ESSENTIAL HEALTH SERVICES IN PAKISTAN

Near the end of 19th century, the industrial revolution in Europe saw heavy disease and death tolls especially in urban areas. Early epidemiological discoveries about diseases like cholera, malaria, yellow fever etc. raised awareness about organization of medical services, clean water, sanitation, and living conditions. During the first half of the nineteenth century, different approaches were adopted by the European countries to tackle health challenges.

Later on, the Second World War damaged health infrastructures in many countries, paradoxically it also paved the way for the introduction of some others. Wartime Britain's national emergency service to deal with casualties was helpful in the construction of what became, in 1948, the National Health Service, perhaps the most widely influential model of a health system.

Japan and the Soviet Union also extended their limited national systems to cover most or all of the population, as did Norway and Sweden, Hungary and other communist states in Europe, and Chile.

As former colonies (including Indo-Pak) gained independence, they also tried to adopt modern, comprehensive systems with heavy state participation.

At the time of independence in 1947, Pakistan inherited a wide range of public health problems. The majority of the country's population was illiterate, unaware of healthy lifestyles and practices, malnourished or under-nourished and living in low levels of environmental sanitation with majority having no access to safe drinking water. Situation was further aggravated by the fact that only a handful of doctors and skilled personnel were left behind to manage the situation.

In 1947, a large epidemiological outbreak of cholera in Egypt gave motivation to the development of tropical medicine for dealing with international outbreak containment. A programme of social uplift was also launched, and 6 medical colleges were established in former East and 6 in West Pakistan.

Later on, scope of health services remained under the influence of international declarations, global health initiatives and other development initiatives but remained largely focused on the disease specific approach to health. Pakistan's public health remained focused on small pox eradication, malaria eradication/ control and control of some other infectious diseases.

A paradigm shift was witnessed in the health systems after the International Conference on Primary Health Care, Alma-Ata in 1978. Health for all (HFA) became the goal and achieving universal accessibility for populace through primary health care approach became the central theme. A large number of PHC facilities were established. In 1982, an alternate Selective PHC approach (GOBI – Growth monitoring, Oral rehydration salt, Breast feeding and Immunization) was launched, which mainly targeted childhood illnesses. The launch of the Lady Health Workers' Programme in 1994 was a major reform in the country, also to ensure the commitment towards International Conference of Population and Development (ICPD).

During 1980s and 1990s the World Bank and other financial institutions assumed a more preeminent role in the health sector and for specific services private sector was also engaged. During 1990s, Global Health Initiatives (Global Polio Eradication Initiatives-GPEI; Global Fund to fight against AIDS, TB & Malaria – GFATM; Global Alliance for Vaccine and Immunization-GAVI etc.) started evolving and represented a radical shift towards these Initiatives.

In 2000, the Millennium Development Goals (MDGs) reinforced the vertical disease focused nature of development assistance with the inclusion of hepatitis, blindness etc. along with some elements of health system strengthening indirectly through programmes focusing on maternal and child health supported by bilateral donors and WB. A number of management and institutional reforms were also tested to improve efficiency and effectiveness in the health system.

Over the period, focus of provincial governments remained on hospitals while private sector emerged as the main service provider. However, private sector prioritized provision of private goods in health and provision of public goods remained largely the mandate of public sector.

The public sector always faced fiscal constraints and cannot properly provide essential health services to all. After 2005 Earthquake, an attempt was made to define very broad basic package of health services. At the same time at global level, concept of EPHS developed further mainly in conflict affected countries – notably Afghanistan, Somalia, Liberia, South Sudan and the Democratic Republic of the Congo to name but a few. The key feature was that all the EPHS proposals were drawn up immediately after conflict/ humanitarian crises in order to assist with comprehensive reform and reconstruction of public health infra-structure.

In Pakistan, a more formal attempt for developing an essential package of health services (EPHS) was made during 2012-13, in the provinces of Punjab and Khyber Pakhtunkhwa, corresponding with the 18th constitutional amendment. With DFID / Technical Resource Facility (TRF), costed EPHS were defined but remained limited to integrated reproductive, maternal, new-born, child health and

nutrition services at community and first level care facilities levels. Non-communicable diseases, health emergencies, inter-sectoral interventions etc. were not prioritized and implementation focus remained largely through the public sector, along with contracting out of health facilities to NGOs to a variable extent. Main objective was to ensure efficiency and effectiveness of health services in the system rather than provision of comprehensive EPHS to all people. However, this offered a good lesson learning opportunity for provision of a package of services which was positively supported by development of minimum services delivery standards mainly at primary level. In parallel, legislative reforms were also initiated to establish healthcare commissions/ authority, to set service delivery standards and their enforcement both in the public and private sector.

Pakistan Health Insurance Programme was first approved in June 2014 and launched on December 31st 2015. The Programme aimed at families living below the poverty line and were covered for up to Rs. 50,000 of treatment in public or private hospitals and for up to Rs. 300,000 for treatment of seven particularly expensive diseases: diabetes, cardiovascular diseases, cancer, kidney and liver diseases, HIV and Hepatitis complications, burns and road accidents. In 2019, the package of services was enhanced to nine diseases and per family support was increased to Rs. 720,000 per year.

The 2030 agenda on Sustainable Development in 2015 has provided another opportunity to revisit the health services and health system in Pakistan to ensure achievements of new targets and goals which are more comprehensive and ambitious than MDGs. The Astana Declaration in 2018 is also expected to provide a fresh look on the PHC agenda.

In August 2018, an international meeting on Disease Control Priorities 3 was held in Pakistan and attended by Morocco, Lebanon, Iran, Jordan, Pakistan, WHO EMRO, University of Washington and other stakeholders including provincial departments of health. Soon after the workshop, Pakistan proposed the DCP3 secretariat to identify Pakistan to be the first country in the World to adopt DCP3 recommend interventions. The proposal was agreed by the secretariat.

In 2018, Ministry of NHSR&C started the development of a generic EPHS for Pakistan through a consultative process with provincial / area DOHs and other stakeholders, which are to be adopted by provinces / areas later on but to be fully implemented in the Islamabad Capital Territory.

RATIONALE

Ministry of NHSR&C and Provincial/ DOHs are committed to improve the health of all Pakistanis, particularly women and children by providing universal access to affordable, quality, essential health services which are delivered through a resilient and responsive health system, capable of attaining the Sustainable Development Goals and fulfilling its other global health responsibilities[7].

On the other hand, there are always financial constraints and the government is unable to provide even basic health services to all people resulting in poor health outcomes in the country.

The SDG baseline for UHC index in Pakistan was estimated to be 40, which is even less than the average of sub-Saharan Africa at 42[8]. While considering different factors, one cannot ignore whether right essential health services are offered to all people or not.

It is therefore critical first to review the current status of health services against some available gold standard (DCP3 recommended EHUC interventions) and find the gaps in service provision at different platforms. Following this, expansion of services and inclusion of new interventions at different platforms should be considered considering some criteria and views of experts & stakeholders.

[7] Ministry of NHSR&C, 2016; National Health Vision
[8] WHO, 2016; World Health Statistics, Monitoring Health for SDGs

OBJECTIVES

The objectives of this review are:

- Review the scope of current Essential Health Services in Pakistan against the DCP3 recommended interventions for EUHC and gather initial views on initial description of Pakistan specific generic UHC benefit package (desk review and wider consultations with stakeholders)
- Produce a plan to develop a generic UHC benefit package (EPHS and prioritized inter-sectoral interventions) for Pakistan while aligning the same with the DCP3 recommended interventions and considering the local needs

METHODOLOGY

The process started with a detailed review of DCP3 recommended interventions – listing of different interventions by different packages along with extraction of data on cost effectiveness.

This was followed by detailed review of the Burden of Disease (BOD) data for Pakistan and trend analysis to assess the health needs in Pakistan with changing scenario.

Different options for selection criteria were discussed and considering how to use the same in a simplistic manner, the following four criteria were proposed:

1 Linkage of intervention with the disease burden in Pakistan

2 Cost-effectiveness of intervention

3 Feasibility for implementation of the intervention in the context of Pakistan

4 Considering intervention/s which were not included in the DCP3 but may be relevant in the context of Pakistan

Considering the above-mentioned criteria, four consultative workshops were held with support to WHO to sensitize stakeholders on the DCP3 recommended interventions, to review the current implementation status of essential health services in Pakistan and to get views of stakeholders for inclusion/ exclusion of the recommended EUHC interventions in the generic UHC benefit package for Pakistan. Four workshops were organized on the following topics:

- Non-communicable diseases and inter-sectoral interventions – 13th December, 2018
- RMNCAH and nutrition and inter-sectoral interventions – 28th December, 2018

- Communicable diseases, international health regulations and inter-sectoral interventions – 15th January, 2019
- Inter-sectoral interventions and Health in all Policies – 20th February, 2019

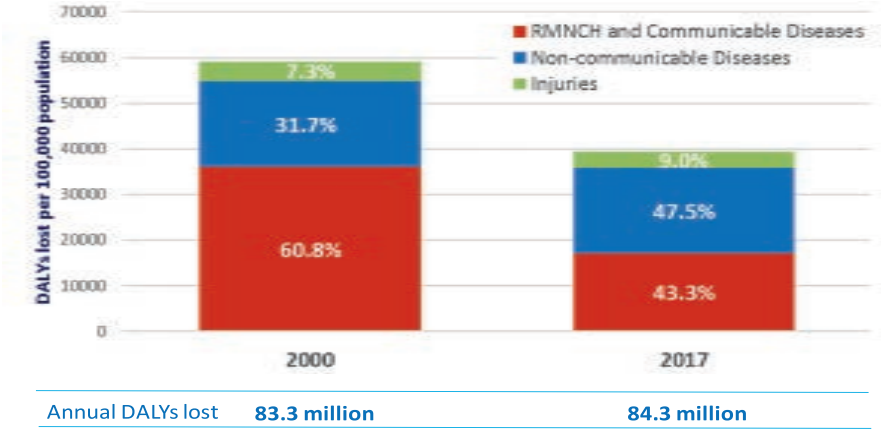
The consultations were attended by specialists, practitioners, representatives of provincial & areas departments of health, managers, health services providers, development partners, CSOs and other line ministries etc. (Please refer to **Annexure A** for list of participants).

All workshops started with a presentation on the current disease burden in Pakistan and sharing the data on cost-effectiveness of interventions to help the participants to review the current situation and prioritize (preliminary) interventions for the development of generic UHC benefit package for Pakistan. A summary of the burden of disease in Pakistan is as following:

BURDEN OF DISEASE IN PAKISTAN

Pakistan is undergoing through epidemiological and demographic transitions. Burden of the communicable, maternal, child and nutritional group, which was more than 60 percent (36,033 DALYs lost per 100,000 population) of the total burden of diseases in the year 2000, has gone down to 43.3 percent (17,063 DALYs lost per 100,000 population) in 2017. However, the burden of non-communicable disease (NCD) group which was 31.7 percent (18,802 DALYs lost per 100,000 population) of the total burden in the year 2000 has increased its share to 47.5 percent (18,709 DALYs lost per 100,000 population) in 2017. The share of burden of injuries increased from 7.38 percent (4,371 DALYs lost per 100,000 population) to 9 percent (3,577 DALYs lost per 100,000 population) over the same period.[9]

Trend of Burden of Disease in Pakistan



Annual DALYs lost	**83.3 million**	**84.3 million**

Top Ten Burden/ Risks in Pakistan (2017)

	Cause of Death
1	Ischemic heart disease
2	Neonatal disorders
3	Stroke
4	Diarrheal diseases
5	Lower resp. infection
6	Road injuries
7	COPD
8	Cirrhosis
9	Tuberculosis
10	Diabetes

	Premature Death
1	Neonatal disorders
2	Ischemic heart disease
3	Lower resp. infection
4	Diarrheal diseases
5	Road injuries
6	Stroke
7	Congenital defects
8	Tuberculosis
9	Cirrhosis
10	Meningitis

	Years lived with Disability
1	Dietary iron deficiency
2	Headache disorders
3	Low back pain
4	Neonatal disorders
5	Depressive disorders
6	Diabetes
7	Musculoskeletal
8	Anxiety disorders
9	Hearing loss
10	Blindness / Vision impairment

	Risk
1	Low birth weight
2	High blood pressure
3	Child growth failure
4	Air pollution
5	High plasma glucose
6	Smoking
7	High body mass index
8	Unsafe water source
9	High LDL cholesterol
10	Diet low in whole grain

[9] Institute of Health Metrics & Evaluation, 2018; BOD data for Pakistan 2017: https://vizhub.healthdata.org/gbd-compare/

In 2017, the death rate was 6.6 deaths per 1,000 population (approximately 1.4 million deaths) and 60.3 percent of all deaths were because of non-communicable diseases, while communicable, maternal, neonatal and nutritional group contributed to 31.5 percent of total deaths and the share of injuries was 8.16 percent.

The birth rate was estimated at 27.3 per 1,000 population in 2016 and a population growth rate of 2.04.[10] Pakistan still has a very high fertility rate of 3.6 children per woman in 2017-18, with worse situation in rural areas.[11] Life expectancy at birth has improved to 68 years (66 years for males and 70.1 years for females) in 2017[10] and is slightly lower than the global average. Further breakdown on three major groups of diseases as per burden of disease data for Pakistan[9] is as following:

1: RMNCH and Communicable Diseases:

DALYs lost per 100,000 population for RMNCH and communicable have declined significantly from 36,033 in 2000 to 17,063 in 2017. More reduction in the DALYs rate for RMNCH&CD is expected considering the results of Pakistan Demographic Health Survey (2017-18). However, still the rate is comparatively high considering other countries in the region. This also indicate that RMNCH&CD related services not only should be continued but should be scaled up further especially in hard to reach areas to get more positive outcomes.

Disease Groups for RMNCH&CD & major diseases	BOD/ DALYs per 100,000 population (2017)	Number of deaths (2017)	Prevalent cases (2017)
Maternal & Neonatal disorders	**8,563**	**203,469**	**4,930,122**
Neonatal disorders	8,025	185,097	4,513,413
Maternal disorders	538	18,371	423,131
Respiratory infections & TB	**2,965**	**103,833**	**53,543,952**
Lower respiratory infections	1,946	59,440	511,976
TB including latent infections	900	44,149	44,863,052
Enteric infections	**2,162**	**69,338**	**4,407,619**
Diarrheal diseases	1,831	59,787	4,418,738
Typhoid and paratyphoid	286	8,175	13,174
Nutritional deficiencies	**1,084**	**5,648**	**67,337,478**
Dietary iron deficiency	704	0	51,623,397
Protein energy malnutrition	160	3,142	4,025,497
HIV/AIDS & sexually transmitted inf	**369**	**10,551**	**20,993,280**
HIV/AIDS	142	5,306	94,091
STI excluding HIV	227	5,245	20,935,939
Neglected tropical diseases & malaria	**333**	**6,821**	**49,049,378**
NTDs	164	1,822	46,682,765
Malaria	169	4,999	2,366,613
Other infectious diseases	**1,586**	**46,841**	**4,355,257**
Meningitis	671	18,853	744,839
Other infectious diseases inc hepatitis	915	27,988	3,610,418
TOTAL RMNCH&CD	**17,063**	**446,502**	**143,101,977**

2: Non-Communicable Diseases:

Contrary to RMNCH&CD, the burden of NCDs remained almost static in Pakistan since the year 2000. DALYs per 100,000 population were 18,802 in 2000 while 18,709 in 2017. Percentage wise share of

[10] Planning Commission and National Institute of Population Studies, 2017: https://www.pc.gov.pk/uploads/annualplan2018/Annual.pdf and NIPS: "Updating the Population Projections for Pakistan, Provinces, FATA & ICT (2016)"
[11] National Institute of Population Studies (NIPS), 2013; Pakistan Demographic & Health Survey, 2012-13

NCDs has increased significantly and will increase further in coming years with declining RMNCH&CD disease burden and rapidly increasing population. One of the major reasons for a stagnant burden of NCD is no prioritization to tackle these diseases especially through preventive and primary healthcare services. The government started health insurance programme for the poorest families in Pakistan, which currently tackles 9 NCDs. Treatment of NCDs and reducing the catastrophic health expenditure is very effective as a social protection measure. However, to reduce the NCD burden in a cost-effective way, it is critical to invest on NCD related essential services with a focus on preventive and primary health care services.

Disease Groups for NCDs & major diseases	BOD/ DALYs per 100,000 population (2017)	Number of deaths (2017)	Prevalent cases (2017)
Cardio-vascular diseases	**4,520**	**381,421**	**8,143,109**
Ischemic heart disease (IHD)	2,513	216,926	2,349,008
Rheumatic heart disease	138	6,695	1,356,122
Stroke	1,343	117,380	1,368,911
Neoplasms	**2,770**	**170,987**	**841,000**
Breast cancer	323	20,241	262,212
Lip and oral cavity cancer	312	20,165	153,482
Leukaemia	221	8,194	36,819
Tracheal, Bronchus & Lung cancer	190	15,029	15,832
Diabetes & Chronic kidney diseases	**1,495**	**77,820**	**22,152,983**
Diabetes	843	40,872	10,743,938
CKD	650	36,844	14,663,997
Digestive diseases	**1,442**	**72,647**	**46,696,275**
Cirrhosis & Chronic liver diseases	782	45,501	33,821,319
Upper digestive system diseases	296	7,193	18,719,057
Mental disorders	**1,373**	**2**	**23,149,231**
Depressive disorders	435	0	5,631,724
Eating disorders	34	2	345,110
Musculoskeletal disorders	**1,250**	**2,995**	**25,347,316**
Low back pain	575	0	10,890,808
Rheumatoid arthritis	40	1,304	462,255
Osteoarthritis	67	0	4,501,133
Chronic respiratory diseases	**1,160**	**69,969**	**10,539,091**
Chronic Obstructive Pulmonary Disease (COPD)	725	50,149	4,466,526
Asthma	346	16,072	6,593,093
Neurological disorders	**1,158**	**32,898**	**92,238,054**
Headache disorders	626	0	91,527,800
Epilepsy	285	4,890	877,351
Sense organ diseases	**586**	**0**	**37,757,444**
Age related & other hearing loss	287	0	24,852,737
Blindness & vision impairment	279	0	19,013,349
Skin and sub-cutaneous diseases	**561**	**925**	**54,550,783**
Dermatitis	179	0	9,315,158
Bacterial skin diseases	17	848	274,579
Scabies	52	0	4,293,947
Substance use disorders	**368**	**2,547**	**4,196,500**
Alcohol use disorder	166	1,547	2,908,361
Drug use disorders	202	1000	1,353,218
Other NCD	**2,026**	**41,825**	**127,376,415**
Congenital birth defects	1,118	25,388	2,232,433
Urinary diseases and male infertility	117	4,634	2,464,464
Gynaecological diseases	134	354	21,023,346
Oral disorders	162	0	93,318,796
TOTAL NCDs	**18,709**	**853,996**	**191,032,226**

3: Injuries:

Although percentage wise share of injuries in the total burden of disease is on the rise, the DALYs lost per 100,000 population has somewhat declined from 4,371 in the year 2000 to 3,577 in 2017, with a major spike in 2005 as a result of earthquake.

Disease Groups for Injuries & major diseases	BOD/ DALYs per 100,000 population (2017)	Number of deaths (2017)	Prevalent cases (2017)
Transport injuries	1,612	58,051	4,464,096
Road Injuries	1,429	53,009	2,937,901
Other transport injuries	183	5,042	1,526,196
Unintentional injuries	1,383	38,343	16,414,368
Falls	294	9,182	5,079,442
Drowning	434	13,046	47,587
Self-harm and interpersonal violence	582	19,145	6,666,806
Self-harm	244	9,087	99,020
Inter-personal violence	301	9,326	5,961,306
TOTAL Injuries	3,578	115,539	27,545,270

Risk Factors:

A risk factor is any attribute, characteristic or exposure of an individual that increases the likelihood of developing a disease or injury. Risk factors in health are classified into **Environmental, Behavioural and Metabolic risks**. Some major risk factors in Pakistan contributing to high disease burden are as following along with their attribution to specific disease burden.

Risk Groups & major risk factors	Major risk of disease/s	Risk factor attribution to specific disease burden
Unsafe water, sanitation and hand washing	**Diarrhoea & Lower Respiratory Infections (LRI)**	**93.2% & 7.6%**
Unsafe water source	Diarrhoea	93.4%
Unsafe sanitation	Diarrhoea	43.5%
Air pollution	**LRI, COPD, IHD**	**43%, 41.6% & 24.9%**
Particulate matter pollution	LRI, COPD, IHD	43%, 35.4% & 24.9%
Other environmental risks	Idiopathic development intellectual disability & IHD	64.1% & 6.4%
Occupational risks	**Back pain, Hearing & Road injuries**	**30%, 16% & 12.1%**
Occupational carcinogens	Lung cancer	9.8%
Occupational injuries	Road injuries, Falls, Exposure to Mechanical forces	12.1%, 10.7% & 11.6%
Occupation noise	Hearing loss	15.9%
Child & maternal malnutrition	**Iron deficiency, Neonatal, LRI & Diarrhoea**	**100%, 89%, 75.5% & 61.7%**
Sub-optimal breast feeding	Diarrhoea & LRI	15.9% & 8.3%
Child growth failure	Protein energy malnutrition, Measles, Diarrhoea & LRI	100%, 61.5%, 54% & 51.7%
Low birth weight & short gestation	Neonatal disorders, LRI & Meningitis	89.6%, 22% & 7.1%
Iron deficiency	Dietary iron deficiency & Maternal disorders	100% & 28.7%
Vitamin A deficiency	Vit. A deficiency, Measles, & Diarrhoea	100%, 24.3% & 12.2%
Zinc deficiency	Diarrhoea	2.7%
Tobacco	**Lung cancer, Oral cancer, COPD, IHD**	**56%, 41.4%, 41% & 19.7%**
Smoking	Larynx cancer, Lung cancer, COPD & IHD	54.3%, 53.3%, 34.7%, 24.5%
Chewing tobacco	Lip & oral cavity cancer & Oesophageal cancer	28.8% &19.7%
Second hand smoke	LRI, COPD, Diabetes & IHD	11.4%, 9%, 8.6% & 6.7%
Others		
Alcohol use	Alcohol use disorder &, Cirrhosis	100% & 9%
Drug	Drug use disorder, HIV & Cirrhosis	100%, 32.2% & 8%
Dietary risks	**IHD, Stroke & Diabetes**	**81.2%, 63.5% & 36%**
Diet low in fruits	Stroke, IHD & Diabetes	31%, 17.3% & 11.3%
Diet low in vegetables	IHD & Stroke	23.7% & 17%
Diet low in sea food omega 3 fatty acids	IHD	22.9%
Diet high in sodium	Hypertension, Stroke & IHD	22.8%, 14.4% & 13%

Childhood maltreatment	**Depression & Anxiety**	**9.4% & 8.8%**
Childhood sexual abuse	Depression & Alcohol use disorders	5.3% & 7.8%
Bullying victimization	Anxiety & Depression	8.8% & 4.4%
Others		
Unsafe sex	HIV, STI & Cervical cancer	44.1%, 8.4% & 100%
Low physical activity	IHD, Stroke & Diabetes	8.9%, 3.4% & 2.6%
Metabolic risks	**Diabetes, CKD & IHD**	**100%, 100% & 83.3%**
High fasting plasma glucose	Diabetes, CKD, IHD & Stroke	100%, 45.9%, 22% & 21.9%
High LDL cholesterol	IHD & Stroke	50.6% & 8%
High systolic blood pressure	Hypertension, Stroke, IHD & CKD	100%, 56.3%, 53.7%, 37.4%
High body mass index	Hypertension, Diabetes, Stroke & IHD	41.1%, 40%, 28.6 & 21.6%
ALL RISK FACTORS	**Dominated by Neonatal, IHD, Stroke, Diarrhoea, LRI, COPD, Diabetes, CKD, Hypertension, Cancers**	**51.7%**

About half of the disease burden in Pakistan can be effectively reduced with appropriate focus on introducing interventions tackling these risks. Most of the risk factors in health need an effective inter-sectoral collaboration and accordingly inter-sectoral interventions. To prioritize inter-sectoral interventions, it is also important to assess attribution of risk factor to specific disease burden.

COST EFFECTIVENESS OF INTERVENTIONS

In Pakistan, health service interventions are traditionally adopted and implemented which have international evidence on effectiveness or are recommended by international declarations and organizations. Information on cost effectiveness of interventions at country level are available but at a limited scale and are not comprehensive.

DCP3 has shared global best practices, all of which have scientific evidence to be cost-effective and offer an opportunity to low- and middle-income countries to review their services considering cost-effectiveness data of different global best practices. However, there are limitations as these interventions were implemented under a different context, which may not be relevant to Pakistan. Further, costing data of one country may not be relevant to another country considering differences in purchasing power parity. DCP3 prioritized interventions have used different approaches for concluding cost-effectiveness of interventions and comparability may be a bit difficult in some cases. Further cost-effectiveness has been often presented as a range rather than a fixed value or sometimes value is not quoted at all which make the review process a bit difficult. Even then, the evidence is good enough if a country wants to choose/ compare some of cost-effectiveness interventions from the list.

While cost-effectiveness of interventions varies considerable by setting and that DCP3 does not provide country specific estimates, generation of cost effectiveness data for different interventions at country level cannot be denied for more appropriate policy and programmatic choices.

Cost effectiveness data of the DCP3 was used in the review exercise. Where possible the data was reflected against each intervention recommended for EUHC / HPP. The participants of the workshops were asked to assess availability of different services generally at the country level (while considering variation among provinces/ areas) and then to preliminary prioritize interventions for the UHC benefit package for Pakistan while considering the criteria. At a later stage further prioritization may be required considering availability of costing data (both required resources and available resources) at national level.

Following matrixes are summary of the deliberations and discussions in different groups.

DCP3 RECOMMENDED INTERVENTIONS AND PAKISTAN's ESSENTIAL HEALTH SERVICES

Review of Essential Health Services in Pakistan considering DCP3 recommended EUHC and HPP was done jointly by stakeholders (Federal ministry, provincial/area DOH, CSO, experts, service providers, UN agencies and development partners) in four workshops. The following legends were used to compare the DCP3 recommended interventions with the Essential Health Services in Pakistan. Considering the criteria of BOD, cost effectiveness and feasibility of the intervention in the Pakistan context, recommendations were made. Further views were also gathered on interventions which have not been mentioned in the DCP3 best practices but are considered effective by the experts/ stakeholders.

Current Status of Essential Health Services in Pakistan	Recommendation (considering BOD, cost-effectiveness and Feasibility)
NOT INCLUDED IN THE CURRENT HEALTH SERVICES 	STRONGLY RECOMMENDED TO BE INCLUDED IN THE EPHS FOR PAKISTAN (Top Priority) 
NOT INCLUDED IN THE CURRENT HEALTH SERVICES BUT BEING IMPLEMENTED PARTIALLY 	RECOMMENDED TO BE INCLUDED IN THE EPHS, ONCE TOP PRIORITIES ARE COVERED 
INCLUDED IN THE CURRENT HEALTH SERVICES 	NOT RECOMMENDED TO BE INCLUDED IN THE EPHS AT THIS STAGE 

REPRODUCTIVE, MATERNAL, NEWBORN, CHILD, ADOLESCENT HEALTH/ AGE RELATED CLUSTER (Packages 1-5)

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
1. Maternal and New-born Health Package of Services				Per capita cost for Essential MNH package (emergency): US$ $1.3
1	Community level	Antenatal and postpartum education on birth spacing		US$211 - 492 per life year
2	Community level	**1. Basic neonatal resuscitation following delivery**		US$500-5000 per DALY

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
3	Community level	**2. Counselling of mothers on providing thermal care for pre-term new-borns (delayed bath and skin to skin contact)**		US$20-$100 per DALY; IYCF: US$20,000 per DALY
4	Community level	**3. Management of labour and delivery in low risk women by skilled attendants**		US$20-100 per DALY
5	Community level	Promotion of breastfeeding or complementary feeding by community health workers		US$20-100 per DALY
6	Community level	HIV education and counselling for pregnant women and high-risk group individuals and PLHIV and their partners (Also included in HIV package of services)		US$249-346 per DALY
7	Community level	**4. In high malaria transmission settings, intermittent preventive treatment in pregnancy** (Also included in Febrile illness package of services)		US$500-800 per DALY
8	PHC centre	**5. Early detection and treatment of neonatal pneumonia with oral antibiotics**		US$516-700 per DALY
9	PHC centre	**6. Management of miscarriage or incomplete abortion and post-abortion care**		US$150-1000 per DALY; US$211-492 per life year saved
10	PHC centre	**7. Management of preterm premature rupture of membranes, including administration of antibiotics**		US$150-1000 per DALY; US$211-492 per life year saved
11	PHC centre	Provision of condoms and hormonal contraceptives, including emergency contraceptives		
12	PHC centre	**8. Counselling of mothers on providing kangaroo care of new-borns**		US$150-1,000 per DALY
13	PHC centre	Management of neonatal sepsis, pneumonia and meningitis using injectable and oral antibiotics		Pneumonia: US$ 282-516 per DALY IMCI: US$1.5 per child per year
14	PHC centre	**9. Pharmacological termination of pregnancy**		
15	PHC centre	**10. Tetanus toxoid immunization among schoolchildren and women attending antenatal care** (Also included in School age health package of services)		US$100 per DALY (routine); US$3.61 per DALY (school)
16	PHC centre	**11. PMTCT of HIV (Option B+) and syphilis**		HIV: US$40-60 per DALY

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
		(Also included in HIV and Congenital disorders packages of services)		Syphilis: US$20-30 per DALY
17	PHC centre	Intermittent preventive treatment in pregnancy in malaria control areas (Also included in Febrile illness package of services)		US$8-800 per DALY
18	PHC centre	Screening and management of hypertensive disorders in pregnancy (Also included in CVD package of services)		<US$100 per QALY
19	PHC centre	Screening and management of diabetes (gestational diabetes or pre-existing type II diabetes) (Also included in CVD & Congenital disorders packages of services)		US$1,320-1,343 per QALY
20	PHC centre	**12. Management of labour and delivery in low risk women (BEmONC), including initial treatment of obstetric or delivery complications prior to transfer** (Also included in Surgery package of services)		US$150-1,000 per DALY;
21	PHC centre	**13. Surgical termination of pregnancy by maternal vacuum aspiration and dilatation & curettage** (Also included in Surgery package of services)		US$211-492 per life year saved
22	First-level hospital	Detection and management of foetal growth restriction		US$150-1,000 per DALY
23	First-level hospital	**14. Induction of labour post-term**		US$211-492 per life year saved
24	First-level hospital	**15. Jaundice management with phototherapy**		
25	First-level hospital	**16. Management of eclampsia with magnesium sulphate, including initial stabilization at health centres**		US$150-1,000 per DALY
26	First-level hospital	**17. Management of maternal sepsis, including early detection at health centres**		US$150-1,000 per DALY
27	First-level hospital	**18. Management of new-born complications, neonatal meningitis, and other very serious infections requiring continuous supportive care (such as IV fluids and oxygen)**		IMCI: US$1.5 per child per year
28	First-level hospital	**19. Management of preterm labour with corticosteroids,**		US$150-1,000 per DALY

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
		including early detection at health centres		
29	First-level hospital	**20. Management of labour and delivery in high-risk women, including operative delivery (CEmONC)** (Also included in Surgery package of services)		US$200-4,000 per DALY (C-section)
30	First-level hospital	**21. Surgery for ectopic pregnancy** (Also included in Surgery package of services)		US$200-$4,000 per DALY
31	Tertiary-level hosp	Full supportive care for preterm new-borns		
2. Child Health Package of Services				Per capita cost of Essential Child package(emergency): US$ $4.8
32	Community level	**22. Management of severe acute malnutrition, including early detection in community setting**		US$40-$200 per DALY
33	Community level	**23. Detection and treatment of childhood infections, including referral if danger signs**		US$114 per DALY
34	Community level	**24. Education on handwashing and safe disposal of children's stool**		US$88-140 per DALY
35	Community level	**25. Pneumococcus vaccination**		US$100-1,036 per DALY
36	Community level	**26. Rotavirus vaccination**		US$100 per DALY ($0.20 per dose)
37	Community level	**27. Provision of vitamin A and zinc supplementation to all children according to WHO guidelines and provision of food supplementation to women and children and food insecure households** (Also included in School age health, Reproductive health and CVD packages of services)		Zinc: <US$100 per DALY ORS: US10-50 per DALY Vit A: US$6-9 per DALY
38	Community level	Mass social marketing of insecticide treated nets (Also included in School age, Febrile illness packages of services)		
39	Community level	**28. Childhood vaccination series (diphtheria, pertussis, tetanus, polio, BCG, measles, hepatitis B, HiB, rubella)** (Also included HIV, TB, Cancer, Congenital disorders packages of services)		EPI6: US$100 per DALY Hep B+HiB: US$60-350 per DALY;

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
40	Community level	**29. In high malaria transmission setting, indoor residual spraying (IRS) in selected areas with high transmission and entomologic data on IRS susceptibility** (Also included in Febrile illness package of services)		US$200-300 per DALY
41	PHC centre	**30. Detection and treatment of childhood infections with danger signs (IMCI)**		IMCI: US$1.5 per child per year
42	PHC centre	**31. Provision of Cotrimoxazole to children born to HIV+ mothers**		US$19.20 per DALY
43	PHC centre	**32. Among all individuals who are known to be HIV+, immediate ART initiation with regular monitoring of viral load for** (Also included in HIV package of services)		CD4 cell counts (500): US$237-1,691 per DLAY
44	First-level hospital	**33. Full supportive care for severe childhood infections with danger signs**		US$10,000 to avert 1 death through multiple interventions
45	First-level hospital	**34. Management of severe acute malnutrition associated with serious infections**		RUTF: US$527/child/year US$26-$39 per DALY averted
3. School-age Health & Development Package of Services				
46	Community level	Education of school children on oral health		US$0.50 per educational message
47	Community level	Vision pre-screening by teachers; vision tests and provision of ready-made glasses on-site by eye specialists		US$84 per DALY
48	Community level	**35. School based HPV vaccination for girls** (Also included in RH, HIV and Cancer packages of services)		US$10-25 per fully immunized girl
49	Community level	**36. Mass drug administration for lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminthiases and trachoma, and food borne trematode infections** (Also included in NTDs package of services)		Deworming: US$ 3.36-6.92 per DALY; Preventive chemotherapy for onchocerciasis: US$5-30 per DALY Preventive chemotherapy lymphatic filariasis: US$6-50 per DALY; Preventive therapy for schistosomiasis

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
				and STH: US$7-200 per DALY Preventive therapy for Trachoma: US422 per DALY
4. Adolescent Health & Development Package of Services				
50	Community level	School based education on sexual health, nutrition and health lifestyle		US$ 31 per student
51	Community level	Adolescent friendly health services including: prevention of STIs; treatment of injury in general and abuse in particular; and screening and treatment of STIs (Also included in HIV and STI packages of services)		US$4.70 per adolescent
52	Community level	Life skills training in schools to build social and emotional competencies (Also included in Mental health package of services)		
53	PHC centre	Psychological treatment for mood, anxiety, ADHD and disruptive behaviour disorders in adolescents (Also included in Mental health package of services)		US$100-2,000 per life year gained
54	Population level	Mass media messages concerning sexual and reproductive health and mental health for adolescents (Also included in HIV and Mental health packages of services)		
55	Population level	**37. Mass media messages concerning healthy eating or physical activity** (Also included in CVD and Musculoskeletal packages of services)		
56	Population level	Mass media messages concerning use of tobacco and alcohol (Also included in CVD and Musculoskeletal packages of services)		US$ 7.56 per DALY
5. Reproductive Health & Contraception Package of Services				Per capita cost of Essential RH package (emergency): US$ 0.6
57	Community level	**38. Provision of iron and folic acid supplementation to pregnant women, and provision of food or caloric supplementation to pregnant women in food-insecurity**		

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
		households (Also included in CVD package of services)		
58	PHC centre	Management of complications following FGM		
59	PHC centre	**39. Post-gender-based violence care, including counselling, provision of emergency contraception, and rape-response referral (medical and judicial)** (Also included in HIV package of services)		Costs of the lost productive capacity of abused women was 2.0% of GDP in Chile, 1.6% in Nicaragua, and 22% in Morocco
60	PHC centre	**40. Syndromic management of common sexual and reproductive tract infections (for example urethral discharge, genital ulcer and others) according to WHO guidelines** (Also included in HIV package of services)		US$2.39 per additional patient appropriately managed for urethral discharge
61	PHC centre	Opportunistic screening for cervical cancer using visual inspection or HPA DNA testing and treatment of precancerous lesions with cryotherapy (Also included in HIV, Cancer and Surgery packages of services)		
62	First-level hospital	**41. Early detection and treatment of early stage cervical cancer** (Also included in HIV and Cancer packages of services)		US$10 per test; US$10,000 per QALY
63	First-level hospital	**42. Insertion and removal of long-lasting contraceptives** (Also included in Surgery package of services)		US$ 4.6 per insertion CYP
64	First-level hospital	**43. Tubal ligation** (Also included in Surgery package of services)		US$ 10–13 per sterilization
65	First-level hospital	**44. Vasectomy** (Also included in Surgery package of services)		US$ 10–13 per sterilization
66	Population level	Education campaign for the prevention of gender-based violence		US$80 per DALY
67	Population level	Prevention of FGM (for daughters of women of reproductive age)		

INFECTIOUS DISEASES CLUSTER (Packages 6-10)

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
6. HIV and STIs Package of Services				
68	Community level	**45. Community-based HIV testing and counselling with appropriate referral or linkages to care and immediate ART initiation**		US$8–15 per person tested (CBT) US$1,340 at an ART threshold of CD4 count less than 200 cells per microliter and US$1,360 at universal access to ART
69	Community level	Household HIV testing and counselling in high-prevalence setting, with appropriate referral/ linkages to care and immediate ART initiation		US$1,340 at an ART threshold of CD4 count less than 200 cells per microliter and US$1,360 at universal access to ART
70	Community level	**46. Provision of condoms to key populations, including sex workers, men have sex with men, people who inject drugs (IDU), transgender populations and prisoners**		
71	PHC centre	For individuals testing positive for hepatitis B and C, assessment of treatment eligibility by trained providers followed by initiation and monitoring of ART when indicated		US$2,814 per QALY
72	PHC centre	Hepatitis B and C testing of individuals identified in the national testing policy with appropriate referral of positive individuals to trained providers		
73	PHC centre	Partner notification and expedited treatment for common STIs including HIV		
74	PHC centre	PrEP for discordant couples and others at high risk of HIV infection such as commercial sex workers		US$1-11,000 per DALY
75	PHC centre	**47. Provider-initiated testing and counselling for HIV, STIs and hepatitis for all in contact with the health system in high-prevalence setting, including prenatal care with appropriate**		US$200-2,00 per DALY (STI & HIV)

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
		referral/ linkages to care including immediate ART initiation for those testing positives for HIV		
76	PHC centre	Hepatitis B vaccination for high risk populations, including healthcare workers, IDU, MSM, household contacts and partners with multiple sex partners (Also included in Cancer package of services)		US$6-51 per life year saved
77	PHC centre	**48. Provision of harm reduction services such as safe injection equipment and opioid substitutions therapy to people who inject drugs** (Also included in Mental health package of services)		US$1,000–10,000 per HALY
78	PHC centre	**49. Provision of voluntary medical male circumcision in setting with high prevalence of HIV** (Also included in Surgery package of services)		VMMC scale-up: US$1-11 per DALY
79	Population level	Mass media encouraging use of condoms, voluntary medical male circumcision and STI testing		
7. Tuberculosis Package of Services				Per capita treatment of TB patient (emergency): US$200 to US$500;
80	Community level	Routine contact tracing to identify individuals exposed to TB and link them to care		US$273 per person (community-based treatment)
81	Community level	Symptomatic screening and referral for chest radiograph for PLHIV and children under five who are close contacts or household members of individuals with active TB; if no active TB, provision of isoniazid preventive therapy according to WHO guidelines		
82	Community level	Screening for latent TB infection following a new diagnosis of HIV, followed by yearly screening among PLHIV at high risk of TB exposure		US$60-90 per DALY
83	Community level/	Diagnosis of TB including assessment of rifampicin resistance		Add Xpert to smear to diagnose

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
	PHC centre (Recommendation of starting at DHQ/THQ level)	using rapid molecular diagnostics (UltraXpert), and initiation of first-line treatment per current WHO guidelines for drug-susceptible TB; referral for confirmation, further assessment of drug resistance and treatment of drug-resistant TB		TB: US$1,000 per DALY; First Line Treatment: US$60-200 per DALY
84	Community level	**50. Screening of HIV in all individuals with a diagnosis of active TB; if HIV infection is present, start (or refer for) ARV treatment and HIV care**		
85	Community level	Screening for latent TB infection following a new diagnosis of HIV, followed by yearly screening among PLHIV at high risk of TB exposure; initiation of isoniazid prevention therapy among all individuals who screen positive but do not have evidence of active TB		
86	First-level hospital	**51. Referral of cases of treatment failure for drug susceptibility testing; enrolment of those with MDR-TB for treatment per WHO guidelines (either short- or long-term regimen)**		Cost per patient of treating MDR TB: US$17,164 Global average cost per patient of treating MDR TB is US$13,259
87	Tertiary-level hosp	Specialized TB services, including management of MDR- and XDR-TB treatment failure and surgery for TB		Cost per patient of treating MDR TB: US$17,164
88	Population level (Also at Community level)	**52. Systematic identification of individuals with TB symptoms among high-risk groups and linkages to care (active case finding)**		
8. Malaria and adult Febrile illness Package of Services				US$5–US$220 per DALY (emergency)
89	Community level	For malaria due to P. vivax, test for G6PD deficiency; if normal, add chloroquine or chloroquine plus 14-day course of primaquine		
90	Community level	Conduct larviciding and water-management programmes in high malaria transmission areas where mosquito breeding sites		US$4-110 per DALY

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
		can be identified and regularly targeted		
91	Community level	**53. In all malaria endemic countries, diagnosis with rapid test or microscopy followed by a treatment with ACTs (or current first line combination)**		US$6-8 per DALY
92	Community level	**54. In high malaria transmission setting where rapid tests and microscopy are unavailable, presumptive treatment of febril illness with ACTs (non-severe cases) or ACTs plus antibiotics (severe cases)**		
93	Community level	**55. In high malaria transmission settings, intermittent preventive treatment in infancy (except where seasonal malaria chemoprophylaxis is being provided)**		US$6-700 per DALY
94	Community level	In low malaria transmission setting, addition of single low-dose Primaquine to first line treatment		
95	Community level	In low malaria transmission settings, case investigation, reactive case detection, proactive case detection (including mass screening and treatment)		
96	Community level	**56. In the coastal areas, seasonal malaria chemoprophylaxis**		
97	Community level	Mass drug administration in low malaria transmission settings (including high risk groups in geographic or demographic clusters)		
98	PHC centre	Evaluation and management of fever in clinically stable individuals using WHO IMAI guidelines, with referral of unstable individuals to first-level hospital care		
99	PHC centre	Focused use of vaccines for endemic infections, such as dengue, JEV, typhoid, meningococcus and others		
100	PHC centre	Provision of insecticide treated nets to children and pregnant women attending health centres		US$70–100 per DALY
101	First-level hospital	**57. Evaluation and management of fever in clinically unstable individuals using WHO IMAI guidelines, including empiric**		

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
		parenteral antimicrobials and antimalarial and resuscitative measures for septic shock		
102	First-level hospital	**58. Management of severe malaria, including early detection and provision of rectal Artesunate in community settings followed by parenteral Artesunate and full course of ACT**		
103	Tertiary-level hosp	**59. Management of refractory febrile illness including etiologic diagnosis at reference microbial laboratory**		
104	Population level	**60. Sustained vector management for ~~Chagas disease~~, visceral Leishmaniasis, dengue and other nationally important causes of non-malarial fever**		Vector control for dengue: US$500-3000 per DALY
9. Neglected tropical diseases Package of Services				
105	Community level	Management of lymphedema		US$ 5-50 per DALY
106	Community level (Also at PHC Level)	**61. Early detection and treatment of ~~Chagas disease~~, human African trypanosomiasis, leprosy and Leishmaniasis** (Priority to Trachoma, Rabies, Dengue, Mycetoma, Soil transmitted helminthiasis)		Chagas: US$45–132 per DALY; Leishmaniasis:US$20-40 per DALY Trypanosomiasis: US$7-110 per DALY Leprosy: US$50-60 per DALY
107	Community level	Total community treatment for yaws		US$500 per DALY
10. Pandemic and Emergency preparedness Package of Services				
108	Community level	Identify and refer patients with high risk including pregnant women, young children and those with underlying medical conditions		
109	Community level	Provide advice and guidance on how to recognize early symptoms and signs and when to seek medical attentions		
110	Community level	Annual flu vaccination and pneumococcal vaccine every five years for individuals with underlying lung disease		US$100-490 per DALY
111	PHC centre	Identify and refer to higher levels of health care patients with signs of progressive illness		

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
112	PHC centre (At hospital level)	Stockpile and consider treating early high-risk patients with ARV medications according to nationally endorsed guidelines		US$3,584-115,168 per death prevented
113	Population level	Conduct a comprehensive assessment of **International Health Regulations (IHR)** competencies using the Joint External Evaluation (JEE) tool and develop cost, finance and implement an action plan to address gaps in preparedness and response		
114	Population level	Conduct simulation exercises and health worker training for outbreak events including outbreak investigation, contact tracing and emergency response		US$100-125 million to cover all aspects of pandemic preparedness
115	Population level	Decentralize stocks of antiviral medications in order to reach at risk groups and disadvantaged populations		
116	Population level	Develop and implement a plan to ensure surge capacity in hospital beds, stockpiles of disinfectants, equipment for supportive care and personal protective equipment		US$125 million
117	Population level	Develop plans and legal authority for curtaining interactions between infected persons and un-infected population and implement and evaluate infection control measures in health facilities		
118	Population level	Ensure influenza vaccine security at national & subnational level		
119	Population level	Mass media messages concerning awareness on handwashing and health effects of household air pollution		US$ 90-140 per DALY

NON-COMMUNICABLE DISEASES AND INJURY PREVENTION CLUSTER (Packages 11-17)

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for EPHS (considering feasibility, BOD and cost-effectiveness)
11. Cardiovascular, respiratory and related disorders Package of Services				Essential Package (emergency): US$21 per capita
120	Community level	Exercise based pulmonary rehabilitation for patients with obstructive lung disease		
121	PHC centre	Long-term combination therapy for persons with multiple CVD risk factors, including screening for CVD in community setting using non-lab-based tools to assess overall CVD risk		US$300–2,920 per QALY
122	PHC centre	Low-dose inhaled corticosteroids and bronchodilators for asthma and for selected patients with COPD		US$1,878 - 4763 per DALY
123	PHC centre	Provision of aspirin for all cases of suspected acute myocardial infarction		US$10–20 per DALY
124	PHC centre	Screening and management of albuminuric kidney disease with ACEi or ARBs, including targeted screening among people with diabetes		US$100 per QALY for screening; US$5,298 per QALY for treatment
125	PHC centre	Screening and management of diabetes among at-risk adults, including glycemic control, management of blood pressure and lipids and consistent foot care		US$1,487 incremental cost-effective ratio for screening; US$2,513 ICER for glycemic control; US$3,136 ICER for foot care
126	PHC centre	Secondary prophylaxis with penicillin for rheumatic fever or established rheumatic heart disease		US$100 per QALY
127	PHC centre	**62. Treatment of acute pharyngitis for rheumatic fever**		US$150 per QALY for children
128	PHC centre	Long term management of ischemic heart disease, stroke and peripheral vascular disease with aspirin, beta blockers, ACEi and statins to reduce risk of further events		US$300-400 per QALY
129	PHC centre	**63. Medical management of heart failure with diuretics, beta blockers, ACEi and mineralocorticoids antagonists**		US$50 (ACEi); US$124-219(beta blockers) per DALY
130	PHC centre	Tobacco cessation counselling and use of nicotine replacement		US$55-761 per QALY (NRT)

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for EPHS (considering feasibility, BOD and cost-effectiveness)
		therapy in certain circumstances (Also included in Cancer package of services)		
131	First-level hospital	Management of acute coronary syndromes with aspirin, unfractionated heparin and generic thrombolytic (when indicated)		US$10-20 per DLAY (aspirin); US$700 per DALY (streptokinase)
132	First-level hospital	Management of acute coronary exacerbations of asthma and COPD using systemic steroids, inhaled beta-agonists and if indicated oral antibiotics and oxygen therapy		US5,000-11,000 per DALY
133	First-level hospital	**64. Medical management of acute heart failure**		US$315-3,100 per QALY
134	Tertiary-level hosp	Management of acute ventilator failure due to acute exacerbations of asthma and COPD		US$50-219 per DALY
135	Tertiary-level hosp	Retinopathy screening via telemedicine, followed by treatment using laser photocoagulation		US$1,200-$2,400 per QALY
136	Tertiary-level hosp	Use of percutaneous coronary intervention for acute myocardial infarction where resources permit		US$9,000 - 25,000 per QALY
12. Cancer Package of Services				
137	Community level	**65. Psychological support and counselling services for individuals with serious, complex or life-limiting health problems and their caregivers** (Also included in Palliative care package of services)		
138	PHC centre	**66. Essential palliative care and pain control measures including oral immediate release morphine and medicines for associated symptoms** (Also included in Palliative care package of services)		US$20 per patient per day
139	First-level hospital	**67. Management of bowel obstruction** (Also included in Surgery package of services)		US$1,611 per life years saved
140	Tertiary-level hosp	**68. Treatment of early stage breast cancer with appropriate multimodal approaches (including generic chemotherapy) with curative intent for cases detected by clinical examination**		US$7,000 per DALY

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for EPHS (considering feasibility, BOD and cost-effectiveness)
		at health centres and first level hospitals		
141	Tertiary-level hosp	**69. Treatment of early stage colorectal cancer with appropriate multimodal approaches (including generic chemotherapy) with curative intent for cases detected by clinical examination at health centres and first level hospitals**		US$700 per DALY
142	Tertiary-level hosp	**70. Treatment of early stage childhood cancers (such as Burkett and Hodgkin lymphoma, acute lymphoblastic leukaemia, retinoblastoma and Wilms tumour) with curative intent in paediatric cancer units or hospitals**		US$115,858 – 16,3350 per case US$1,962 – 2,655 per life saved (AcLL)
13. Mental, neurological and substance use disorders Package of Services				
143	Community level	Self-managed treatment of migraine		US$100 per DALY
144	PHC centre	Interventions to support caregivers of patients with dementia		
145	PHC centre	**71. Management of bipolar disorder using generic mood-stabilizing medications and psychological treatment**		US11,440 per DALY
146	PHC centre	**72. Management of depression and anxiety disorders with psychological and generic antidepressants therapy**		US$437-2048 per DALY
147	PHC centre	**73. Management of epilepsy, including acute stabilization and long-term management with generic anti-epileptics**		US$ 1,450-2,877 per DALY
148	PHC centre	**74. Management of schizophrenia using generic anti-psychotic medications and psychological treatment**		US$1427-1774 per DALY
149	PHC centre	Screening and brief intervention for alcohol use disorders (Also included in Injury package of services)		US$684 per DALY
14. Musculoskeletal disorders Package of Services				
150	PHC centre	Exercise programmes for upper extremities injuries and disorders		
151	PHC centre	Calcium and vitamin D supplementation for primary prevention of osteoporosis in high-risk individuals		
152	First-level hospital	Calcium and vitamin D supplementation for secondary prevention of osteoporosis		US$7,970 per QALY

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for EPHS (considering feasibility, BOD and cost-effectiveness)
153	Tertiary-level hosp	**75. Elective surgical repair of common orthopaedic injuries (for example meniscal and ligamentous tears) in individuals with severe functional limitation**		US$359 per DALY
154	Tertiary-level hosp	**76. Urgent, definitive surgical management of orthopaedic injuries (for example open reduction and internal fixation)**		US$362 per DALY
15. Congenital and genetic disorders Package of Services				
155	PHC centre	Targeted screening for congenital hearing loss in high-risk children, using optoacoustic testing		
156	First-level hospital	**77. In settings where sickle cell disease is a public health concern, universal new born screening followed by standard prophylaxis against bacterial infections and malaria**		
157	First-level hospital	In setting where specific single-gene disorders are a public health concern (for example thalassemia), retrospective identification of carriers plus prospective (premarital) screening and counselling to reduce rates of conception		
158	First-level hospital	Universal new-born screening for congenital endocrine or metabolic disorders (for example congenital hypothyroidism, phenylketonuria) that have high incidence rates and for which long-term treatment is feasible in limited resource settings		
159	Tertiary-level hosp	**78. Repair of cleft lip and cleft palate**		US$67-300 per DALY
160	Tertiary-level hosp	Repair of club foot (Also included in Surgery package of services)		
16. Injury prevention Package of Services				
161	Community level	Early identification of lead poisoning and counselling of families in remediation strategies for sources of environmental exposure		
162	Community level	Parent training of high-risk families, including nurse home visitation for child maltreatment		
163	First-level hospital	Management of intoxication / poisoning syndromes using		

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for EPHS (considering feasibility, BOD and cost-effectiveness)
		widely available agents e.g. charcoal, naloxone, bicarbonate, antivenin		
17. Environmental improvement Package of Services				
164	Community level	WASH behaviour change interventions, such as community led total sanitation		US$530-1,113 per DALY

HEALTH SERVICES CLUSTER (Packages 18-21)

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
18. Surgery Package of Services				
165	PHC Centre	Dental extraction		
166	PHC Centre	Drainage of dental abscess		
167	PHC Centre	**79. Drainage of superficial abscess**		US$10–220 per DALY
168	PHC Centre	Management of non-displaced fractures		US$359 per DALY
169	PHC Centre	Resuscitation with basic life support measures		US$170 to avert one death (paramedic) US$1,818 to avert one death (ambulance)
170	PHC Centre	Suturing of lacerations		US$10–220 per DALY
171	PHC Centre	Treatment of caries		
172	First-level hospital	**80. Appendectomy**		US$1,611 per life years saved
173	First-level hospital	**81. Assisted vaginal delivery using vacuum extraction or forceps**		US$211–492 per life year saved
174	First-level hospital	Burr hole to relive acute elevated intracranial pressure		US$362 per DALY
175	First-level hospital	**82. Colostomy**		US$1,611 per life year saved

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
176	First-level hospital	Escharotomy or fasciotomy		
177	First-level hospital	**83. Fracture reduction**		US$359 per DALY (non-emergency)
178	First-level hospital	**84. Hernia repair including emergency surgery**		US$10-100 per DALY
179	First-level hospital	**85. Hysterectomy for uterine rupture or intractable postpartum haemorrhage**		US$15–380 per DALY
180	First-level hospital	**86. Irrigation and debridement of open fractures**		US$359 per DALY
181	First-level hospital	**87. Management of osteomyelitis, including surgical debridement**		US$359 per DALY
182	First-level hospital	**88. Management of septic arthritis**		US$362per DLAY
183	First-level hospital	**89. Placement of external fixator and use of traction for fractures**		US$359 per life year saved
184	First-level hospital	**90. Relief of urinary obstruction by catheterization for fractures**		US$10-220 per DALY
185	First-level hospital	Removal of gallbladder, including emergency surgery		US$1,611per life year saved
186	First-level hospital	**91. Repair of perforations (for example perforated peptic ulcer, typhoid ileal perforation)**		US$1,611 per life year saved
187	First-level hospital	**92. Resuscitation with advanced life support measures, including surgical airway**		US$300 per life year gained
188	First-level hospital	Skin grafting		US$218 per DALYS
189	First-level hospital	Surgery for filarial hydrocele		
190	First-level hospital	**93. Trauma laparotomy**		US$302 per DALY
191	First-level hospital	**94. Trauma related amputations**		US$362 per DALY
192	First-level hospital	**95. Tube thoracotomy**		
193	Tertiary-level hosp	**96. Cataract extraction and insertion of intraocular lens**		US$97-176 per patient US$5.06 per DALY (without lens)
194	Tertiary-level hosp	Repair of anorectal malformations and Hirschsprung's disease		

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
195	Tertiary-level hosp	**97. Repair of obstetric fistula**		US$211-492 per life year saved; US$220-500 per DALY
196	Tertiary-level hosp	Insertion of shunt for hydrocephalus		US$29-400 per DALY
197	Tertiary-level hosp	**98. Surgery for Trachomatous Trichiasis**		US$90-11- per DALY
19. Rehabilitation Package of Services				
198	Community level	Cardiac and pulmonary rehabilitation programmes		US$998 per QALY
199	Community level	Early childhood development rehabilitation interventions including motor, sensory and language stimulation		US$4.5 per child per month;
200	Community level	Functional interventions for self-care for rehabilitation		
201	Community level	Individualized environmental modifications (for example house adaptations)		
202	Community level	Pressure area prevention and supportive seating interventions for wheelchair users		
203	Community level	Provision and training in the use of basic assistive products (such as canes, braille displays, and other aids) and compensatory strategies needed to communicate and perform activities of daily living		
204	Community level	Training and retraining for disorders of speech, swallowing, communication and cognition		
205	Community level	Training, retraining and exercise programmes for musculoskeletal injuries and disorders, including chronic low back and neck pain		
206	PHC Centre	Basic management of musculoskeletal and neurological injuries and disorders such as prescription of simple exercises and sling or cast provision		
207	PHC Centre	Review of prosthetics, orthotics and splints with referral to hospital if indicated		
208	First-level hospital	Assessment, provision and training in the use of prosthetics,		

No.	Level of Healthcare	DCP3 recommended EUHC interventions (**Bold interventions are the HPP**)	Services currently covered	Recommended for revised EPHS (considering feasibility, BOD and cost-effectiveness)
		orthotics and splints		
209	First-level hospital	Compression therapy for amputations, burns, and vascular or lymphatic disorders		
210	First-level hospital	Evaluation and acute management of swallowing dysfunction		
211	First-level hospital	Fabrication, fitting and training in the use of prosthetics, orthotics and splints		
212	First-level hospital	Initial assessment, prescription and provision of individualized interventions for musculoskeletal, cardiopulmonary, neurological, speech and communication and cognitive deficits including training in preparation for discharge		
213	First-level hospital	Mobilization activities following acute injury or illness		
20. Palliative and pain control Package of Services				
214	PHC Centre	Expanded palliative care and pain control measures, including prevention and relief of all physical and psychological symptoms of suffering		US$0.48-0.98 / patient / day
215	First-level hospital	**99. Prevention and relief of refractory suffering and acute pain related to surgery, serious injury or other serious, complex or life-limiting health problems**		US$0.48-0.98 / patient / day
21. Pathology Package of Services				
216	PHC Centre	Health centre pathology services		US$2,000–US$5,000 to establish lab (level I);
217	First-level hospital	First level hospital pathology services		
218	Tertiary-level hosp	Referral level hospital pathology services		US$150,000–US$200,000 to establish lab (level II)
219	Tertiary-level hosp	Speciality pathology services		

Pakistan Health Services (current) Legends:
N – included in Current Health Services
N – Not included in Current Health Services but being implemented partially
(NOTE: Significant variation among provinces/ areas & districts exist)

SUMMARY COMPARISON OF EUHC & HPP AND PAKISTAN's HEALTH SERVICES

No	Services Package	Total No. of Services			Community level			PHC Centre			First level hospital			Tertiary hospital			Population level		
		HPP	EUHC	Pak HS	HPP	EUHC	Pak HS	HPP	EUHC	Pak HS	HPP	EUHC	Pak HS	HPP	EUHC	Pak HS	HPP	EUHC	Pak HS
1.	**RMNCAH/ Age-Related Cluster**																		
1.	Maternal & new-born health	21	31	12+15	4	7	4 + 1	9	14	4 + 8	8	9	3 + 6	0	1	1	0	0	0
2.	Child health	13	14	6 + 5	8	9	4 + 3	3	3	1 + 1	2	2	1 + 1	0	0	0	0	0	0
3.	School-age health and development	2	4	1 + 2	2	4	1 + 2	0	0	0	0	0	0	0	0	0	0	0	0
4.	Adolescent health & development	1	7	1 + 1	0	3	0	0	1	0	0	0	0	0	0	0	1	3	1 + 1
5.	Reproductive health & contraception	7	11	2 + 5	1	1	1	2	4	1	4	4	2 + 2	0	0	0	0	2	1
2.	**Infectious Diseases Cluster**																		
6.	HIV & STIs	5	12	2 + 6	2	3	1 + 2	3	8	1 + 4	0	0	0	0	0	0	0	1	0
7.	Tuberculosis	3	9	2 + 7	1	6	1 + 5	0	0	0	1	1	1	0	1	1	1	1	1
8.	Malaria & adult febrile illness	8	16	5 + 3	4	9	1 + 2	0	3	1	2	2	1 + 1	1	1	1	1	1	1
9.	NTDs	1	3	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Pandemics	0	12	1 + 6	0	3	0	0	2	1	0	0	0	0	0	0	0	7	6
3.	**Non-communicable Diseases and Injuries Cluster**																		
11.	CVD	3	17	4 + 3	0	1	0	2	10	1	1	3	1 + 2	0	3	2 + 1	0	0	0
12.	Cancer	6	6	4	1	1	0	1	1	0	1	1	1	3	3	3	0	0	0
13.	Mental, neurological & substance use disorders	4	7	0	0	1	0	4	6	0	0	0	0	0	0	0	0	0	0
14.	Musculoskeletal disorders	2	5	2	0	0	0	0	2	0	0	1	0	2	2	2	0	0	0
15.	Congenital disorders	2	6	2	0	0	0	0	1	0	1	3	0	1	2	2	0	0	0
16.	Injury prevention	0	3	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0
17.	Environmental improvement	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
4.	**Health Services Cluster**																		
18.	Surgery	20	33	4 + 23	0	0	0	1	7	2 + 3	16	21	1 + 16	3	5	1 + 4	0	0	0
19.	Rehabilitation	0	16	5	0	8	1	0	2	2	0	6	2	0	0	0	0	0	0
20.	Palliative care	1	2	2	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0
21.	Pathology package of services	0	4	3	0	0	0	0	1	1	0	1	1	0	2	1	0	0	0
TOTAL		**99**	**219**	**42+93**	**24**	**62**	**12+18**	**25**	**66**	**11+21**	**37**	**56**	**9+34**	**10**	**20**	**8+11**	**3**	**15**	**2+9**

Results are based on general consensus among participants and gives a general picture of health services in the country. However, there would be significant variation in service provision not only among provinces/ areas but also expected worse coverage in hard to reach/ socio-economically poor districts.

Summary results of the comparison indicate that:

- Overall 135 (61.6%) of the 219 DCP3 recommended EUHC interventions are being currently implemented, out of which 42 (19.1%) are expected to be available generally, while 93 (42.4%) are available at limited level

- At Community level, 30 (48.3%) of the 62 globally recommended EUHC interventions are being currently implemented, out of which 12 (19.3%) are available generally and 18 (29%) at limited level
- At PHC centre level, 32 (48.4%) of the 66 globally recommended EUHC interventions are being implemented, out of which 12 (18.1%) are available generally and 21 (31.8%) are available at limited level
- At First level hospital, 43 (76.7%) of the 56 globally recommended EUHC interventions are being implemented, out of which 9 (16%) are available generally and 34 (60.7%) are available at limited level
- At Tertiary level hospital, 19 (95%) of the 20 globally recommended EUHC interventions are being implemented, out of which 8 (40%) are available generally and 11 (55%) are available at limited level
- At Population level, 11 (73.3%) of the 15 globally recommended EUHC interventions are being implemented, out of which 2 (13.3%) are available generally and 9 (60%) are available at limited level
- **In summary**, results indicate that generally maximum of DCP3 recommended health services are expected to be available at Tertiary level (at 95%), followed by First level hospital (at 76.7%) and then Population level (at 73.3%). Availability of DCP3 recommended services at PHC centre level and Community level are at the worst at <48%, while more than 80% of population is expected to get services from PHC centre level and Community.

Service Cluster wise results were as following:

- For RMNCH and age-related cluster, 50 (74.6%) of the 67 globally recommended EUHC interventions are being implemented, out of which 22 (32.8%) are available generally and 28 (56%) are available at limited level
- For Infectious diseases cluster, 32 (61.5%) of the 52 globally recommended EUHC interventions are being implemented, out of which 10 (19.2%) are available generally and 22 (42.3%) are available at limited level
- For Non-communicable diseases and injuries cluster, 16 (35.5%) of the 45 globally recommended EUHC interventions are being implemented, out of which 6 (13.3%) are available generally and 10 (22.2%) are available at limited level
- For Health services cluster, 37 (67.2%) of the 55 globally recommended EUHC interventions are being implemented, out of which 4 (7.2%) are available generally and 33 (60%) are available at limited level
- **In summary**, results indicate that maximum of DCP3 recommended services are expected to be available for RMNCH and age-related cluster (at 74.6%), followed by infectious diseases cluster (at 61.5%) and then health services cluster (at 64.9%). Non-communicable diseases and injuries cluster appears to be a neglected area at 35.5% while burden of disease for this is more than 56%. The results correspond to the breakdown of results for UHC index of Pakistan in 2016.

- Implementation of the highest priority package is only with 27 (27.2%) of the 99 recommended interventions.
- 169 (77.1%) out of 219 recommended EUHC interventions were proposed by participants to be included on priority basis in the generic EPHS, while others may be included at a later stage. However, before that importance should also be given to scale up those interventions which are available at limited level, while ensuring **access**, **equity** and **quality**.
- Some of the DCP3 recommendations were not recommended to be included by participants considering i) not relevant/ feasible in the context of Pakistan, ii) contradicting to the WHO standard guidelines, iii) riskier and iv) other reasons.
- It was strongly recommended that while developing a generic EPHS, platform of **PHC Centres** should be further divided into Rural Health Centre, Basic Health Unit, MCH Centre, Health Centre and Dispensary. Similarly, platform of **First level hospitals** should be divided into DHQ and THQ hospitals. Role of public and private sector should be considered not only for the development of EPHS but also in the implementation.

INTERSECTORAL INTERVENTIONS TO REDUCE RISKS

Inter-sectoral interventions were not considered as a part of UHC Benefit Package. Further no significant efforts were made in the past to focus on these cost effective and sustainable reforms. However, the stakeholders and participants of the workshops strongly recommended to introduce such reforms on priority basis. The following legends were used to capture the priority recommendations of the stakeholders/ participants.

Recommendation	
HIGHLY RECOMMENDED (Top Priority)	
RECOMMENDED TO BE INCLUDED AT A LATAR STAGE	
NOT RECOMMENDED TO BE INCLUDED AT THIS STAGE	

No.	DCP3 recommended inter-sectoral policies and interventions (**Bold interventions are the HPP**)	**Instrument**	**Priority**
1. Risk domain – ADDICTIVE SUBSTANCE USE			
1	**1. Substance use: impose large excise taxes on tobacco, alcohol and other addictive substance**	Fiscal	US$13 per DALY; US$1 per person
2	**2. Substance use: impose and enforce strict regulation of advertising, promotion, packaging and availability of tobacco and alcohol**	Regulation	US$435 per DLAY (tobacco)
3	**3. Smoking control: ban smoking in public places**	Regulation	US$6.56 per DALY
4	Alcohol control: setting and enforcement of blood alcohol concentration limits	Regulation	US$555 per DALY
2. Risk domain – DIET			
5	**4. Iron and folic acid: Fortify food**	Regulation	US$24 cost benefit ratio
6	**5. Iodine: Fortify salt**	Regulation	US16.4 annual cost per child; US$81 cost benefit ratio
7	**6. School feeding: ensure that subsidized foods and school lunches have adequate nutritional quality**	Regulation	US$41 per child (targeted to 20% of population in most food

No.	DCP3 recommended inter-sectoral policies and interventions (**Bold interventions are the HPP**)	**Instrument**	**Priority**
			insecure or poor areas)
8	**7: School feeding: finance school feeding for all schools and students in selected geographical areas**	Regulation	US$182 per kg weight gain
- Excessive nutrient intake			
9	**8: Salt: impose regulations to reduce salt in manufactured food products**	Regulatory	US$0.40-1 per person per year
10	**9: Salt and sugar: provide consumer education against excess use, including product labelling**	Information and education	US$2.60 to 3.74 per DALY
11	**10: Sugar sweetened beverages: tax to discourage use**	Fiscal	US$0.03 per cane
12	**11: Transfats: ban and replace with polyunsaturated fats**	Regulatory	US$0.50 per adult per year (to reduce 2% of energy from Transfats with Poly-saturated
3. Risk domain – ENVIRONMENTAL			
- Air pollution			
13	Indoor sources: ban on kerosene as a source of household fuel	Regulatory	
14	**12: Indoor sources: halt the use of unprocessed coal as a household fuel**	Regulatory	
15	Indoor sources: promotion of kitchen retrofits to reduce household air pollution	Information and education	
16	Indoor sources: regulations on building codes that ensure adequate ventilation	Regulation	
17	**13: Indoor sources: subsidize clean alternatives to kerosene such as liquid propane gas (LPG)**	Fiscal	
18	**14: Indoor sources: subsidies to promote the use of low emission household energy devices and fuels**	Fiscal	
19	**15: Fossil fuel emissions: dismantle subsidies for and increase taxation of fossil fuels (except LPG)**	Fiscal	
20	Fossil fuel emissions: measure to reduce diesel use, including engine retrofits and transition to compressed natural gas for fleets	Build environment	
21	**16: Fossil fuel emissions: regulate transport, industrial and power generation emissions**	Regulatory	
22	Fossil fuel emissions: relocation of brick kilns and retrofits for emission control	Build environment	
23	Fossil fuel emissions: subsidies to renewable energy	Fiscal	

No.	DCP3 recommended inter-sectoral policies and interventions (**Bold interventions are the HPP**)	Instrument	Priority
24	**17: Fossil fuel emissions: tax emissions and /or auction off transferable emission permits**	Fiscal	
25	Fossil fuel emissions: enhance clean fuel distribution networks	Build environment	
26	Non-emission outdoor sources: Establish or strengthen municipal street cleaning and trash collection measures	Regulatory	
27	Non-emission outdoor sources: fines for residual trash burning	Fiscal	
28	Non-emission outdoor sources: impose and enforce measures to control non-emission sources of air pollution, including road and construction dust	Regulatory	
29	Greenhouse gases: regulate CO2 and methane emissions (including cap and trade)	Regulatory	
30	Greenhouse gases: tax CO2 and methane emissions	Fiscal	
- Occupational			
31	Animal husbandry: hygiene enforcement measures, including education, in occupations that involve animal husbandry	Regulatory	
32	Medical workers: introduce safe injection devices, such as blunt tip suture needles	Build environment	
33	Occupational safety: setting and enforcement of occupational safety standards	Regulatory	
34	Hazardous occupations: setting and enforcement of regulations on the use of personal equipment in hazardous occupations	Information and education	
- Water supply and sanitation			US$530 per DALY
35	WASH: establish quality WASH facilities in schools, workplaces, public spaces and healthcare facilities	Build environment	
36	WASH: targeted WASH subsidies to poor and vulnerable groups	Fiscal	
37	**18: WASH: enact national standards for safe drinking water and sanitation within and outside households and institutions**	Regulatory	US$200-3000 per DALY
- Toxic substances			
38	**19: Hazardous waste: legislation and enforcement of standards for hazardous waste disposal**	Information and education	
39	Hazardous waste: restricted access to contaminated sites	Regulatory	
40	Hazardous substances: regulations on child-resistant containers for hazardous substances (e.g. paraffin, paracetamol, etc.)	Regulatory	

No.	DCP3 recommended inter-sectoral policies and interventions **(Bold interventions are the HPP)**	**Instrument**	**Priority**
41	**20: Pesticides: enact strict control and move to selective bans on highly hazardous pesticides**	Regulatory	
42	Silica: engineering controls to decrease release of silica and other toxins	Build environment	
43	Arsenic: monitoring of groundwater supplies and provision of alternatives if needed	Regulatory	
44	Asbestos: banning of import, export, mining, manufacture and sale	Regulatory	
45	**21: Lead exposure: concessionary financing for remediation of worst cases of lead contamination**	Fiscal	
46	Lead exposure: take actions to reduce human exposure to lead, including bans on leaded fuels and phase-out of lead-based consumer products	Regulatory	
47	Toxic emissions: established and enforced toxic element emissions for air and water	Regulatory	
48	Mercury: monitoring and reduction or elimination of use in artisanal mining, large scale smelting and cosmetics	Regulatory	
4. Risk domain – INJURIES			
	- Road traffic injuries		
49	**22: Public transportation: build and strengthen public transportation systems in urban areas**	Build environment	Road injuries cost US$89.6 billion a year in LMICs, or 1–2% of their GNPs
50	Public transportation: subsidies to encourage use of public transportation systems	Fiscal	US$32 per year life saved (LIC)
51	Traffic safety: increased visibility, areas for pedestrians separate from fast motorized traffic	Build environment	
52	**23: Traffic safety: include traffic calming mechanisms into road construction**	Build environment	
53	**24: Traffic safety: set and enforce speed limits on roads**	Regulatory	US$32 per year life saved
54	**Pedestrian safety: Programs that ensure the supervision of children walking to and from school**	Information and education	
55	**25: Vehicle safety: enact legislation and enforce personal transport safety measures, including seatbelts and helmets for motorcycle users**	Regulatory	Enforcement of traffic laws costs US$84 per DALY averted
56	Vehicle safety: social marketing to promote seatbelt use in vehicles and helmet use by child bicyclists	Information and education	US$615 per DALY for helmet safety
57	Vehicle safety: mandatory use of daytime running lights for motorcycles	Regulatory	

No.	DCP3 recommended inter-sectoral policies and interventions (**Bold interventions are the HPP**)	Instrument	Priority
	- Other injuries		
58	Suicide prevention: decriminalization of suicide	Regulatory	
59	Interpersonal injury prevention: stricter licensing laws and reduced availability of firearms and ammunition	Regulatory	
60	Gender equity: micro-finance combined with gender equity training	Fiscal	
61	Gender equity: school-based programmes to address gender norms and attitudes	Information and education	
62	Drowning: legislation and enforcement of use of flotation devices	Regulatory	
63	Drowning: programmes to prevent drowning in high-risk areas by supervising younger children and teaching older children how to swim	Information and education	Swimming training for children ages 4+ years: US$27 per DALY averted and US$949 per death
64	Burns: safer stove design to reduce risk of burns	Build environment	Average cost per burn patient is US$1,102
5. Risk domain – OTHERS			
65	**26: Exercise: take steps to develop infrastructure enabling pedestrians and bicyclists**	Build environment	
66	**27: Agricultural antibiotics use: reduce and eventually phase-out sub therapeutic antibiotic use in agriculture**	Regulatory	
67	**28: Emergency response: create and exercise multi-sectoral response and supply stockpiles to respond to pandemics and other emergencies**	Regulatory	
68	Safe sex: enact laws and policies to protect and reduce stigma for key populations	Regulatory	
69	Safe sex: impose regulations requiring condom use in brothels	Regulatory	
70	Safe sex: remove legal barriers to safe injection facilities and needle exchange programmes	Regulatory	
71	**29: Safe sex: remove duties and taxes on condoms and subsidize for high-risk populations. As soon as possible, make condoms free, ~~beginning with adolescent and low income populations~~**	Regulations	

SUMMARY OF DCP3 INTERSECTORAL INTERVENTIONS STRONGLY RECOMMENDED FOR UHC BENEFIT PACKAGE FOR PAKISTAN

No	Risk Domains	Total No. of Policies			Fiscal			Regulation			Info & Education			Build Environment		
		EIP	IP	Pak Priorities	EIP	IP	Pak Priorities	EIP	IP	Pak Priorities	EIP	IP	Pak Priorities	EIP	IP	Pak Priorities
1.	**ADDICTIVE SUBSTANCE USE**															
a.	Addictive Substance Use	3	4	**3**	1	1	**1**	2	3	**2**	0	0	**0**	0	0	**0**
2.	**DIET**															
b	Inadequate nutrient intake	4	4	**2**	1	1	**0**	3	3	**2**	0	0	**0**	0	0	**0**
c	Excessive nutrient intake	4	4	**3**	1	1	**1**	2	2	**1**	1	1	**1**	0	0	**0**
3.	**ENVIRONMENTAL**															
d	Air pollution	6	18	**7**	4	7	**1**	2	7	**4**	0	1	**0**	0	3	**2**
e	Occupational	0	4	**4**	0	0	**0**	0	2	**2**	0	1	**1**	0	1	**1**
f	Water supply and sanitation	1	3	**2**	0	1	**0**	1	1	**1**	0	0	**0**	0	1	**1**
g	Toxic substances	3	11	**10**	1	1	**1**	1	8	**7**	1	1	**1**	0	1	**1**
4.	**INJURIES**															
h	Road traffic injuries	4	9	**9**	0	1	**1**	2	3	**3**	0	2	**2**	2	3	**3**
i	Other injuries	0	7	**6**	0	1	**1**	0	3	**2**	0	2	**2**	0	1	**1**
5.	**OTHERS**															
j	Others	4	7	**4**	0	0	**0**	3	6	**3**	0	0	**0**	1	1	**1**
TOTAL		29	71	**50**	8	14	**6**	16	38	**27**	2	8	**7**	3	11	**10**

EIP: Early Inter-sectoral policies
IP: Inter-sectoral policies

Summary of recommendations for Inter-sectoral policies:

- Stakeholders recommended 50 (70.4%) of the 71 DCP3 inter-sectoral policies to be considered for inclusion in the UHC Benefit Package for Pakistan, in the first stage – 6 are fiscal, 27 are regulatory, 7 are Info & Education and 10 are related to building environment.

ADDITIONAL INTERVENTIONS TO BE INCLUDED/ ENSURED

Level	Intervention	Comments
Community	Communication interventions for early detection of susceptible cases seeking early treatment and advantages of community-based preventive approached (LLIN, IRS and breading site management) under Integrated Vector Management umbrella	
Inter-sectoral intervention	Legislation for safe use and disposal of public health pesticides used in vector control	Regulation
Inter-sectoral intervention	Elimination of rodent reservoirs of cutaneous Leishmaniasis by other departments	Information and education
Inter-sectoral intervention	Ban on plastic bags and plastic utensils use in microwaves	Regulation and Information & education
Inter-sectoral intervention	Discourage injectable use in milk producing animals	Regulation
All five platforms and inter-sectoral interventions	13 Global Best Practices for Nutrition (mostly included in DCP3) **Promoting good nutritional practices:** i. Breast-feeding ii. Complementary feeding for infants after the age of six months iii. Improved hygiene practices including hand washing **Increasing intake of vitamins and minerals:** **Provision of micronutrients for young children and their mothers:** iv. Periodic Vitamin A supplements v. Therapeutic zinc supplements for diarrhoea management vi. Multiple micronutrient powders vii. De-worming drugs for children (to reduce losses of nutrients) viii. Iron-folic acid supplements for pregnant women to prevent and treat anaemia ix. Iodized oil capsules where iodized salt is unavailable **Provision of micronutrients through food fortification for all:** x. Salt iodization xi. Iron fortification of staple foods **Therapeutic feeding for malnourished children with special foods:** xii. Prevention or treatment for moderate under-nutrition xiii. Treatment of severe under-nutrition (“severe acute malnutrition”) with ready-to-use therapeutic foods (RUTF) etc.	

PLAN TO DEVELOP A GENERIC UHC BENEFIT PACKAGE FOR PAKISTAN

ACTIONS REQUIRED

The desired outcome should be the development of a live and Generic UHC Benefit Package (EPHS + Inter-sectoral interventions) for Pakistan considering not only recommended DCP3 interventions but also some interventions which may be added only in the country context as per suggestions of stakeholders. The actions required are proposed to be as following:

1. Ministry of NHSR&C should finalize this report and share with stakeholders to get their views and suggestions and incorporate the same while developing a generic UHC benefit package.
2. Quarterly call the meetings of Technical Working Groups (RMNCH, Communicable Diseases/IHR, NCD and Inter-sectoral etc.) to share findings and getting their inputs for the development of a generic UHC benefit package.
3. Complete the following tasks with support of partners.

3.1.1 Review of current HRH norms at different levels and assess requirements – HSPIU/ HSRUs
3.1.2 Discussion on HRH norms with National HRH Working Group
3.2.1 Review of essential drug list at different levels and assess requirements – HPSIU/ HSRUs
3.2.2 Discussion with Drugs Group to finalize list of essential medicines, equipment and supplies
3.3.1 Review of health information system and suggest recommendations – HPSIU/ HSRUs and WHO
3.4.1 Development of TOR to review systems- supervision, referral, drug supply, WASH services in health facilities, patient safety measures, coordination mechanism at district level and relevant protocols
3.4.2 Procurement of System review (TA)
3.4.3 Fieldwork/ Desk Review for System review (TA)
3.5.1 Development of ToR to review in service training for all levels
3.5.2 Procurement of In-service training review (TA)
3.5.3 Fieldwork/ Desk Review for In-service training review (TA)
3.6.1 ToR and Revision of training curriculum & modules/ development of new modules
3.7.1 Development of ToR to review quality standards for service delivery
3.7.2 Procurement of quality standards review (TA)
3.7.3 Fieldwork/ Desk Review for quality standards and suggest recommendations (TA)
3.7.4 Workshop with Islamabad Healthcare Authority and all provincial healthcare commissions and partners to develop consensus on generic quality standards
3.8.1 Development of ToR for formulation of Operational plan for Inter-sectoral interventions (HiAP)
3.8.2 Procurement of TA for Operational plan development for Inter-sectoral interventions
3.8.3 Field/ Desk Review for Inter-sectoral interventions plan (TA)
3.8.4 Production of zero draft of Generic UHC benefit package and costing exercise (HPSIU with support of HSA, AKU and LSHTM) – second stage of prioritization may also be required on

availability of costing results and fiscal gap analysis

Costing exercise will include a very ball park 'localized' estimate of each of the costs and cost effectiveness of the services to be included in the package. This will be used to list the interventions in order/ ranking which may help in conducting more exercise to 'change the order/ ranking' based on other criteria

List the interventions that are 'in' or 'out' for different scenarios of budget growth and then

- Finalised budget envelops / or go ahead in specific geographic areas
- A detailed resource estimates / costing for the areas of implementation / as per the plan
- A further document, that is advisory to the areas not included in implementing straightaway
- A list of interventions requiring further investigation/ measurement

3.9.1 Meeting of National Task Force on DCP3 to review the Package

3.10.1 Review of the Package by the International Advisory Group

4. Develop standard operating protocols to roll out EPHS and inter-sectoral interventions
5. Develop integrated training curriculum and training materials especially for in service training and recommendations for pre-service training
6. Develop a plan to roll out EPHS and capacity building activities as an integral component of Islamabad Model Health System, Family Practice Approach and other reform initiatives

Annexure A: Review Team and Participants

The Ministry of National Health Services, Regulations and Coordination is playing a lead role with full involvement of Provincial / Area Departments of Health.

Involvement of stakeholders from the public & private health sector, community, implementing partners/ CSOs, academic institutions, UN and donor agencies (at different level) was ensured for a comprehensive and inclusive dialogue.

For early inter-sectoral interventions, involvement of other relevant ministries and stakeholders is also being ensured right from the beginning.

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