Afghanistan priority package of health services:

Guidelines for health interventions

Prepared by Maureen Seguin, PhD

Contents

List of abbreviations	ii
1. Introduction	1
2. Methodology	1
Figure 1. Clusters of essential packages*	1
3. Findings: Guidelines per intervention organised by DCP3 cluster	2
3.1 Age-related cluster	2
3.1.1 Package 1: Maternal and newborn health interventions	2
3.1.2 Package 2: Child health interventions	7
3.1.3 Package 3: School-age health and development interventions	9
3.1.4 Package 4: Adolescent health and development	10
3.1.5 Package 5: Reproductive health and contraception	11
3.2 Infectious diseases cluster	13
3.2.1 Package 6: HIV and sexually transmitted infections	13
3.2.2 Package 7: Tuberculosis	15
3.2.3 Package 8: Malaria and adult febrile illness	17
3.2.4 Package 9: Neglected tropical diseases	
3.2.5 Package 10: Pandemic and emergency preparedness	18
3.3 Non-communicable disease and injury cluster	19
3.3.1 Package 11: Cardiovascular, respiratory and related disorders	19
3.3.2 Package 12: Cancer	21
3.3.3 Package 13: Mental, neurological, and substance use disorders	21
3.3.4 Package 14: Musculoskeletal disorders	23
3.3.5 Package 15: Congenital and genetic disorders	23
3.3.6 Package 16: Injury prevention	24
3.4 Health Services cluster	24
3.4.1 Package 18: Surgery	24
3.4.2 Package 19: Rehabilitation	27
3.4.3 Package 20: Palliative care and pain control	
3.4.4 Package 21: Pathology	
4. Summary	29
5. References	
Appendix A: Integrated package of essential health services 2019	
Appendix B: List of organizations and networks included in guideline search	
Appendix C: Description of guideline documents	

List of abbreviations

ACF	Action Contre La Faim
ACT	Artemisinin-based Combination Therapy
ARV	Antiretroviral
BHC	Basic Health Centres
CHC	Comprehensive Health Centres
CMHT	Community/Mobile Health Teams
COPD	Chronic Obstructive Pulmonary Disorder
CPWG	Child Protection Working Group
DH	District Hospitals
ECD	Early Child Development
ENN	Emergency Nutrition Network
ICRC	International Committee of the Red Cross
IM/IV	Intramuscular/Intravenous
IV	Intravenous
MDR-TB	Multi-Drug-Resistant Tuberculosis
mhGAP	Mental Health Gap Programme
MSF	Médecins Sans Frontières
РН	Provincial Hospitals
PMTCT	Prevention of Mother-To-Child Transmission
PPROM	Pre-term Pre-labour Rupture Of Membranes
RDT	Rapid Diagnostic Test
SAM	Severe Acute Malnutrition
SHC	Sub Health Centres
ТВ	Tuberculosis
VAWG	Violence Against Women and Girls

1. Introduction

The London School of Hygiene & Tropical Medicine (LSHTM) was commissioned to support the Afghanistan Ministry of Public Health (MoPH) to develop a priority package of health services. This technical report collates the most relevant implementation guidelines for the interventions comprising the package of health services. The report consists of a methodology section, followed by the recommended guidelines per intervention (organised by Disease Control Priorities [third edition] cluster), closing with a brief summary.

2. Methodology

The interventions comprising the health package were selected through collaboration between members of an expert committee. Membership in the committee was drawn from the Afghanistan MoPH, World Health Organisation (WHO), United States Agency for International Development (USAID), the Palladium Group, and academics from LSHTM, University College London, University of Washington, and Aga Khan University. The current package of health services in Afghanistan was compared to the Disease Control Priorities (third edition) (DCP3) high-priority interventions in order to prompt discussion on additional interventions to incorporate into the new Afghan package of health services. Some members of the expert committee were involved in drafting the DCP3. A December 2018 draft table containing the interventions appears in Appendix A.

The DCP3 organises 21 essential health packages into four clusters: age-related, infectious disease, noncommunicable disease and injury, and health services (D Jamison et al., 2017). The interventions selected for the new package of health services were derived from those listed in Annexes 3C (Watkins et al., 2018b) and 1A (Watkins et al., 2018a) of DCP3 Volume 9 (Jamison et al., 2018), as well as expert opinion. Figure 1 shows the 21 essential health packages according to cluster.

Figure 1. Clusters of essential packages*

- iguie i. Clusters of essential puerages						
Age-related cluster (packages 1–5)1 Maternal and newborn health2 Child health3 School-age health and development						
4 Adolescent health and development						
5 Reproductive health and contraception						
Infectious diseases cluster (packages 6–10)						
6 HIV and sexually transmitted infections						
7 Tuberculosis						
8 Malaria and adult febrile illness						
9 Neglected tropical diseases						
10 Pandemic and emergency preparedness						
Non-communicable disease and injury cluster (packages 11–17)						
11 Cardiovascular, respiratory, and related disorders						
12 Cancer						
13 Mental, neurological, and substance use disorders						
14 Musculoskeletal disorders						
15 Congenital and genetic disorders						
16 Injury prevention						
17 Environmental improvements						
Health services cluster (packages 18–21)						
18 Surgery						
19 Rehabilitation						
20 Palliative care and pain control						
21 Pathology						

^{*}Adapted from DT Jamison et al. (2017)

The websites of 75 organizations and networks (see Appendix B) were searched for guidance documents related the selected health interventions. This yielded 104 documents, of which 39 were selected as the most relevant to the interventions.

Below, the interventions and associated guidance documents are reported according to DCP3 package, organised by cluster.

3. Findings: Guidelines per intervention organised by DCP3 cluster

The DCP3 alphanumeric code associated with interventions (as per Annex 3C) (Watkins et al., 2018b) are listed in round brackets per intervention below, where applicable. For those interventions associated with the essential health packages in Annex 1A (Watkins et al., 2018a) the package number (1 through 21) is reported. Interventions derived from expert opinion are denoted with the abbreviation 'EO.' The suggested setting for the interventions (ranging from Community/Mobile Health Teams [CMHT], Sub Health Centres [SHC], Basic Health Centres [BHC], Comprehensive Health Centres [CHC], District Hospitals [DH] and Provincial Hospitals [PH]) are reported, per intervention, in square brackets.

Relevant guidelines are listed following each intervention. Many guidelines were relevant to more than one intervention. A brief description of each guideline appears in Appendix C (chronological according to author), The guideline documents are available at the following google drive link: https://drive.google.com/drive/folders/1sE9tfP2Xurpglta_n7ERADx094e2bzxV.

3.1 Age-related cluster

The age-related cluster includes packages 1-5: (1) Maternal and newborn health, (2) Child health, (3) School-age health and development, (4) Adolescent health and development, and (5) Reproductive health and contraception (DT Jamison et al., 2017).

3.1.1 Package 1: Maternal and newborn health interventions

The expert committee selected 26 interventions regarding maternal and newborn health interventions. Each are bulleted below, followed by a sub-bullet outlining the relevant guidelines for the intervention.

- At least 4 antenatal visits including essential education (on maternal health and family planning, support for those experiencing interpersonal violence, recognition of danger signs for hypertensive disorders and gestational diabetes, promotion of healthy diet and relevant nutritional supplementation per WHO protocol, HIV education and counselling, and tetanus vaccination administration (C1, C5, and C6) [SHC, BHC].
 - Relevant guideline: The Sphere Association (2018) guidelines are most overarching of available guidelines for this intervention.
 - Guidelines specific to Severe Acute Malnutrition (SAM) can be found in Action Contre La Faim (2012), and to breastfeeding in Action Contre La Faim (2014). The 'Community management of at-risk mothers and infants under six months of age' (C-MAMI) Tool provides guidance on how to assess, classify, and manage at-risk mothers and infants under 6 months of age who are nutritionally vulnerable (Emergency Nutrition Network et al., 2019). Additional nutrition guidelines for pregnant women can be found in the 'Nutrition matters: Guidance for nutrition programming' document drafted by the International Committee of the Red Cross (ICRC, 2016).

- See the 'Guide to maternal, newborn and child health and nutrition in emergencies,' drafted by World Vision to access low-cost, evidence-based, measurable and preventive interventions to address causes of maternal and child mortality in emergency settings (Geibel, 2012).
- See Becher (2015a, b) for guidance on ensuring the uninterrupted supply of Antiretroviral (ARV) drugs for the Prevention of mother-to-child transmission (PMTCT) during crisis, and IASC (2010) (Guidelines for addressing HIV in humanitarian settings) for standard operating procedures templates to assist programme planners and implementers in planning the delivery of a minimum set of HIV prevention, treatment, care and support services to people affected by humanitarian crises.
- See the 'Handbook for Coordinating Gender-based violence interventions in humanitarian settings' Gender-based Violence Area of Responsibility Working Group (2010) for comprehensive guidelines on how to prevent and respond effectively to gender-based violence.
- Clinical guidelines for conditions relevant to this intervention can be accessed in Médecins Sans Frontières (MSF) 'Clinical guidelines - Diagnosis and treatment manual for curative programmes in hospitals and dispensaries: Guidance for prescribing' document (Grouzard et al., 2018).
- Comprehensive antenatal visits for complicated pregnancy, including management of hypertensive disorders in pregnancy, gestational diabetes, and HIV in pregnancy (HC8, HC9, HC10, and FLH1) [CHC and DH].
 - Relevant guidelines: The MSF guide (Essential obstetric and newborn care: Practical guide for midwives, doctors with obstetrics training and health care personnel who deal with obstetric emergencies) (Coutin, 2015), and World Vision guide to maternal, newborn and child health and nutrition in emergencies (Geibel, 2012) are most relevant to this intervention.
 - See Becher (2015a, b) for guidance on ensuring the uninterrupted supply of ARV drugs for PMTCT during crisis, IASC (2010) for standard operating procedures templates to assist programme planners and implementers in planning the delivery of a minimum set of HIV prevention, treatment, care and support services to people affected by humanitarian crises, and ICRC (2008) for guidelines on how to integrate HIV care into other health programs.
 - See UNHCR (2014) (Guidelines for the delivery of antiretroviral therapy to migrants and crisis-affected persons in sub-saharan Africa), which may have some relevance to other settings with migrants and crisis-affected persons.
 - See Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013) (Assessment of HIV in internally displaced situations) for guidance relevant to pregnant internally displaced women with HIV.
- Education for recognition of signs of pre-term labour (EO) [CMHT].
 - Relevant guideline: The MSF guidelines authored by Coutin (2015).
- Early detection of pre-term labour and premature rupture of membranes with timely referral and first dose antibiotics if indicated (FLH7) [SHC, BHC, and CHC].
 - Relevant guideline: MSF guidelines authored by Coutin (2015).

- **Management of preterm labour and pre-term pre-labour rupture of membranes** (PPROM) with antenatal corticosteroids and antibiotics as indicated (HC3 and FLH7) [DH and PH].
 - Relevant guideline: MSF guidelines authored by Coutin (2015).
- Early detection of signs of pre-eclampsia with timely referral (HC9) [SHC].
 - Relevant guideline: MSF guidelines authored by Coutin (2015).
- Initial stabilization and management of eclampsia with intramuscular/intravenous injection (IM/IV) loading dose magnesium sulphate, and transfer (FLH4) [BHC and CHC].
 - Relevant guideline: The MSF-funded 'Essential drugs: Practical guide intended for physicians, pharmacists, nurses and medical auxiliaries' authored by Pilon (2018) is the most relevant guideline to this intervention.
 - See also MSF guidelines authored by Coutin (2015).
 - See also ICRC (2018) for anaesthesia guidelines relevant to this intervention.
- **Comprehensive management of eclampsia** (FLH4) [DH and PH].
 - Relevant guideline: Pilon (2018).
 - See also Coutin (2015) and ICRC (2018).
- Management of labour and delivery in low-risk women and adolescents, Basic Emergency Obstetric and Newborn Care (BEmONC), including initial treatment of obstetric or delivery complications prior to transfer, in both remote and non-remote areas (HC11) [SHC, BHC, and CHC].
 - Relevant guideline: The Sphere Association (2018).
 - See also Coutin (2015) and ICRC (2018).
 - See Gender-based Violence Area of Responsibility Working Group (2010), for specific guidelines for pregnant women who have experienced violence.
- Management of labour and delivery in high risk women and adolescents undergoing caesarean delivery, Comprehensive Emergency Obstetric and Newborn Care (CEmONC) (FLH8) [DH and PH].
 - Relevant guideline: The Sphere Association (2018).
 - See also Coutin (2015) and ICRC (2018).
 - See also Gender-based Violence Area of Responsibility Working Group (2010).
- Promotion of Kangaroo care and early breastfeeding (C2, C4 and HC5) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and Save the Children (2016) (Newborn health in emergencies summary sheet).
 - See Action Contre La Faim (2012) and (2014) for relation of breastfeeding to SAM.
 - See also Coutin (2015), Geibel (2012) and Grouzard et al. (2018).
 - See also World Vision (2017) for guidelines on the use of milk and milk-derived products in field programmes in emergency contexts.

- Helping babies breathe (C3 and HC11) [SHC and BHC].
 - Relevant guidelines: Coutin (2015), Pilon (2018), and ICRC (2018) (for anaesthesia guidelines related to respiratory surgical procedures).
- **Management of newborn complications**, including jaundice, neonatal meningitis, and other very serious infections requiring continuous supportive care (IV fluids, oxygen, etc.) (HC6, FLH6 and FLH3) [CHC].
 - Relevant guidelines: The Sphere Association (2018) and Pilon (2018)
 - See also Coutin (2015), Geibel (2012), Grouzard et al. (2018) and ICRC (2018).
- Early post-natal visits within 48 hours (C1) [CMHT].
 - A relevant guideline stipulating post-natal visits within 48 hours was not identified.
- Early recognition and referral for clinical signs of maternal sepsis (FLH5) [SHC, BHC and CHC].
 - Relevant guideline: Coutin (2015).
- **Management of maternal sepsis**, including early detection at health centres (FLH5) [DH and PH].
 - Relevant guideline: Coutin (2015).
- Counselling and referral for termination of pregnancy (EO) [SHC].
 - Relevant guideline: The Sphere Association (2018).
 - See also Coutin (2015) and Gender-based Violence Area of Responsibility Working Group (2010).
 - See Department for International Development (2013) (Violence against women and girls in humanitarian emergencies: The CHASE Briefing paper) for guidelines on this intervention for women and girls who have experienced violence.
 - See International Rescue Committee (2012) (Caring for Child Survivors of Sexual Abuse Guidelines for health and psychosocial service providers in humanitarian settings) for guidelines on this intervention for child survivors of sexual assault.
- Management of miscarriage or incomplete abortion and post abortion care (HC2) [BHC].
 - Relevant guideline: The Sphere Association (2018).
 - See also Coutin (2015), Gender-based Violence Area of Responsibility Working Group (2010) and Department for International Development (2013).
- **Termination of pregnancy**, including by manual vacuum aspiration (HC7 and FLH10) [CHC].
 - Relevant guidelines: The Sphere Association (2018) and Pilon (2018).

- See also Coutin (2015), Gender-based Violence Area of Responsibility Working Group (2010) and Department for International Development (2013).
- Operative treatment for ectopic pregnancy or ovarian cyst torsion (FLH9) [DH].
 - Relevant guideline: Coutin (2015)
- **Provision of condoms and hormonal contraceptives**, including emergency contraceptives (HC4) [CMHT].
 - Relevant guideline: The Sphere Association (2018)*
 - See also Coutin (2015), Gender-based Violence Area of Responsibility Working Group (2010), Department for International Development (2013), International Rescue Committee (2012) and Geibel (2012),
 - See also ICEC and IAWG (2015) (Emergency contraceptive pills: Fast facts for decision-makers and program mangers in crisis-affected settings) for guidance specifically on emergency contraception provision.
- **Promotion of relevant childhood nutrition interventions** according to WHO guidelines including promotion of breastfeeding, complementary feeding, and a varied diet, vitamin and micronutrient supplementation (C4) [CMHT and SHC].
 - Relevant guidelines: The Sphere Association (2018) and ICRC (2016)
 - See also ACF (2012) and (2014), Becher (2015a, b), Emergency Nutrition Network et al. (2019), Coutin (2015), Child Protection Working Group (2012), Geibel (2012), Grouzard et al. (2018), and World Vision (2017).
- Opportunistic outreach initiatives for age appropriate child vaccination (C5) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017) 'Vaccination in Humanitarian Emergencies: Implementation guide' (Opportunistic vaccine service delivery is outlined in section 5.2).
 - \circ See also Coutin (2015) Grouzard et al. (2018) and ICRC (2016).
 - For Tuberculosis (TB) vaccination of children see MSF (2017) (Tuberculosis: Practical guide for clinicians, nurses, laboratory technicians and medical auxiliaries).
- Routine age-appropriate immunization per international guidelines (C5) [SHC, BHC, CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and (WHO, 2017).
 - See also Coutin (2015), Grouzard et al. (2018), ICRC (2016) and MSF (2017).
- **HIV education and counselling and provision of condoms** for high-risk individuals (C6) [SHC].
 - Relevant guidelines: The Sphere Association (2018)
 - See also Becher (2015a,b), Coutin (2015), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), Geibel (2012), IASC (2010) and ICRC (2008).

- See Inter-Agency Task Team on HIV and Young People (No date) (HIV interventions for young people in humanitarian emergencies: Guidance brief) for guidelines specific to young people.
- See Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013) (Assessment of HIV in internally displaced situations) for guidelines specific to Internally Displaced Persons (IDPs).
- **Recognition of danger signs in neonates**, children and adults, including early recognition of signs of serious infection (HC1) [SHC, BHC, and CHC].
 - Relevant guidelines: Coutin (2015) and Save the Children (2016).

3.1.2 Package 2: Child health interventions

The following 15 interventions were suggested:

- Promotion of Kangaroo care and early breastfeeding (C4) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and Save the Children (2016).
 - See Action Contre La Faim (2012) and (2014), Coutin (2015), Geibel (2012), Grouzard et al. (2018) and World Vision (2017).
- **Promotion of relevant childhood nutrition interventions** according to WHO guidelines including promotion of breastfeeding, complementary feeding, and a varied diet, vitamin and micronutrient supplementation (C4 and C14) [CMHT and SHC].
 - Relevant guidelines: The Sphere Association (2018) and ICRC (2016).
 - See also ACF (2012) and (2014), Becher (2015a, b), Emergency Nutrition Network et al. (2019), Coutin (2015), Child Protection Working Group (2012), Geibel (2012), Grouzard et al. (2018), and World Vision (2017).
- **Monthly growth monitoring** and promotion session for under five years children, and referral in the presence of complications for management of severe acute malnutrition (EO) [CMHT].
 - Relevant guideline: The Sphere Association (2018).
 - See also ACF (2012) and (2014), Emergency Nutrition Network et al. (2019), Geibel (2012), Grouzard et al. (2018) and ICRC (2016).
 - See the IASC Global Nutrition Cluster and Standing Committee on Nutrition (SCN) Task Force on Assessment (2009) for WHO Child Growth Standards.
- Routine childhood visits with parenting programs in infancy to promote early child development, monitoring for expected developmental milestones and referral for delay (Package 14) [SHC].
 - Relevant guidelines: The Sphere Association (2018) and Child Protection Working Group (2012) (Minimum standards for child protection in humanitarian action).
- Improve early child development (ECD) through introduction of ECD services by health care providers (EO) [BHC and CHC].

- Relevant guidelines: The Sphere Association (2018) and Child Protection Working Group (2012).
- See Lilley et al. (2015) for child friendly spaces guidelines (Evaluation of child friendly spaces: Tools and guidance for monitoring and evaluating CFS).
- Management of severe acute malnutrition (C8) [BHC].
 - Relevant guideline: The Sphere Association (2018).
 - See also ACF (2012) and (2014), Emergency Nutrition Network et al. (2019), Child Protection Working Group (2012), Geibel (2012), Grouzard et al. (2018) and ICRC (2016).
 - See also IASC (2015) (Guidelines for integrating gender-based violence interventions in humanitarian action: Reducing risk, promoting resilience and aiding recovery) for guidelines focused on gender and violence relating to SAM.
- Management of severe acute malnutrition associated with serious infection (FLH12) [CHC, DH and PH].
 - Relevant guideline: The Sphere Association (2018).
 - See also ACF (2012) and (2014), Geibel (2012), Grouzard et al. (2018) and ICRC (2016).
- Education on hand washing and safe disposal of children's stools (C10) [CMHT].
 - Relevant guidelines: Van Den Noorgate et al. (2010) (Public health engineering in precarious situations: Manual intended for the setting up of public health programmes in disadvantaged areas, particularly in refugee and displaced persons camps, and in health structures) and Action Contre La Faim (2017) (Wash'Nutrition: A practical guidebook on increasing nutritional impact through integration of wash and nutrition programmes).
- **Basic treatment of acute diarrhoea** per WHO guidelines including oral fluids (HC12) [SHC and BHC].
 - Relevant guideline: The Sphere Association (2018) and Pilon (2018).
 - See also Geibel (2012), Grouzard et al. (2018) and ICRC (2016).
- Advanced treatment of severe diarrhoea per WHO guidelines including IV fluids (HC12) [CHC].
 - Relevant guideline: The Sphere Association (2018) and Pilon (2018).
 - See also Grouzard et al. (2018).
- **Opportunistic outreach initiatives for age appropriate child vaccination** (C11and C16) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017)
 - \circ See also Coutin (2015) Grouzard et al. (2018), ICRC (2016), and MSF (2017).

- **Routine age-appropriate immunization** per international guidelines (C11 and C16) [SHC, BHC, CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and (WHO, 2017).
 - o See also Coutin (2015), Grouzard et al. (2018), ICRC (2016) and MSF (2017).
- **Provider-initiated testing and counselling for HIV, STIs, and hepatitis**, including for adolescents, with **expedited treatment** of STIs and referral for immediate initiation of therapy for those testing positive for HIV (HC13) [BHC].
 - Relevant guideline: The Sphere Association (2018)
 - See also Becher (2015 a, b), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2010), ICRC (2008), Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013), International Rescue Committee (2012) and UNHCR (2014).
 - See also IASC (2008) (Establishing gender-based violence standard operating procedures [SOPs] for multisectoral and inter-organisational prevention and response to gender-based violence in humanitarian settings) for HIV testing and counselling for women who have experienced violence.
- **Provider-initiated testing and counselling for HIV, STIs, and hepatitis**, including for adolescents, with **immediate treatment** of STIs and initiation and on-going monitoring of appropriate therapies for those testing positive for HIV (HC13) [CHC, DH and PH].
 - Relevant guideline: The Sphere Association (2018)
 - See also Becher (2015 a, b), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2010), ICRC (2008), Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013), International Rescue Committee (2012), UNHCR (2014) and IASC (2008).
- **Recognition of danger signs in** neonates, **children** and adults, including early recognition of signs of serious infection (HC12) [SHC, BHC and CHC].
 - Relevant guidelines: Coutin (2015) and Save the Children (2016).
- **Triage of children and adults at first entry to facility** with validated instrument such WHO/ICRC triage tool (FLH11) [DH and PH].
 - Relevant guideline: The Sphere Association (2018)

3.1.3 Package 3: School-age health and development interventions

The following 5 interventions were suggested:

• At least 4 antenatal visits including essential education (on maternal health and family planning, support for those experiencing interpersonal violence, recognition of danger signs for hypertensive disorders and gestational diabetes, promotion of healthy diet and relevant nutritional supplementation per WHO protocol, HIV education and counselling, and tetanus vaccination administration (C5) [SHC and BHC].

- Relevant guideline: The Sphere Association (2018) guidelines are most overarching of available guidelines for this intervention.
- See also Action Contre La Faim (2012) and (2014), Emergency Nutrition Network et al. (2019), ICRC (2016), Geibel (2012), Becher (2015a, b), IASC (2010), Gender-based Violence Area of Responsibility Working Group (2010) and Grouzard et al. (2018).
- **Promotion of relevant childhood nutrition interventions** according to WHO guidelines including promotion of breastfeeding, complementary feeding, and a varied diet, vitamin and micronutrient supplementation (C14) [CMHT and SHT].
 - Relevant guidelines: The Sphere Association (2018) and ICRC (2016).
 - See also ACF (2012) and (2014), Becher (2015a, b), Emergency Nutrition Network et al. (2019), Coutin (2015), Child Protection Working Group (2012), Geibel (2012), Grouzard et al. (2018), and World Vision (2017).
- **Opportunistic outreach initiatives for age appropriate child vaccination** (C5) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017)
 - See also Coutin (2015) Grouzard et al. (2018), ICRC (2016), and MSF (2017).
- **Routine age-appropriate immunization** per international guidelines (C5) [SHC, BHC, CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and (WHO, 2017).
 - See also Coutin (2015), Grouzard et al. (2018), ICRC (2016) and MSF (2017).
- Mass helminthiases drug administration in targeted areas (C21) [CMHT and SHC].
 - A relevant guideline on mass helminthiases drug administration in targeted areas was not identified.

3.1.4 Package 4: Adolescent health and development

The following 2 interventions were suggested:

- **Detection of psychotic disorders** using validated interview based tools with timely referral for management, and continuation of psychosocial support for psychotic disorders (HC14) [CHC].
 - \circ Relevant guidelines: The Sphere Association (2018)¹
 - See Grouzard et al. (2018) for clinical guidelines on antipsychotic medication.
- **Promotion of child safety**, including prevention of road traffic injury, falls and poisoning (Package 4) [CMHT, SHC, BHC, and CHC].
 - Relevant guideline: Van Den Noorgate et al. (2010)

¹ These guidelines do not mention validated interview based tools or referral, but do outline management through anti-psychotic medication.

3.1.5 Package 5: Reproductive health and contraception

The following 17 interventions were suggested:

- Establish community-based women's groups (including prevention and support for violence, psychosocial support, newborn care and nutrition) (EO) [CMHT].
 - Relevant guideline: The Sphere Association (2018)
 - See also Action Contre La Faim (2014) Child Protection Working Group (2012), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2008) and IASC (2015).
 - See Women's Refugee Commission (2015b) for guidelines on support groups for conflict-affected women engaged in sex work.
- **Provision of food and appropriate nutritional supplementation** to pregnant women in food insecure households (C27) [CMHT].
 - Relevant guideline: The Sphere Association (2018).
 - See also Child Protection Working Group (2012), Geibel (2012), Grouzard et al. (2018) and ICRC (2016).
- At least 4 antenatal visits including essential education (on maternal health and family planning, support for those experiencing interpersonal violence, recognition of danger signs for hypertensive disorders and gestational diabetes, promotion of healthy diet and relevant nutritional supplementation per WHO protocol, HIV education and counselling, and tetanus vaccination administration (C5 and C25) [SHC and BHC].
 - Relevant guideline: The Sphere Association (2018) guidelines are most overarching of available guidelines for this intervention.
 - See also Action Contre La Faim (2012) and (2014), Emergency Nutrition Network et al. (2019), ICRC (2016), Geibel (2012), Becher (2015a, b), IASC (2010), Genderbased Violence Area of Responsibility Working Group (2010) and Grouzard et al. (2018).
- **Post-natal reproductive health visit** (including education on birth spacing, family planning, resumption of sexual intercourse, and pelvic floor exercises) (EO) [CMHT, SHC, BHC, CHC].
 - Relevant guideline: The Sphere Association (2018).
 - See Also Coutin (2015), Child Protection Working Group (2012), Geibel (2012), and Women's Refugee Commission (2015b)
- Referral for, or where available, administration and/or insertion and removal of longacting contraceptive methods (FLH14) [SHC, BHC, and CHC].
 - Relevant guideline: Coutin (2015).
 - See also Department for International Development (2013), Pilon (2018) and The Sphere Association (2018).

- **Surgical methods of contraception** including tubal ligation and vasectomy (FLH15 and FLH16) [DH].
 - Relevant guideline: Coutin (2015).
- **Post-gender-based violence care**, including provision of emergency contraception, and rape response referral (medical and judicial) (HC16) [CHC and DH].
 - Relevant guideline: The Sphere Association (2018).
 - See also Child Protection Working Group (2012), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), IASC (2008), IASC (2015), ICEC and IAWG (2015), International Rescue Committee (2012), and Women's Refugee Commission (2015b).
- Early detection by visual inspection of early stage cervical cancer with referral (FLH13) [CHC].
 - A relevant guideline on early detection by visual inspection of early stage cervical cancer with referral was not identified.
- Early detection by visual inspection and treatment by cryotherapy and colposcopy of early-stage cervical cancer (FLH13) [DH].
 - A relevant guideline on early detection by visual inspection and treatment by cryotherapy and colposcopy of early-stage cervical cancer was not identified.
- **Promotion of relevant childhood nutrition interventions** according to WHO guidelines including promotion of breastfeeding, complementary feeding, and a varied diet, vitamin and micronutrient supplementation (C14) [CMHT and SHC].
 - Relevant guidelines: The Sphere Association (2018) and ICRC (2016).
 - See also ACF (2012) and (2014), Becher (2015a, b), Emergency Nutrition Network et al. (2019), Coutin (2015), Child Protection Working Group (2012), Geibel (2012), Grouzard et al. (2018), and World Vision (2017).
- Opportunistic outreach initiatives for age appropriate child vaccination (C5) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017)
 - See also Coutin (2015) Grouzard et al. (2018), ICRC (2016), and MSF (2017).
- **Routine age-appropriate immunization** per international guidelines (C5) [SHC, BHC, CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and (WHO, 2017).
 - See also Coutin (2015), Grouzard et al. (2018), ICRC (2016) and MSF (2017).
- **Provider-initiated testing and counselling for HIV, STIs, and hepatitis**, including for adolescents, with **expedited treatment** of STIs and referral for immediate initiation of therapy for those testing positive for HIV (HC17) [BHC].
 - Relevant guideline: The Sphere Association (2018).

- See also Becher (2015 a, b), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2010), ICRC (2008), Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013), International Rescue Committee (2012), UNHCR (2014) and IASC (2008).
- **Provider-initiated testing and counselling for HIV, STIs, and hepatitis**, including for adolescents, with **immediate treatment** of STIs and initiation and on-going monitoring of appropriate therapies for those testing positive for HIV (HC17) [CHC, DH and PH].
 - Relevant guideline: The Sphere Association (2018).
 - See also Becher (2015 a, b), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2010), ICRC (2008), Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013), International Rescue Committee (2012), UNHCR (2014) and IASC (2008).
- **Community education to limit exposure to violence**, including all interpersonal violence, sexual violence, and conflict (C25) [CMHT].
 - Relevant guideline: The Sphere Association (2018).
 - See also Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), IASC (2008), and IASC (2015).
- Psychosocial support for those exposed to violence (HC16) [CHC].
 - Relevant guideline: The Sphere Association (2018).
 - See also Child Protection Working Group (2012), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), IASC (2008), IASC (2015), Women's Refugee Commission (2015b) and Snider et al. (2011) (Psychological first aid: Guide for field workers).
- Advanced management for effects of exposure to violence (HC16) [DH and PH].
 - Relevant guideline: The Sphere Association (2018)
 - See also Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010) and IASC (2015).

3.2 Infectious diseases cluster

The infectious disease cluster covers health packages 6-10: (6) HIV and sexually transmitted infections, (7) Tuberculosis, (8) Malaria and adult febrile illness, (9) Neglected tropical diseases, and (10) Pandemic and emergency preparedness (DT Jamison et al., 2017).

3.2.1 Package 6: HIV and sexually transmitted infections

• At least 4 antenatal visits including essential education (on maternal health and family planning, support for those experiencing interpersonal violence, recognition of danger signs for hypertensive disorders and gestational diabetes, promotion of healthy diet and relevant

nutritional supplementation per WHO protocol, HIV education and counselling, and tetanus vaccination administration (C5 and C25) [SHC and BHC].

- Relevant guideline: The Sphere Association (2018) guidelines are most overarching of available guidelines for this intervention.
- See also Action Contre La Faim (2012) and (2014), Emergency Nutrition Network et al. (2019), ICRC (2016), Geibel (2012), Becher (2015a, b), IASC (2010), Genderbased Violence Area of Responsibility Working Group (2010) and Grouzard et al. (2018).
- Comprehensive antenatal visits for complicated pregnancy, including management of hypertensive disorders in pregnancy, gestational diabetes, and HIV in pregnancy (HC8, HC9, HC10, and FLH1) [CHC and DH].
 - Relevant guidelines: Coutin (2015), and Geibel (2012) are most relevant to this intervention.
 - See also Becher (2015a, b), IASC (2010), ICRC (2008), UNHCR (2014) and Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013).
- **Post-gender-based violence care**, including provision of emergency contraception, and rape response referral (medical and judicial) (HC16) [CHC and DH].
 - Relevant guideline: The Sphere Association (2018).
 - See also Child Protection Working Group (2012), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), IASC (2008), IASC (2015), ICEC and IAWG (2015), International Rescue Committee (2012), and Women's Refugee Commission (2015b).
- Early detection by visual inspection of early stage cervical cancer with referral (FLH13) [CHC].
 - A relevant guideline on early detection by visual inspection of early stage cervical cancer with referral was not identified.
- Early detection by visual inspection and treatment by cryotherapy and colposcopy of early-stage cervical cancer (FLH13) [DH].
 - A relevant guideline on early detection by visual inspection and treatment by cryotherapy and colposcopy of early-stage cervical cancer was not identified.
- **Opportunistic outreach initiatives for age appropriate child vaccination** (C5) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017)
 - See also Coutin (2015) Grouzard et al. (2018), ICRC (2016), and MSF (2017).
- Routine age-appropriate immunization per international guidelines (C5) [SHC, BHC, CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and (WHO, 2017).
 - See also Coutin (2015), Grouzard et al. (2018), ICRC (2016) and MSF (2017).

- **Targeted age- and risk-based vaccinations for adults** (including tetanus, pneumococcus, influenza, Hepatitis B, including for health providers, and other relevant vaccinations), (HC24) [SHC, BHC, CHC, and DH].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017).
 - See also Grouzard et al. (2018).
- **HIV education and counselling and provision of condoms** for high-risk individuals (C6 and C30) [SHC].
 - Relevant guidelines: The Sphere Association (2018)
 - Becher (2015a,b), Coutin (2015), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), Geibel (2012), IASC (2010), ICRC (2008), Inter-Agency Task Team on HIV and Young People (No date) and Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013).
- **Provider-initiated testing and counselling for HIV, STIs, and hepatitis**, including for adolescents, with **expedited treatment** of STIs and referral for immediate initiation of therapy for those testing positive for HIV (HC17) [BHC].
 - Relevant guideline: The Sphere Association (2018).
 - See also Becher (2015 a, b), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2010), ICRC (2008), Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013), International Rescue Committee (2012), UNHCR (2014) and IASC (2008).
- **Provider-initiated testing and counselling for HIV, STIs, and hepatitis**, including for adolescents, with **immediate treatment** of STIs and initiation and on-going monitoring of appropriate therapies for those testing positive for HIV (HC17) [CHC, DH and PH].
 - Relevant guideline: The Sphere Association (2018).
 - See also Becher (2015 a, b), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2010), ICRC (2008), Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013), International Rescue Committee (2012), UNHCR (2014) and IASC (2008).
- Psychosocial support for those exposed to violence (HC16) [CHC].
 - Relevant guideline: The Sphere Association (2018).
 - See also Child Protection Working Group (2012), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), IASC (2008), IASC (2015), Women's Refugee Commission (2015b) and Snider et al. (2011) (Psychological first aid: Guide for field workers).

3.2.2 Package 7: Tuberculosis

• **Opportunistic outreach initiatives for age appropriate child vaccination** (C5) [CMHT].

- Relevant guidelines: The Sphere Association (2018) and WHO (2017).
- See also Coutin (2015) Grouzard et al. (2018), ICRC (2016), and MSF (2017).
- **Routine age-appropriate immunization** per international guidelines (C5) [SHC, BHC, CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and (WHO, 2017).
 - See also Coutin (2015), Grouzard et al. (2018), ICRC (2016) and MSF (2017).
- Contact tracing for TB (C32) [CMHT].
 - \circ Relevant guidelines: The Sphere Association (2018) and MSF (2017)²
- Following a new diagnosis of HIV, **initial and annual screening for latent TB infection**, initiation of isoniazid preventive therapy among all with positive screen but no evidence of active TB (HC29) [CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) outlines coordination between TB and HIV treatment, though not following the process here (Following a new diagnosis of HIV, initial and annual screening for latent TB infection, initiation of isoniazid preventive therapy among all with positive screen but no evidence of active TB).
- **Provider-initiated diagnosis of TB using sputum smear**, and initiation of first line and second line treatment per current WHO guidelines for drug susceptible TB; referral for confirmation, assessment of drug resistance, and treatment of drug-resistant TB (HC27) [CHC].
 - Relevant guidelines: MSF (2017) and Pilon (2018)
- Confirmation, further assessment of drug resistance, and treatment of drug resistant TB (HC27 and FLH17) [DH].
 - Relevant guidelines: The Sphere Association (2018) and MSF (2017).
- **Drug susceptibility testing** for cases of treatment failure and tertiary referral as needed; enrolment of those with Multi-Drug-Resistant Tuberculosis (MDR-TB) for treatment per WHO guidelines (either short or long regimen) (FLH17) [PH].
 - Relevant guidelines: The Sphere Association (2018) and MSF (2017).
- Suggest screening for HIV in all individuals with a diagnosis of active TB; if HIV present, initiation of ARV treatment and HIV care (HC28) [CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018)* (key guidelines) and MSF (2017).
 - See also Grouzard et al. (2018), IASC (2010), ICRC (2008), Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013) and Pilon (2018).

² Contact tracing is mentioned but not explicitly outlined in these guidelines.

3.2.3 Package 8: Malaria and adult febrile illness

- In high prevalence areas, **early empirical treatment of uncomplicated malaria** (clinically diagnosed) with relevant anti-malarial medicines (C36) [CMHT and SHC].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2013) (Malaria control in humanitarian emergencies: An inter-agency field handbook).
 - See also Grouzard et al. (2018) and Pilon (2018).
- **Treatment of malaria diagnosed by Rapid Diagnostic Test (RDT)** with relevant oral/rectal anti-malarial therapy (C36 and C38) [BHC and CHC].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2013).
 - See also Grouzard et al. (2018).
- Management of severe malaria, including with parenteral artesunate and full course of Artemisinin-based Combination Therapy (ACT) (FLH19) [DH and PH].
 - Relevant guideline: WHO (2013).
 - See also Grouzard et al. (2018) and Pilon (2018).
- **Provision of insecticide-treated nets** to children and pregnant women attending SHCs in high risk areas (HC32) [SHC, BHC and CHC].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2013).
 - See also Coutin (2015), Geibel (2012), Grouzard et al. (2018), ICRC (2016) and ICRC (2016).
- **Recognition of danger signs in neonates, children and adults**, including early recognition of signs of serious infection (HC30) [SHC, BHC, and CHC].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2013).
 - See also Coutin (2015) and Grouzard et al. (2018).
- WHO Basic Emergency Care: Basic syndrome-based management of difficulty breathing, shock, altered mental status, and poly trauma in dedicated emergency unit for neonates, children and adults (interventions include manual airway manoeuvres, oral/nasal airway placement, oxygen administration, bag-valve mask ventilation, temperature management, administration of essential emergency medications, including empiric antibiotics for serious infection (FLH18) [BHC and CHC].
 - Relevant guidelines include Pilon (2018), Becher (2015a, b), Coutin (2015), Grouzard et al. (2018), WHO (2013)
 - For guidelines on altered mental states see the mhGAP intervention guide (WHO, 2015).

3.2.4 Package 9: Neglected tropical diseases

- Mass helminthiases drug administration in targeted areas (C21) [CMHT and SHC].
 - A relevant guideline on mass helminthiases drug administration in targeted areas was not identified.

3.2.5 Package 10: Pandemic and emergency preparedness

- **Develop plans and legal standards for curtailing interactions** between infected persons and uninfected population and implement and evaluate infection control measures in health facilities (P11) [SHC, BHC, CHC, DH and PH].
 - Relevant guideline: The Sphere Association (2018).
- **Targeted age- and risk-based vaccinations for adults** (including tetanus, pneumococcus, influenza, Hepatitis B, including for health providers, and other relevant vaccinations), (HC33) [SHC, BHC, CHC, and DH].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017).
 - See also Grouzard et al. (2018).
- In the context of an emerging infectious outbreak, disseminate advice and guidance on how to recognise early symptoms and signs and when to seek medical attention (C46) [CMHT].
 - Relevant guideline: The Sphere Association (2018).
- **Rapid scale up of service delivery capacity under provincial/regional coordination** (P10) [CHC].
 - Relevant guideline: The Sphere Association (2018).
 - $\circ~$ See Carr (2014) for how to scale up feeding programme using ready-to-use-therapeutic food.
 - \circ See IASC (2010) for how to scale up ART for HIV.
 - See IASC (2015) for how to scale up interventions addressing VAWG across other humanitarian sectors.
- Mass casualty management (protocol-based) for rapid scale up of service delivery capacity (P10) [DH].
 - Relevant guideline: The Sphere Association (2018).
- Advanced (protocol-based) regional response coordination for mass casualty management and rapid scale of service delivery capacity (P10) [PH].
 - Relevant guideline: The Sphere Association (2018).

3.3 Non-communicable disease and injury cluster

The non-communicable disease and injury cluster is comprised of six health packages numbered 11-17: (11) Cardiovascular, respiratory, and related disorders, (12) Cancer, (13) Mental, neurological, and substance use disorders, (14) Musculoskeletal disorders, (15) Congenital and genetic disorders, (16) Injury prevention, and (17) Environmental improvements (DT Jamison et al., 2017). No interventions were suggested for the environmental improvements package.

3.3.1 Package 11: Cardiovascular, respiratory and related disorders

- **Provision of food and appropriate nutritional supplementation** to pregnant women in food insecure households (C27) [CMHT].
 - Relevant guideline: The Sphere Association (2018).
 - See also Child Protection Working Group (2012), Geibel (2012), Grouzard et al. (2018) and ICRC (2016).
- Comprehensive antenatal visits for complicated pregnancy, including management of hypertensive disorders in pregnancy, gestational diabetes, and HIV in pregnancy (HC9 and HC10) [CHC and DH].
 - Relevant guidelines: Coutin (2015), and Geibel (2012) are most relevant to this intervention.
 - See also Becher (2015a, b), IASC (2010), ICRC (2008), UNHCR (2014) and Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013).
- Early detection of signs of pre-eclampsia with timely referral (HC9) [SHC].
 - Relevant guidelines: Coutin (2015).
- **Promotion of relevant childhood nutrition interventions** according to WHO guidelines including promotion of breastfeeding, complementary feeding, and a varied diet, vitamin and micronutrient supplementation (C14) [CMHT and SHC].
 - Relevant guidelines: The Sphere Association (2018) and ICRC (2016).
 - See also ACF (2012) and (2014), Becher (2015a, b), Emergency Nutrition Network et al. (2019), Coutin (2015), Child Protection Working Group (2012), Geibel (2012), Grouzard et al. (2018), and World Vision (2017).
- **Targeted age- and risk-based vaccinations for adults** (including tetanus, pneumococcus, influenza, Hepatitis B, including for health providers, and other relevant vaccinations), (HC35) [SHC, BHC, CHC, and DH].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017).
 - See also Grouzard et al. (2018).
- Screening for diabetes among at-risk adults, and continuation of prescribed therapies, including for control of glycaemia, blood pressure and lipids, and consistent foot care (HC40) [BHC].
 - Relevant guidelines: Grouzard et al. (2018) and Pilon (2018).

- Screening and management of diabetes among at risk adults, including initiation of prescriptions for glycaemic control, management of blood pressure and lipids (HC40) [CHC].
 - Relevant guidelines: Grouzard et al. (2018) and Pilon (2018).
- **Opportunistic screening for hypertension for all adults** and continuation of prescribed treatments (HC45) [SHC and BHC].
 - Relevant guidelines: Grouzard et al. (2018) and Pilon (2018).
- Initiation of treatment among individuals with severe hypertension, evidence of associated end-organ changes, or other high risk factors (HC45) [CHC, DH and PH].
 - Relevant guidelines: Grouzard et al. (2018) and Pilon (2018).
- Longitudinal management and monitoring of chronic cardiovascular disease with continuation of prescribed therapies to reduce risk of further events (HC43 and HC44) [CHC].
 - Relevant guidelines: Grouzard et al. (2018) and Pilon (2018).
- Chronic management of asthma and chronic obstructive pulmonary disorder (COPD) with low-dose inhaled corticosteroids and long acting bronchodilators (HC37) [BHC and CHC].
 - Relevant guidelines: Grouzard et al. (2018) and Pilon (2018).
- Management of severe acute exacerbations of asthma and COPD (using systemic steroids, inhaled beta-agonists, and, if indicated, oral antibiotics and oxygen therapy) (FLH22) [CHC].
 - Relevant guidelines: Grouzard et al. (2018) and Pilon (2018).
- **Management of acute ventilatory failure** due to acute exacerbations of asthma and COPD; in COPD use of bilevel positive airway pressure preferred (RH4) [DH and PH].
 - Relevant guidelines: Grouzard et al. (2018) and Pilon (2018).
- **Basic management of cardiovascular emergencies**, including provision of aspirin for suspected acute myocardial infarction (HC38) [BHC and CHC].
 - Relevant guidelines: The Sphere Association (2018), Grouzard et al. (2018) and Pilon (2018).
- Advanced management of cardiovascular emergencies, including myocardial infarction, heart failure, acute arrhythmia, tamponade, and acute critical limb ischemia (Interventions include aspirin, unfractionated heparin and thrombolytics, pacing and synchronized cardioversion, pericardiocentesis) (HC38, FLH20, FLH21, FLH23 and FLH45) [DH and PH].
 - Relevant guidelines: The Sphere Association (2018), Grouzard et al. (2018) and Pilon (2018).

3.3.2 Package 12: Cancer

- Management of labour and delivery in high risk women and adolescents undergoing caesarean delivery, (CEmONC) (FLH24) [DH and PH].
 - Relevant guideline: The Sphere Association (2018).
 - See also Coutin (2015), ICRC (2018), and Pilon (2018).
 - See also Gender-based Violence Area of Responsibility Working Group (2010).
- Early detection by visual inspection of early stage cervical cancer with referral (FLH13) [CHC].
 - A relevant guideline on early detection by visual inspection of early stage cervical cancer with referral was not identified.
- Early detection by visual inspection and treatment by cryotherapy and colposcopy of early-stage cervical cancer (FLH13) [DH].
 - A relevant guideline on early detection by visual inspection and treatment by cryotherapy and colposcopy of early-stage cervical cancer was not identified.
- Opportunistic outreach initiatives for age appropriate child vaccination (C16) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017)
 - See also Coutin (2015) Grouzard et al. (2018), ICRC (2016), and MSF (2017).
- **Routine age-appropriate immunization** per international guidelines (C5) [SHC, BHC, CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and (WHO, 2017).
 - See also Coutin (2015), Grouzard et al. (2018), ICRC (2016) and MSF (2017).
- **Targeted age- and risk-based vaccinations for adults** (including tetanus, pneumococcus, influenza, Hepatitis B, including for health providers, and other relevant vaccinations), (HC24) [SHC, BHC, CHC, and DH].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017).
 - See also Grouzard et al. (2018).
- Oral palliative care and pain control measures with non-opioid agents (HC47) [BHC].
 - Relevant guidelines: The Sphere Association (2018), Pilon (2018) and ICRC (2018).

3.3.3 Package 13: Mental, neurological, and substance use disorders

• Initiation of pharmacological and psychosocial support for depression using WHO Mental Health Gap Programme (mhGAP) intervention guide, (HC50) [CHC and DH].

- Relevant guideline: WHO (2015).
- See also Snider et al. (2011), Child Protection Working Group (2012), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2010), IASC (2015), International Rescue Committee (2012), Lilley et al. (2015), Pilon (2018), and The Sphere Association (2018).
- Initiation of pharmacological and psychosocial support for anxiety disorders using mhGAP intervention guide (HC50) [PH].
 - Relevant guideline: WHO (2015).
 - See also Snider et al. (2011), Child Protection Working Group (2012), Department for International Development (2013), Gender-based Violence Area of Responsibility Working Group (2010), Grouzard et al. (2018), IASC (2010), IASC (2015), International Rescue Committee (2012), Lilley et al. (2015), Pilon (2018), and The Sphere Association (2018).
- **Detection of psychotic disorders** using validated interview based tools with timely referral for management, and continuation of psychosocial support for psychotic disorders (HC14, HC49 and HC52) [CHC].
 - Relevant guideline: WHO (2015).
 - See also Grouzard et al. (2018) and The Sphere Association (2018).
- **Prescription of pharmacological and psychosocial support for psychotic disorders** (HC14, HC49 and HC52) [DH].
 - Relevant guideline: WHO (2015).
 - See also Grouzard et al. (2018), Pilon (2018) and The Sphere Association (2018).
- Continuation of prescribed pharmacological and psychosocial support for epilepsy using WHO mhGAP intervention guide (HC51) [CHC].
 - Relevant guideline: WHO (2015) (See Module 6).
 - See also Grouzard et al. (2018), Pilon (2018) and The Sphere Association (2018).
- Prescription and initiation of pharmacological and psychosocial for epilepsy (HC51) [PH].
 - Relevant guideline: WHO (2015) (See Module 6).
 - See also Grouzard et al. (2018), Pilon (2018) and The Sphere Association (2018).
- Self-managed treatment of migraine (C48) [CMHT].
 - A relevant guideline on self-managed treatment of migraine was not identified.
- Initiation of self-managed treatment of migraine protocol (C48) [CHC].
 - A relevant guideline on initiation of self-managed treatment of migraine protocol was not identified.

3.3.4 Package 14: Musculoskeletal disorders

- Urgent, definitive surgical management of orthopedic injuries (for example, by open reduction and internal fixation) (RH11) [PH].
 - A relevant guideline on urgent, definitive surgical management of orthopedic injuries was not identified.
- **Physical mobilization and strengthening activities following acute injury** or illness and guidance in use of rehabilitation equipment e.g. crutches, wheelchair etc (HC54) [DH].
 - A relevant guideline on urgent, definitive surgical management of orthopedic injuries was not identified.

3.3.5 Package 15: Congenital and genetic disorders

- Comprehensive antenatal visits for complicated pregnancy, including management of hypertensive disorders in pregnancy, gestational diabetes, and HIV in pregnancy (HC8 and HC10) [CHC and DH].
 - Relevant guidelines: Coutin (2015), and Geibel (2012) are most relevant to this intervention.
 - See also Becher (2015a, b), IASC (2010), ICRC (2008), UNHCR (2014) and Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013).
- Promotion of Kangaroo care and early breastfeeding (HC56) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and Save the Children (2016).
 - See Action Contre La Faim (2012) and (2014), Coutin (2015), Geibel (2012), Grouzard et al. (2018) and World Vision (2017).
- **Opportunistic outreach initiatives for age appropriate child vaccination** (C16) [CMHT].
 - Relevant guidelines: The Sphere Association (2018) and WHO (2017).
 - See also Coutin (2015) Grouzard et al. (2018), ICRC (2016), and MSF (2017).
- Routine age-appropriate immunization per international guidelines (C16) [SHC, BHC, CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and (WHO, 2017).
 - See also Coutin (2015), Grouzard et al. (2018), ICRC (2016) and MSF (2017).
- Early recognition and referral for congenital anomalies (HC56) [BHC, CHC and DH].
 - Relevant guideline: Coutin (2015).
- Management of cleft lip/palate and club foot (RH12 and RH13) [PH].
 - A relevant guideline on management of cleft lip/palate and club foot was not identified.

3.3.6 Package 16: Injury prevention

- **Early identification of lead poisoning** and counselling of families in remediation strategies for sources of environmental exposure (C49) [BHC and CHC].
 - Relevant guidelines: Sphere Association (2018) and Van Den Noorgate et al. (2010).³
- Recognition of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms, with referral for management (FLH30) [CHC].
 - A relevant guideline on recognition of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms, with referral for management not identified.
- Recognition and management of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms (FLH30) [DH and PH].
 - A relevant guideline on recognition and management of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms, with referral for management not identified.

3.4 Health Services cluster

The health services cluster encompasses four health packages numbered 18-21: (18) Surgery, (19) Rehabilitation, (20) Palliative care and pain control, and (21) pathology (DT Jamison et al., 2017).

3.4.1 Package 18: Surgery

- Management of labour and delivery in low-risk women and adolescents (BEmNOC), including initial treatment of obstetric or delivery complications prior to transfer, in remote areas (HC11) [SHC, BHC and CHC].
 - Relevant guideline: The Sphere Association (2018).
 - See also Coutin (2015), Gender-based Violence Area of Responsibility Working Group (2010), Geibel (2012) and ICRC (2018).
- Management of labour and delivery in high risk women and adolescents caesarean delivery (CEmONC) (FLH8, FLH24 and FLH32) [DH and PH].
 - Relevant guideline: The Sphere Association (2018).
 - See also Coutin (2015), ICRC (2018), and Pilon (2018) for pharmaceutical guidance.
- **Helping babies breathe** (HC11) [SHC and BHC].
 - Relevant guidelines: Coutin (2015), Pilon (2018), and ICRC (2018) (for anaesthesia guidelines related to respiratory surgical procedures).

³ These guidelines refer to poisoning, but not lead poisoning specifically.

- **Termination of pregnancy**, including by manual vacuum aspiration, or surgery (FLH10) [CHC, DH and PH].
 - Relevant guidelines: The Sphere Association (2018) and Pilon (2018).
 - See also Coutin (2015), Gender-based Violence Area of Responsibility Working Group (2010), Department for International Development (2013), and IAWG SAC subworking group (no date) (Safe abortion care: 10 steps for starting/expanding programming).
- Operative treatment for ectopic pregnancy or ovarian cyst torsion (FLH9) [DH].
 - Relevant guideline: Coutin (2015).
- Hysterectomy for uterine rupture or intractable postpartum haemorrhage (FLH38) [DH and PH].
 - Relevant guidelines: Coutin (2015) and ICRC (2018).
- Referral for, or where available, administration and/or insertion and removal of long-acting contraceptive methods (FLH14) [SHC, BHC, and CHC].
 - Relevant guideline: Coutin (2015).
 - See also Department for International Development (2013), Pilon (2018) and The Sphere Association (2018).
- **Surgical methods of contraception** including tubal ligation and vasectomy (FLH15 and FLH16) [DH].
 - Relevant guideline: Coutin (2015).
- **Community-based first aid**: Interventions include airway positioning, choking interventions, and basic external haemorrhage control (direct pressure, tourniquet) (HC61) [CMHT].
 - Relevant guideline: The Sphere Association (2018).
 - See also Grouzard et al. (2018) and ICRC (2018).
- **Basic life support**, plus protocol-based administration of oral fluids with adjustment for age and condition including malnutrition (HC61) [SHC].
 - Relevant guideline: ICRC (2018).
- Advanced syndrome based management of difficulty breathing, shock, altered mental status, and poly trauma in dedicated emergency unit, including for neonates, children and adults. (Interventions include intubation, mechanical ventilation, surgical airway, and placement of chest drain, haemorrhage control, defibrillation, administration of IV fluids via peripheral and central venous line with adjustment for age and condition, including malnutrition; administration of essential emergency medication) (FLH45 and FLH50) [DH and PH].

- Relevant guidelines: Grouzard et al. (2018), ICRC (2018), Pilon (2018), The Sphere Association (2018), and WHO (2015).
- **Basic wound care**, including suturing of simple lacerations (HC62) [SHC].
 - Relevant guidelines: Grouzard et al. (2018) and The Sphere Association (2018).
- Advanced wound care, including suturing of complex lacerations (HC62) [BHC, CHC, DH and PH].
 - Relevant guidelines: Grouzard et al. (2018) and The Sphere Association (2018).
- Minor soft tissue surgical procedure (drainage of simple abscess and removal of foreign body) (HC59) [CHC, DH and PH].
 - Relevant guidelines: Grouzard et al. (2018), The Sphere Association (2018) and ICRC (2018).
- Splinting of acute fractures and dislocations (HC60) [SHC and BHC].
 - Relevant guideline: ICRC (2018).
- **Reduction and non-operative management of acute fractures and dislocations** (HC60 and FLH36) [CHC].
 - Relevant guideline: ICRC (2018).
- Reduction and non-operative management of acute fractures and dislocations, including traction (FLH36) [DH and PH].
 - A relevant guideline on reduction and non-operative management of acute fractures and dislocations, including traction was not identified.
- Burr hole to relieve acute elevated intracranial pressure (FLH33) [DH and PH].
 - Relevant guideline: ICRC (2018).
- Escharotomy or fasciotomy (FLH35) [DH and PH].
 - Relevant guideline: Grouzard et al. (2018) and ICRC (2018).
- **Trauma-related amputations** (FLH49) [DH and PH].
 - Relevant guideline: Grouzard et al. (2018) and ICRC (2018).
- **Reduction of acute fractures and dislocations**, placement of external fixator and use of traction for fractures (FLH36) [DH].
 - A relevant guideline on reduction of acute fractures and dislocations, placement of external fixator and use of traction for fractures was not identified.

- Irrigation and debridement of open fractures (FLH39) [DH and PH].
 - A relevant guideline on irrigation and debridement of open fractures was not identified.
- Management of septic arthritis (FLH41) [DH and PH].
 - Relevant guideline: Grouzard et al. (2018).
- Basic skin grafting and release of contractures, including for burns (FLH46) [DH and PH].
 - o Relevant guidelines: Grouzard et al. (2018), ICRC (2018) and Pilon (2018).
- **Relief of urinary obstruction by catheterization or suprapubic cystostomy** (FLH42) [DH and PH].
 - Relevant guideline: Grouzard et al. (2018).
- Abdominal surgeries, including hernia repair, management of acute abdomen, removal of gallbladder, appendectomy, colostomy, and management of hydatic cyst (FLH31, FLH34 and FLH43) [DH and PH].
 - A relevant guideline on abdominal surgeries, including hernia repair, management of acute abdomen, removal of gallbladder, appendectomy, colostomy, and management of hydatic cyst was not identified.
- **Trauma laparotomy** (FLH48) [DH and PH].
 - Relevant guideline: The Sphere Association (2018).
- Management of cleft lip/palate and club foot (RH13 and RH15) [PH].
 - A relevant guideline on management of cleft lip/palate and club foot was not identified.
- Occular surgeries, including cataract removal (RH14) [PH].
 - A relevant guideline on occular surgeries, including cataract removal was not identified.
- **Basic dental procedures** (treatment of caries, extraction, drainage of simple dental abscess) (HC57, HC58 and HC63) [DH].
 - Relevant guideline: Grouzard et al. (2018).

3.4.2 Package 19: Rehabilitation

• Targeted therapeutic programmes for children referred with developmental delays, including motor, sensory and language stimulation (C53) [DH].

- Relevant guideline: Child Protection Working Group (2012).
- Physical mobilization and strengthening activities following acute injury or illness and guidance in use of rehabilitation equipment e.g. crutches, wheelchair etc (HC64, FLH56 and C57) [DH].
 - A relevant guideline on physical mobilization and strengthening activities following acute injury or illness and guidance in use of rehabilitation equipment e.g. crutches, wheelchair etc was not identified.
- **Physical mobilization activities and provision of appropriate rehabilitation equipment** e.g. crutches, wheelchair etc. (HC65, FLH51, FLH54, FLH55, FLH56 and C57) [PH].
 - Relevant guideline: The Sphere Association (2018)
 - See also Women's Refugee Commission (2015a) (Including Adolescent Girls with Disabilities in Humanitarian Programs: Principles and Guidelines).

3.4.3 Package 20: Palliative care and pain control

- Oral palliative care and pain control measures with non-opioid agents (HC47) [BHC].
 - Relevant guidelines: The Sphere Association (2018) Pilon (2018).
 - See also Grouzard et al. (2018), ICRC (2018) and MSF (2017).
- Oral and parenteral palliative care and pain control measures with non-opioid agents (HC67) [CHC].
 - Relevant guidelines: The Sphere Association (2018) Pilon (2018).
 - See also Grouzard et al. (2018), ICRC (2018) and MSF (2017).
- Treatment of severe acute pain including in association with procedures, including with opioid and non-opioid agents (FLH57) [DH and PH].
 - Relevant guidelines: The Sphere Association (2018) Pilon (2018).
 - See also Grouzard et al. (2018), ICRC (2018) and MSF (2017).

3.4.4 Package 21: Pathology

- **Point-of-care testing for glucose** (HC68) [SHC].
 - A relevant guideline on point-of-care testing for glucose was not identified.
- Point of care testing for glucose, malaria, HIV, urinalysis and urine pregnancy, and haemoglobin (HC68) [BHC].
 - A relevant guideline on point of care testing for glucose, malaria, HIV, urinalysis and urine pregnancy, and haemoglobin was not identified.
- Laboratory complete blood counts, simple coagulation studies, urea and electrolytes. Slide microscopy for cell counts, malaria, urinary STI testing (HC68) [CHC].

- Relevant guidelines: For guidelines relating to the necessity of blood counts regarding TB treatment, see MSF (2017).
- For general information on the importance of heaving adequate laboratory resources, see The Sphere Association (2018).
- Laboratory complete blood counts, simple coagulation studies, urea and electrolytes, including cardiac markers. Slide microscopy for cell counts, malaria, and wet preparation. STI testing. Capacity to collect blood culture in emergency unit prior to antibiotic administration (FLH58) [DH].
 - For general information on the importance of heaving adequate laboratory resources, see The Sphere Association (2018).
- **Comprehensive laboratory services for emergency diagnoses**, including cardiac markers, blood gas, thyroid studies, therapeutic drug levels (RH19) [PH].
 - For general information on the importance of heaving adequate laboratory resources, see The Sphere Association (2018).
- Perform and interpret electrocardiogram (FLH58) [DH and PH].
 - A relevant guideline on perform and interpret electrocardiogram was not identified.
- Comprehensive X-ray services (FLH58) [DH].
 - A relevant guideline on comprehensive X-ray services was not identified.
- **Radiology and point of care ultrasound** (FLH58 and RH19) [DH and PH].
 - A relevant guideline on radiology and point of care ultrasound was not identified.

4. Summary

This report matches guidelines to the interventions comprising the package of health services, organised by Disease Control Priorities clusters. Some of the guidelines, notably the MSF guidelines authored by Grouzard et al. (2018) and The Sphere Association (2018) are very extensive in suggesting practical pathways to deliver many interventions. Guidelines for the age-related and infectious diseases clusters are well-covered. Guidelines for a minority of interventions (notably in the health services cluster) are yet to be located.

5. References

- Action Contre La Faim. (2012). Emergency nutrition: A handbook for developing an emergency nutrition intervention strategy. Paris, France: ACF.
- Action Contre La Faim. (2014). Baby friendly spaces: Holistic approach for pregnant, lactating women and their very young children in emergency. Paris, France: ACF.
- Action Contre La Faim. (2017). Wash'Nutrition: A practical guidebook on increasing nutritional impact through integration of wash and nutrition programmes. Paris, France: ACF.
- Becher, H. (2015a). Interagency task team HIV in humanitarian emergencies: PMTCT in humanitarian settings. Part I: Lessons learned and recommendations: Inter-Agency Task Team to Address HIV in Humanitarian Emergencies.
- Becher, H. (2015b). Interagency task team HIV in humanitarian emergencies: PMTCT in humanitarian settings. Part II: Implementation Guide: Inter-Agency Task Team to Address HIV in Humanitarian Emergencies.
- Carr, S. (2014). Guidelines for the selection and use of new ready-to-use-therapeutic food (RUTF) products in World Vision Programmes. London, UK: World Vision International

unicef.

- Child Protection Working Group. (2012). Minimum standards for child protection in humanitarian action: CPWG.
- Coutin, A. (2015). Essential obstetric and newborn care: Practical guide for midwives, doctors with obstetrics training and health care personnel who deal with obstetric emergencies: MSF.
- Department for International Development. (2013). Violence against women and girls in humanitarian emergencies: CHASE briefing paper. London, UK: DfID.
- Emergency Nutrition Network, London School of Hygiene and Tropical Medicine, Save the Children, & GOAL. (2019). C-MAMI Tool: Community management of at-risk mothers and infants under six months of age (C-MAMI) (2 ed.).
- Geibel, R. (2012). Guide to maternal, newborn and child health and nutrition in emergencies. London, UK: World Vision.
- Gender-based Violence Area of Responsibility Working Group. (2010). Handbook for coordinating gender-based violence interventions in humanitarian settings. Geneva: Global Protection Cluster: GBV Prevention and Response.
- Grouzard, V., Rigal, J., & Sutton, M. (2018). Clinical guidelines Diagnosis and treatment manual: For curative programmes in hospitals and dispensaries; Guidance for prescribing: MSF.
- IASC. (2008). Establishing gender-based violence standard operating procedures (SOPs) for multisectoral and inter-organisational prevention and response to gender-based violence in humanitarian settings: IASC.
- IASC. (2010). Guidelines for addressing HIV in humanitarian settings: IASC.
- IASC. (2015). Guidelines for integrating gender-based violence interventions in humanitarian action: Reducing risk, promoting resilience and aiding recovery. Geneva: IASC.
- IASC Global Nutrition Cluster, & Standing Committee on Nutrition (SCN) Task Force on Assessment, M., and Evaluation,. (2009). Fact sheet on the implementation of 2006 WHO Child Growth Standards for emergency nutrition programmes for children aged 6-59 months.
- IAWG SAC sub-working group. (no date). Safe abortion care: 10 steps for starting/expanding programming. In I.-a. W. Group (Ed.).
- ICEC, & IAWG. (2015). Emergency contraceptive pills: Fast facts for decision-makers and program mangers in crisis-affected settings: Inter-Agency Working Group on Reproductive Health in Crises.
- ICRC. (2008). HIV/AIDS field guide: A planning and practice guide to integrating HIV/AIDS into the ICRC's health work. Geneva: ICRC.
- ICRC. (2016). Nutrition matters: Guidance for nutrition programming. Geneva: ICRC.
- ICRC. (2018). Anaesthesia handbook. Geneva: ICRC.

- Inter-Agency Task Team on HIV and Young People. (No date). HIV interventions for young people in humanitarian emergencies: Guidance brief. New York, US: United Nations Population Fund, HIV/AIDS Branch.
- Inter-Agency Task Team to Address HIV in Humanitarian Emergencies. (2013). Assessment of HIV in internally displaced situations. Geneva: UNHCR.
- International Rescue Committee. (2012). Caring for child survivors of sexual abuse: Guidelines for health and psychosocial service providers in humanitarian settings. New York, USA: International Rescue Committee.
- Jamison, D., Alwan, A., Mock, C., Nugent, R., Watkins, D., Adeyi, O., . . . Zhao, K. (2017). Universal health coverage and intersectoral action for health: Key messages from Disease Control Priorities, 3rd edition. *The Lancet*, 391(10125), 1108-1120.
- Jamison, D., Alwan, A., Mock, C., Nugent, R., Watkins, D., Adeyi, O., . . . Zhao, K. (2017). Universal health coverage and intersectoral action for health: Key messages from Disease Control Priorities, 3rd edition. *The Lancet*, 391(10125), 1108-1120
- Jamison, D., Gelband, H., Horton, S., Jha, P., Laxminarayan, R., Mock, C., & Nugent, R. (2018). Disease Control Priorities: Improving Health and Reducing Poverty *Disease Control Priorities* (Third ed., Vol. 9). Washington, DC, USA: The World Bank.
- Lilley, S., Metzler, J., & Ager, A. (2015). Evaluation of child friendly spaces: Tools and guidance for monitoring and evaluating CFS. London, UK: World Vision International

Columbia University

Save the Children

unicef.

MSF. (2017). Tuberculosis: Practical guide for clinicians, nurses, laboratory technicians and medical auxiliaries: MSF

Partners in Health.

- Pilon, S. (2018). Essential drugs: Practical guide intended for physicians, pharmacists, nurses and medical auxiliaries: MSF.
- Save the Children. (2016). Newborn health in emergencies summary sheet. In S. t. Children (Ed.).
- Snider, L., van Ommeren, M., & Schafer, A. (2011). Psychological first aid: Guide for field workers. Geneva, Switzerland: WHO

War Trauma Foundation

World Vision Australia.

- The Sphere Association. (2018). The sphere handbook: Humanitarian charter and minimum standards in humanitarian response. Geneva, Switzerland: Sphere Association.
- UNHCR. (2014). Guidelines for the delivery of antiretroviral therapy to migrants and crisis-affected persons in sub-saharan Africa Geneva, Switerland: UNHCR.
- Van Den Noorgate, J., Maes, P., Diaz, F., Fesselet, J., Heeger, J., Laurent, P., . . . Verkerk, R. (2010). Public health engineering in precarious situations: Manual intended for the setting up of public health programmes in disadvantaged areas, particularly in refugee and displaced persons camps, and in health structures: MSF.
- Watkins, D., Jamison, D., Mills, A., Atun, R., Danforth, K., Glassman, A., . . . Alwan, A. (2018a).
 Annex 1A. Essential packages as they appear in Volumes 1 through 9. In D. Jamison, H.
 Gelband, S. Horton, P. Jha, R. Laxminarayan, C. Mock & R. Nugent (Eds.), *Disease control priorities: Improving health and reducing poverty* (Vol. Vlume 9). Washington, DC, USA: Word Bank.
- Watkins, D., Jamison, D., Mills, A., Atun, R., Danforth, K., Glassman, A., . . . Alwan, A. (2018b).
 Annex 3C. Essential Universal Health Coverage: Interventions and Platforms. In D. Jamison, H. Gelband, S. Horton, P. Jha, R. Laxminarayan, C. Mock & R. Nugent (Eds.), *Disease Control Priorities* (Vol. Volume 9). Washington, DC, USA: World Bank.
- WHO. (2013). Malaria control in humanitarian emergencies: An inter-agency field handbook (second edition ed.). Geneva, Switzerland: WHO.

- WHO. (2015). mhGAP Humanitarian Intervention Guide (mhGAP-HIG): Clinical management of mental, neurological and substance use conditions in humanitarian emergencies. Geneva, Switzerland: WHO.
- WHO. (2017). Vaccination in humanitarian emergencies: Implementation guide. Geneva, Switzerland: WHO.
- Women's Refugee Commission. (2015a). Including adolescent girls with disabilities in humanitarian programs: Principles and guidelines. New York, USA: Women's Refugee Commission.
- Women's Refugee Commission. (2015b). Working with refugees engaged in sex work: A guidance note for humanitarians 14 practical steps for field staff. New York, USA: Women's Refugee Commission.
- World Vision. (2017). World vision policy governing the procurement and use of milk products in field programmes. Uxbridge, UK: World Vision.



Ministry of Public Health, Afghanistan Integrated Package of Essential Health Services 2019

Draft 24 December 2018

	Health and Disease Interventions									
Population Based Interventions	Community/Mobile Health Teams 15,951/2299*	Sub Health Centre (SHC) 1,001*	Basic Health Centre (BHC) 874*	Comprehensive Health Centre (CHC) 433*	District Hospital 85*	Provincial Hospital 27*				
	*Staff at health posts: 1 male CHW; 1 female CHW Staff for mobile health teams: 1 female health provider (community midwife or nurse); 1 male health provider (doctor or nurse); 1 vaccinator; 1 driver	*Staff: 1 male nurse; 1 community midwife; 1 cleaner/guard	*Staff: 1 male nurse; 1 community midwife; I laboratory technician; 1 cleaner/guard	*Staff: 1 male nurse; 1 female nurse; 2 community midwives; 1 community health supervisor; 2 vaccinators; 1 male physician; 1 female physician; 1 laboratory technician; 1 pharmacy technician; 1 psychosocial counsellor; 1 administrator; 4 cleaners/guards; 1 driver	*Staff: 2 male physicians general; 2 female physicians; 1 surgeon; 1 anaesthetist; 1 paediatrician; 1 dentist; 5 male nurses; 5 female nurses; 4 midwives; 1 community health supervisor; 1 pharmacist; 2 vaccinators; 2 laboratory technicians; 1 dental technician; 1 x-ray technician; 1 physiotherapist; 6 cleaners/guards; 1 driver	*Staff: 2 surgeons; 1 anaesthetist; 2 obstetrician /gynaecologists; 2 paediatricians; 2 medical specialists; 7 general practitioners); 1 dentist; 5 nurses; 8 midwives; 12 ward nurses; 2 anaesthetic nurses; 4 nurses for emergency room and outpatient department; 1 physiotherapist; 2 pharmacists; 2 x-ray technicians; 1 dental technician; 2 vaccinators; 2 technical assistants; driver				

Population Based Interventions	Reproductive, Maternal	and Newborn Health				
1. Mass media messages concerning healthy eating and physical activity	1. Establish community- based women's groups (including prevention and support for violence, psychosocial support, newborn care and nutrition) [not DCP3 intervention]	See also mental health section	See also mental health section	See also mental health section		
messages concerning use of tobacco and alcohol	2. Provision of food and appropriate nutritional supplementation to pregnant women in food insecure households [C27]**	1. At least 4 antenatal visits including essential education (on maternal health and family planning, support for those experiencing interpersonal violence, recognition of danger signs for hypertensive disorders and gestational diabetes, promotion of healthy diet and relevant nutritional supplementation per WHO protocol, HIV education and counselling, and tetanus vaccination administration [C1, C5, C6, C25]	1. At least 4 antenatal visits including essential education (on maternal health and family planning, support for those experiencing interpersonal violence, recognition of danger signs for hypertensive disorders and gestational diabetes, promotion of healthy diet and relevant nutritional supplementation per WHO protocol, HIV education and counselling, and tetanus vaccination administration [C1, C5, C6, C25]	1. Comprehensive antenatal visits for complicated pregnancy, including management of hypertensive disorders in pregnancy, gestational diabetes, and HIV in pregnancy [HC8, HC9, HC10, FLH1]	1. Comprehensive antenatal visits for complicated pregnancy, including management of hypertensive disorders in pregnancy, gestational diabetes, and HIV in pregnancy [HC8, HC9, HC10, FLH1]	
tracing, and emergency response	3. Education for recognition of signs of pre- term labour [No clear DCP3 mapping, possibly C1]	2. Early detection of pre- term labour and premature rupture of membranes with timely referral and first dose antibiotics if indicated [FLH7]	2. Early detection of pre- term labour and premature rupture of membranes with timely referral and first dose antibiotics if indicated [FLH7]	antibiotics if indicated [FLH7]	antenatal corticosteroids and antibiotics as indicated	1. Management of preterm labour and pre-term pre- labour rupture of membranes or PPROM with antenatal corticosteroids and antibiotics as indicated [HC3, FLH7]
6. Ensure plan in place to ensure ability to cope with large increase of patients due to		3. Early detection of signs of pre-eclampsia with timely referral [HC9]	management of eclampsia with IM	3. Initial stabilization and management of eclampsia with IM/IV loading dose magnesium sulphate, and transfer [FLH4]	management of eclampsia	2. Comprehensive management of eclampsia [FLH4]

infectious diseases e.g. stockpiles of disinfectants, equipment for patent care, and personal protective equipment 7. Ensure influenza vaccine available at		4. In remote areas, management of labour and delivery in low-risk women and adolescents (BEmNOC), including initial treatment of obstetric or delivery complications prior to transfer [HC11]	4. Management of labour and delivery in low-risk women and adolescents (BEmNOC), including initial treatment of obstetric or delivery complications prior to transfer [HC11]	4. Management of labour and delivery in low-risk women and adolescents (BEmNOC), including initial treatment of obstetric or delivery complications prior to transfer [HC11]	and delivery in high risk women and adolescents caesarean delivery (CEmNOC) [FLH8, FLH24,	3. Management of labour and delivery in high risk women and adolescents including caesarean delivery (CEmNOC) [FLH8, FLH24, FLH32]
system	4. Promotion of Kangaroo care and early breastfeeding [C2, C4, HC5, HC56],	5. Helping babies breathe interventions [C3, HC11]	5. Helping babies breathe interventions [C3, HC11]	5. Management of newborn complications, including jaundice, neonatal meningitis, and other very serious infections requiring continuous supportive care (IV fluids, oxygen, etc.) [HC6, FLH6, FLH3]	5. See also emergency care section	
	5. Early post-natal visit within 48 hours [C1]	6. Early recognition and referral for clinical signs of maternal sepsis [FLH5]	6. Early recognition and referral for clinical signs of maternal sepsis [FLH5]	6. Early recognition and referral for clinical signs of maternal sepsis [FLH5]	sepsis, including early detection at health centres	4. Management of maternal sepsis, including early detection at health centres [FLH5]
	6. Post-natal reproductive health visit (including education on birth spacing, family planning, resumption of sexual intercourse, and pelvic floor exercises) [not DCP3 intervention]	7. Post-natal reproductive health visit (including education on birth spacing, family planning, resumption of sexual intercourse, and pelvic floor exercises) [not DCP3 intervention]	7. Post-natal reproductive health visit (including education on birth spacing, family planning, resumption of sexual intercourse, and pelvic floor exercises) [not DCP3 intervention]	7. Post-natal reproductive health visit (including education on birth spacing, family planning, resumption of sexual intercourse, and pelvic floor exercises) [not DCP3 intervention]		
		8. Counselling and referral for termination of pregnancy [Not DCP3 intervention]	8. Management of miscarriage or incomplete abortion and post abortion care [HC2]	8. Termination of pregnancy, including by manual vacuum aspiration [HC7, FLH10]	pregnancy by manual vacuum aspiration and dilation and curettage	5. Surgical termination of pregnancy by manual vacuum aspiration and dilation and curettage [FLH10]
					8. Operative treatment for ectopic pregnancy or ovarian cyst torsion [FLH9]	
					rupture or intractable postpartum haemorrhage	6. Hysterectomy for uterine rupture or intractable postpartum haemorrhage [FLH38]
	7. Provision of condoms and hormonal contraceptives, including	9. Referral for, or where available, administration of long-acting	9. Insertion and removal of long-acting contraceptives [FLH14]	11. Insertion and removal of long-acting contraceptives [FLH14]	10. Surgical methods of contraception including tubal ligation and vasectomy [FLH15, FLH16]	

emergency contraceptives [HC4]	contraceptive methods [FLH14]				
			12. Post gender based violence care, including provision of emergency contraception, and rape response referral (medical and judicial) [HC16]	11. Post gender based violence care, including provision of emergency contraception, and rape response referral (medical and judicial) [HC16]	
			13. Early detection by visual inspection of early stage cervical cancer with referral [FLH13]	12. Early detection by visual inspection and treatment by cryotherapy and colposcopy of early-stage cervical cancer [FLH13]	
Child and Adolescent H	-				
FOR TREATMENT OF ACU	JTE INFECTIONS, SEE INF	ECTIOUS DISEASE AND	EMERGENCY CARE SECTIO	JNS	
8. Monthly growth monitoring and promotion session for under five years children, and referral in the presence of complications for management of severe acute malnutrition [Not DCP3 intervention]	10. Routine childhood visits with parenting programs in infancy to promote early child development, monitoring for expected developmental milestones and referral for delay. [Annex 1A, package 14]	development (ECD) through introduction of ECD services by health	14. Improve early child development (ECD) through introduction of ECD services by health care providers. [Not DCP3 intervention]	13. Targeted therapeutic programmes for children referred with developmental delays, including motor, sensory and language stimulation [C53]	
9. Promotion of relevant childhood nutrition interventions according to WHO guidelines including promotion of breastfeeding, complementary feeding, and a varied diet, vitamin and micronutrient supplementation [C4, C14]	11. Promotion of relevant childhood nutrition interventions according to WHO guidelines including promotion of breastfeeding, complementary feeding, and a varied diet with relevant vitamin and micronutrient supplementation [C4, C14]	severe acute malnutrition [C8]	15. Management of severe acute malnutrition associated with serious infection [FLH12]	acute malnutrition associated with serious	7. Management of severe acute malnutrition associated with serious infection [FLH12]
10. Education on hand washing and safe disposal of children's stools [C10]	12. Basic treatment of acute diarrhoea per WHO guidelines including oral fluids [HC12]	guidelines including oral	16. Advanced treatment of severe diarrhoea per WHO guidelines including IV fluids [HC12]	SEE EMERGENCY CARE SECTION for treatment of severe dehydration and shock	

11. Opportunistic outreach initiatives for age appropriate child vaccination [C5, C11, C16]	13. Routine age appropriate immunization per international guidelines [C5, C11, C16]	per international	immunization per international guidelines [C5,	15. Routine age appropriate immunization per international guidelines [C5, C11, C16]	8. Routine age appropriate immunization per international guidelines [C5, C11, C16]
12. Promotion of child safety, including prevention of road traffic injury, falls and poisoning [Annex 1A, package 4]	14. Promotion of child safety, including prevention of road traffic injury, falls and poisoning [Annex 1A, package 4]	14. Promotion of child safety, including prevention of road traffic injury, falls and poisoning [Annex 1A, package 4]	18. Promotion of child safety, including prevention of road traffic injury, falls and poisoning [Annex 1A, package 4]		
		15. Early identification of lead poisoning and counselling of families in remediation strategies for sources of environmental exposure [C49]	19. Early identification of lead poisoning and counselling of families in remediation strategies for sources of environmental exposure [C49]	SEE EMERGENCY CARE SECTION for management of acute poisoning and toxic exposure	
Infectious Diseases	15. Develop plans and legal standards for curtailing interactions between infected persons and uninfected population and implement and evaluate infection control measures in health facilities [P11]	16. Develop plans and legal standards for curtailing interactions between infected persons and uninfected population and implement and evaluate infection control measures in health facilities [P11]	standards for curtailing interactions between infected persons and uninfected population and implement and evaluate	16. Develop plans and legal standards for curtailing interactions between infected persons and uninfected population and implement and evaluate infection control measures in health facilities [P11]	9. Develop plans and legal standards for curtailing interactions between infected persons and uninfected population and implement and evaluate infection control measures in health facilities [P11]
	16. Targeted age based and risk based vaccinations for adults (including tetanus, pneumococcus, influenza, Hepatitis B, including for health providers, and other relevant vaccinations) [HC35, HC33, HC24]	17. Targeted age based and risk based vaccinations for adults (including tetanus, pneumococcus, influenza, Hepatitis B, including for health providers, and other relevant vaccinations) [HC35, HC33, HC24]	21. Targeted age based and risk based vaccinations for adults (including tetanus, pneumococcus, influenza, Hepatitis B, including for health providers, and other relevant vaccinations) [HC35, HC33, HC24]	17. Targeted age based and risk based vaccinations for adults (including tetanus, pneumococcus, influenza, Hepatitis B, including for health providers, and other relevant vaccinations) [HC35, HC33, HC24]	
13. Mass helminthiases drug administration in targeted areas [C21]	17. Mass helminthiases drug administration in targeted areas [C21]				

14. Contact tracing for TB [C32]					
		18. Provider initiated testing and counselling for HIV, STIs, and hepatitis, including for adolescents, with expedited treatment of STIs and referral for immediate initiation of therapy for those testing positive for HIV [HC13, HC17, HC21, HC23]	22. Provider initiated testing and counselling for HIV, STIs, and hepatitis, including for adolescents, with immediate treatment of STIs and initiation and on- going monitoring of appropriate therapies for those testing positive for HIV [HC13, HC17, HC19, HC21, HC23]	18. Provider initiated testing and counselling for HIV, STIs, and hepatitis, including for adolescents, with immediate treatment of STIs and initiation and on- going monitoring of appropriate therapies for those testing positive for HIV [HC13, HC17, HC19, HC21, HC23]	10. Provider initiated testing and counselling for HIV, STIs, and hepatitis, including for adolescents, with immediate treatment of STIs and initiation and on- going monitoring of appropriate therapies for those testing positive for HIV [HC13, HC17, HC19, HC21, HC23]
			annual screening for latent TB infection, initiation of	19. Following a new diagnosis of HIV, initial and annual screening for latent TB infection, initiation of isoniazid preventive therapy among all with positive screen but no evidence of active TB [HC29]	11. Following a new diagnosis of HIV, initial and annual screening for latent TB infection, initiation of isoniazid preventive therapy among all with positive screen but no evidence of active TB [HC29]
			24. Provider-initiated diagnosis of TB using sputum smear, and initiation of first line and second line treatment per current WHO guidelines for drug susceptible TB; referral for confirmation, assessment of drug resistance, and treatment of drug-resistant TB [HC27]	20. Confirmation, further assessment of drug resistance, and treatment of drug resistant TB [HC27/FLH17]	12. Drug susceptibility testing for cases of treatment failure and tertiary referral as needed; enrolment of those with MDR-TB for treatment per WHO guidelines (either short or long regimen) [FLH17]
			individuals with a diagnosis	21. Screening for HIV in all individuals with a diagnosis of active TB; if HIV present, initiation of ARV treatment and HIV care [HC28]	13. Screening for HIV in all individuals with a diagnosis of active TB; if HIV present, initiation of ARV treatment and HIV care [HC28]
15. In high prevalence areas, early empirical treatment of uncomplicated malaria (clinically diagnosed) with relevant anti-malarial medicines [C36]	19. In high prevalence areas, early empirical treatment of uncomplicated malaria (clinically diagnosed) with relevant anti-malarial medicines [C36]	19. Treatment of malaria diagnosed by rapid diagnostic test (RDT) with relevant oral/rectal anti- malarial therapy [C36, C38]	26. Treatment of malaria diagnosed by rapid diagnostic test (RDT) with relevant oral/rectal anti- malarial therapy [C36, C38]	22. Management of severe malaria, including with parenteral artesunate and full course of ACT [FLH19]	14. Management of severe malaria, including with parenteral artesunate and full course of ACT [FLH19]

	20. Provision of insecticide-treated nets to children and pregnant women attending SHCs in high risk areas [H32]	insecticide-treated nets to children and pregnant women attending BHCs	27. Provision of insecticide- treated nets to children and pregnant women attending CHCs in high risk areas [H32]		
16. In the context of an emerging infectious outbreak, disseminate advice and guidance on how to recognise early symptoms and signs and when to seek medical attention [C46]	21. Only at time of risk for outbreak, basic case- based syndromic surveillance and reporting with contact precautions [Not DCP3 intervention]	21. Only at time of risk for	28. Only at time of risk for outbreak, basic case-based syndromic surveillance and reporting with contact precautions [Not DCP3 intervention]	23. Case-based syndromic surveillance in emergency rooms/units and reporting with basic communicable disease isolation [Not DCP3 intervention]	15. Case-based syndromic surveillance in emergency rooms/units and reporting with advanced communicable disease isolation [Not DCP3 intervention]
Chronic Non-Communi	cable Diseases				
		diabetes among at-risk adults, and continuation of prescribed therapies, including for control of glycaemia, blood pressure and lipids, and	29. Screening and management of diabetes among at risk adults, including initiation of prescriptions for glycaemic control, management of blood pressure and lipids [HC40]	See EMERGENCY CARE section for management of acute complications	See EMERGENCY CARE section for management of acute complications
	22. Opportunistic screening for hypertension for all adults and continuation of prescribed treatments [HC45]	hypertension for all adults and continuation of prescribed treatments	30. Initiation of treatment among individuals with severe hypertension, evidence of associated end- organ changes, or other high risk factors. [HC45]	24. Initiation of treatment among individuals with severe hypertension, evidence of associated end- organ changes, or other high-risk factors. [HC45]	16. Initiation of treatment among individuals with severe hypertension, evidence of associated end- organ changes, or other high-risk factors. [HC45]
			31. Longitudinal management and monitoring of chronic cardiovascular disease with continuation of prescribed therapies to reduce risk of further events [HC43, HC44]		SEE EMERGENCY CARE SECTION for management of acute exacerbations of cardiovascular disease, including ischaemia
		of asthma and chronic obstructive pulmonary	32. Chronic management of asthma and chronic obstructive pulmonary disorder (COPD) with low- dose inhaled corticosteroids	CARE SECTION: Management of acute exacerbations of asthma	

Mental, Neurological, al	nd Substance Use Diso	corticosteroids and long acting bronchodilators. [HC37] rders	and long-acting bronchodilators. [HC37]	pulmonary disorder [FLH22, RH4]	
	and anxiety disorders with interview based tools [Not DCP3 intervention]	25. Detection & referral for depression for all age groups using validated interview-based tools. Detection of anxiety disorders for all age groups using validated interview-based tools & referral for initiation of pharmacological treatment, referral for psychosocial support. [Not DCP3 intervention]	Mental Health Gap Programme (mhGAP) intervention guide (HC50). 34. Detection and referral for initiation of pharmacological treatment of anxiety disorders for all age groups and continuation of psychosocial support SEE EMERGENCY SECTION FOR	 25. Initiation of pharmacological and psychosocial support for depression using WHO mhGAP intervention guide (HC50) 26. Detection and referral for initiation of pharmacological treatment of anxiety disorders for all age groups and continuation of psychosocial support SEE EMERGENCY SECTION FOR CLINICALLY UNSTABLE [HC50] 	 17. Detection and referral to CHC of depression for all age groups using validated interview based tools 18. Initiation of pharmacological and psychosocial support for anxiety disorders using mhGAP intervention guide [HC50]
		26. Detection of substance use disorders for all age groups using validated screening tools, and referral to vertical drug demand reduction (DDR) programme for pharmacological treatment and referral for psychosocial support. [Not DCP3 intervention]	use disorders for all age groups using validated screening tools, and referral to vertical DDR programme for pharmacological	SEE EMERGENCY SECTION FOR CLINICALLY UNSTABLE /ACUTE e.g., overdose, drug-induced psychosis, suicide. Referral to DDR programme for pharmacological treatment and referral to CHC for psychosocial support [Not DCP3 intervention]	SEE EMERGENCY SECTION FOR CLINICALLY UNSTABLE /ACUTE e.g., overdose, drug-induced psychosis, suicide. Referral to DDR programme for pharmacological treatment and referral to CHC for psychosocial support [Not DCP3 intervention]
		27. Detection of psychotic disorders using validated interview based tools with timely referral for management [Not DCP3 intervention]	disorders using validated interview based tools with timely referral for management, and continuation of psychosocial support for	27. Prescription of pharmacological and psychosocial support for psychotic disorders SEE EMERGENCY SECTION FOR CLINICALLY UNSTABLE e.g., severe acute agitation,	

				suicide [HC14, HC49, HC52]	
17. Community education to limit exposure to violence, including all interpersonal violence, sexual violence, and conflict [C25]	24. Active detection of exposure to violence and referral for appropriate care [Not DCP3 intervention]	28. Active detection of exposure to violence and referral for appropriate care [Not DCP3 intervention]	37. Psychosocial support for those exposed to violence (see also emergency care section for medical support) [HC16]	28. Advanced management for effects of exposure to violence. See also treatment for anxiety, depression, and emergency care section for medical support. [HC16]	19. Advanced management for effects of exposure to violence. See also treatment for anxiety, depression, and emergency care section for medical support. [HC16]
			38. Continuation of prescribed pharmacological and psychosocial support for epilepsy using WHO mhGAP intervention guide. SEE EMERGENCY SECTION FOR CLINICALLY UNSTABLE e.g., active seizures [HC51]	SEE EMERGENCY SECTION FOR CLINICALLY UNSTABLE e.g. active seizures [HC51]	20. Prescription and initiation of pharmacological and psychosocial for epilepsy. SEE EMERGENCY SECTION FOR CLINICALLY UNSTABLE e.g., seizures [HC51]
18. Self-managed treatment of migraine [C48]			39. Initiation of self managed treatment of migraine protocol [C48]		
Emergency Care				I	
PRE-HOSPITAL CARE: User activated dispatch of basic ambulance services from district level [not DCP3 intervention]					
PRE-HOSPITAL CARE: WHO Basic Emergency Care - Initial syndrome- based management at scene by pre-hospital providers for difficulty in breathing, shock, altered mental status, and poly trauma [not DCP3 intervention]					
PRE-HOSPITAL CARE: Direct provider monitoring during transport to appropriate health facility and structured handover to					

hospital personnel [not DCP3 intervention]					
	signs in neonates, children and adults,	29. Recognition of danger signs in neonates, children and adults, including early recognition of signs of serious infection [HC1, HC12, HC30]	40. Recognition of danger signs in neonates, children and adults, including early recognition of signs of serious infection [HC1, HC12, HC30]	29. Triage of children and adults at first entry to facility with validated instrument such WHO/ICRC triage tool [FLH11]	21. Triage of children and adults at first entry to facility with validated instrument such WHO/ICRC triage tool [FLH11]
				30. Implementation of checklists for management of critically ill and injured patients in designated resuscitation area (WHO emergency and trauma care checklists) [not DCP3 intervention]	22. Implementation of checklists for management of critically ill and injured patients in designated resuscitation area (WHO Emergency and Trauma Care Checklists) [not DCP3 intervention
aid: Interventions include airway positioning, choking	age and condition including malnutrition. [HC61,]	30. WHO Basic Emergency Care: Basic syndrome-based management of difficulty breathing, shock, altered mental status, and poly trauma in dedicated emergency unit for neonates, children and adults (interventions include manual airway manoeuvres, oral/nasal airway placement, oxygen administration, bag-valve mask ventilation, temperature management, administration of essential emergency medications, including empiric antibiotics for serious infection) [FLH18]	41. WHO Basic Emergency Care: Basic syndrome- based management of difficulty breathing, shock, altered mental status, and poly trauma in dedicated emergency unit for neonates, children and adults (interventions include manual airway manoeuvres, oral/nasal airway placement, oxygen administration, bag-valve mask ventilation, temperature management, administration of essential emergency medications,	31. Advanced syndrome based management of difficulty breathing, shock, altered mental status, and poly trauma in dedicated emergency unit, including for neonates, children and adults. (Interventions include intubation, mechanical ventilation, surgical airway, and placement of chest drain, haemorrhage control, defibrillation, administration of IV fluids via peripheral and central venous line with adjustment for age and condition, including malnutrition; administration of essential emergency medication) [FLH45, FLH50].	23. Advanced syndrome based management of difficulty breathing, shock, altered mental status, and poly trauma in dedicated emergency unit, including for neonates, children and adults. (Interventions include intubation, mechanical ventilation, surgical airway, and placement of chest drain, haemorrhage control, defibrillation, administration of IV fluids via peripheral and central venous line with adjustment for age and condition, including malnutrition; administration of essential emergency medication) [FLH45, FLH50].

			42. Management of severe acute exacerbations of asthma and COPD (using systemic steroids, inhaled beta-agonists, and, if indicated, oral antibiotics and oxygen therapy) [FLH22]	32. Management of acute ventilatory failure due to acute exacerbations of asthma and COPD; in COPD use of bilevel positive airway pressure preferred [RH4]	24. Management of acute ventilatory failure due to acute exacerbations of asthma and COPD; in COPD use of bilevel positive airway pressure preferred [RH4]
		31. Basic management of cardiovascular emergencies, including provision of aspirin for suspected acute myocardial infarction [HC38], and automatic external defibrillation [Not DCP3 intervention]	43. Basic management of cardiovascular emergencies, including provision of aspirin for suspected acute myocardial infarction [HC38], and automatic external defibrillation [Not DCP3 intervention}	33. Advanced management of cardiovascular emergencies, including myocardial infarction, heart failure, acute arrhythmia, tamponade, and acute critical limb ischemia. (Interventions include aspirin, unfractionated heparin and thrombolytics, pacing and synchronized cardioversion, pericardiocentesis) [HC38, FLH20, FLH21, FLH23, FLH45]	25. Advanced management of cardiovascular emergencies, including myocardial infarction, heart failure, acute arrhythmia, tamponade, and acute critical limb ischemia. (Interventions include aspirin, unfractionated heparin and thrombolytics, pacing and synchronized cardioversion, pericardiocentesis) [HC38, FLH20, FLH21, FLH23, FLH45]
		32. Recognition of clinical hypoglycaemia [Not DCP3 intervention]	44. Recognition and initial management of hypoglycaemia and hyperglycaemia [Not DCP3 intervention]	34. Recognition and management of hypoglycaemia and hyperglycaemia, including treatment of diabetic ketoacidosis [Not DCP3 intervention]	Recognition and management of hypoglycaemia and hyperglycaemia, including treatment of diabetic ketoacidosis [Not DCP3 intervention
			45. Recognition of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms, with referral for management [FLH30]	35. Recognition and management of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms [FLH30]	26. Recognition and management of symptoms due e.g. to opioids/narcotics, sedative hypnotics or hallucinogens, including poisoning, acute intoxication and withdrawal symptoms [FLH30]
20. Initial wound care, including cleaning and dressing [Not DCP3 intervention]	27. Basic wound care, including suturing of simple lacerations [HC62]	33. Advanced wound care, including suturing of complex lacerations [HC62]	46. Advanced wound care, including suturing of complex lacerations [HC62]	36. Advanced wound care, including suturing of complex lacerations [HC62]	27. Advanced wound care, including suturing of complex lacerations [HC62]

		47. Minor soft tissue surgical procedure (drainage of simple abscess [HC59] and removal of foreign body)	surgical procedure	28. Minor soft tissue surgical procedure (drainage of simple abscess [HC59] and removal of foreign body)
28. Splinting of acute fractures and dislocations [HC60]	34. Splinting of acute fractures and dislocations [HC60]	48. Reduction and non- operative management of acute fractures and dislocations [HC60/FLH36]	38. Reduction and non- operative management of acute fractures and dislocations, including traction [FLH36]	29. Reduction and non- operative management of acute fractures and dislocations, including traction [FLH36]
			39. Management of ENT emergencies, including foreign body removal, peritonsillar abscess and epistaxis [Not DCP3 intervention]	
			40. Management of acute trauma of the eye, including acid and alkali burns [Not DCP3 intervention]	30. Management of acute trauma of the eye, including acid and alkali burns [Not DCP3 intervention]
		49. Rapid scale up of service delivery capacity under provincial/regional coordination [P10]	41. Mass casualty management (protocol- based) for rapid scale up of service delivery capacity [P10]	31. Advanced (protocol- based) regional response coordination for mass casualty management and rapid scale of service delivery capacity [P10]
			42. Burr hole to relieve acute elevated intracranial pressure [FLH33]	32. Burr hole to relieve acute elevated intracranial pressure [FLH33]
			43. Escharotomy or fasciotomy [FLH35]	33. Escharotomy or fasciotomy [FLH35]
			44. Trauma related amputations [FLH49]	33. Trauma related
SEE EMERGENCY C	ARE SECTION ABOVE		45. Reduction of acute fractures and dislocations, placement of external fixator and use of traction for fractures [FLH36]	34. Urgent surgical management of orthopaedic injuries (for example, by open reduction and internal fixation) [RH11]
			46. Irrigation and debridement of open fractures [FLH39]	35. Irrigation and debridement of open fractures [FLH39]

				47. Management of septic arthritis [FLH41]	36. Management of septic arthritis [FLH41]
				48. Basic skin grafting and release of contractures, including for burns [FLH46]	Basic skin grafting and release of contractures, including for burns [FLH46]
				49. Relief of urinary obstruction by catheterization or suprapubic cystostomy [FLH42]	37. Relief of urinary obstruction by catheterization or suprapubic cystostomy [FLH42]
				50. Abdominal surgeries, including hernia repair, management of acute abdomen, removal of gallbladder, appendectomy, colostomy, management of hydatic cyst [FLH31, FLH34, FLH43]	Abdominal surgeries, including hernia repair, management of acute abdomen, removal of gallbladder, appendectomy, colostomy, management of hydatic cyst [FLH31, FLH34, FLH43]
				51. Trauma laparotomy [FLH48]	38. Trauma laparotomy [FLH48]
		35. Early recognition and referral for congenital anomalies [HC56]	50. Early recognition and referral for congenital anomalies [HC56]	52. Early recognition and referral for congenital anomalies [HC56]	39. Management of cleft lip/palate, club foot, [RH12, RH13, RH15]
				53. Simple occular procedures e.g. foreign body removal) [Not DCP3intervention]	40. Occular surgeries, including cataract removal [RH14]
				54. Basic dental procedures (treatment of caries, extraction, drainage of simple dental abscess) [HC57, HC58, HC63]	
Palliative Care					
		36. Oral palliative care and pain control measures with non-opioid agents [HC47]	51. Oral and parenteral palliative care and pain control measures with non- opioid agents [HC67]	55. Treatment of severe acute pain including in association with procedures, including with opioid and non-opioid agents [FLH57]	41. Treatment of severe acute pain including in association with procedures, including with opioid and non-opioid agents [FLH57]
Rehabilitation	29. Identification of people with disabilities	37. Identification of people with disabilities	52. Identification of people with disabilities and referral	56. Physical mobilization and strengthening activities	42. Physical mobilization activities and provision of

8 population based interventions	20 + 3 interventions at community level of which 16 are EUHC***	30 interventions at sub health centre level of which 24 are EUHC	38 interventions at basic health centre level of which 28 are EUHC	53 interventions at comprehensive health centre level of which 45 are EUHC	60 interventions at district hospital of which 52 are EUHC	45 interventions at provincial hospital level of which 43 are EUHC
Total					60. Radiology and point of care ultrasound [FLH58]	45. Radiology and point of care ultrasound [RH19]
					59. Comprehensive X-ray services [FLH58]	
					58. Perform and interpret electrocardiogram [FLH58]	44. Perform and interpret electrocardiogram [FLH58]
	Diagnostic Testing	30. Point-of-care testing for glucose [HC68]	38. Point of care testing: glucose, malaria, HIV, urinalysis and urine pregnancy, haemoglobin [HC68]	53. Laboratory complete blood counts, simple coagulation studies, urea and electrolytes. Slide microscopy for cell counts, malaria, urinary STI testing [HC68]	57. Laboratory complete blood counts, simple coagulation studies, urea and electrolytes, including cardiac markers. Slide microscopy for cell counts, malaria, and wet preparation. STI testing. Capacity to collect blood culture in emergency unit prior to antibiotic administration [FLH58]	43. Comprehensive laboratory services for emergency diagnoses, including cardiac markers, blood gas, thyroid studies, therapeutic drug levels [RH19]
		and referral to nearest services for physical rehabilitation [Not DCP3 intervention]	and referral to nearest services for physical rehabilitation [Not DCP3 intervention]	to nearest services for physical rehabilitation [Not DCP3 interventions]	following acute injury or illness and guidance in use of rehabilitation equipment e.g. crutches, wheelchair etc. [HC54, HC64, FLH56,	appropriate rehabilitation equipment e.g. crutches, wheelchair etc. [HC65, FLH51, FLH54, FLH55, FLH56, C57]

Appendix B: List of organizations and networks included in guideline search

Action Contre la Faim American Refugee Committee **AVSI** Foundation **CARE** International Center for Reproductive Rights Centre for Disease Control and Prevention - United States of America Centre for Research on the Epidemiology of Disasters Columbia University Concern Worldwide **CORE** Group Department for International Development - Government of United Kingdom Department of State/Bureau of Population, Refugees, and Migration - United States of America Emergency and Relief Agency - Arab Medical Union **Emory University ENN** European Commission Humanitarian Aid Office Food and Agriculture Organization of the United Nations Global Alliance for Improved Nutrition: Home Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria GOAL Helen Keller International HelpAge International Hope worldwide iMMAP Institute for Global Health - UCL InterAction International Centre for Migration and Health International Committee of the Red Cross International Consortium for Emergency Contraception, hosted by Management Sciences for Health International Council of Nurses International Council of Voluntary Agencies

International Federation of Red Cross and Red Crescent Societies International Medical Corps International Organization for Migration (IOM) International Orthodox Christian Charities | Home International Planned Parenthood Federation - The SPRINT Initiative International Rescue Committee Ipas Jhpiego John Snow, Inc. Johns Hopkins University Center for Refugee & Disaster Response Malaysian Medical Relief Society Malteser International Marie Stopes International Medair Medecins du Monde Médecins Sans Frontières Medical Teams International Nutrition International: Home Office of Foreign Disaster Assistance - United States of America **Plan International** Population Action International Premiere Urgenc Internationale Public Health Agency of Canada Public Health England RedR UK **Relief International** Research for Health in Humanitarian Crises - Elrha Samaritan's Purse — International Relief Save the Children (UK) Save the Children (USA) Sphere Project Terre des homes The Harvard Humanitarian Initiative United Nations Children's Fund (UNICEF)

United Nations High Commissioner for Refugees (UNHCR) United Nations Population Fund (UNFPA) Université catholique de Louvain UNSCN Valid International Women's Refugee Commission World Association for Disaster and Emergency Medicine World Food Programme (WFP) World Health Organization World Vision

Appendix C: Description of guideline documents

Please follow this google drive link to access the guideline documents: https://drive.google.com/drive/folders/1sE9tfP2Xurpglta_n7ERADx094e2bzxV.

1. Action Contre La Faim (2012). *Emergency nutrition: A handbook for developing an emergency nutrition intervention strategy*

These are guidelines to address SAM within the first month of a given emergency. They recommend an intervention strategy based on three components: (1) substitution/gap filling (developing strategies to increase coverage to those currently not covered), (2) strengthening (diagnosis of the weaknesses of the health system), and (3) crisis management strategy. The crisis management strategy (see pages 18-25) can be broken down further into a four-part cycle: emergency preparation, emergency, emergency response, and rehabilitation, which then leads back to emergency preparation to complete the loop.

2. Action Contre La Faim (2014). Baby friendly spaces: Holistic approach for pregnant, lactating women and their very young children in emergency

These are guidelines to implement 'Baby Friendly Spaces,' a programme for pregnant, lactating women and children under the age of 2 in emergency settings.(Action Contre La Faim, 2014) A baby friendly space is a designated quiet and private area, located in close proximity to intended beneficiaries, where caregivers and pregnant women can breastfeed and receive support, guidance and counselling from trained professionals (psychosocial workers, social workers, educators, psychologists). Home visits of staff to family homes are arranged from the space. An initial rapid needs assessment is suggested, as well as a preliminary survey to evaluate the number of potential beneficiaries, followed by training of staff, and then the commencement of activities. Regular workshops and refresher training should be provided to staff. A full description of guidelines for implementation of activities is available from pages 71 through 108.

3. Action Contre La Faim (2017) *Wash'Nutrition: A practical guidebook on increasing nutritional impact through integration of wash and nutrition programmes*

This guideline has been developed to provide practitioners with usable information and simple tools so they can design and implement effective WASH and nutrition programmes. It is targeted at humanitarian and development workers.

4. Becher (2015a) Interagency task team HIV in humanitarian emergencies: PMTCT in humanitarian settings. Part I: Lessons learned and recommendations

5. Becher (2015b) Interagency task team HIV in humanitarian emergencies: PMTCT in humanitarian settings. Part II: Implementation Guide

Funded by the Inter-Agency Task Team to Address HIV in Humanitarian Emergencies, these are guidelines to ensure the uninterrupted supply of ARV drugs for PMTCT during crisis. Part I contains a useful review of relevant literature include the importance of preparedness and planning (including buffer stocks), funding availability, and effective rapid response and monitoring strategies. An in-depth description of guidelines is available in Part II.

6. Carr (2014) Guidelines for the selection and use of new ready-to-use-therapeutic food (RUTF) products in World Vision Programmes

This World Vision report provides procedures and guidelines which govern the use of Ready to Use Food products in World Vision programs worldwide, which may be relevant to other organisations.

7. Child Protection Working Group (2012) *Minimum standards for child protection in humanitarian action*

These are guidelines for those working on child protection, to make child protection responses in emergencies more predictable, accountable and effective. The guidelines span the age-related and NCD intervention clusters.

8. Coutin (2015) *Essential obstetric and newborn care: Practical guide for midwives, doctors with obstetrics training and health care personnel who deal with obstetric emergencies*

An MSF guide authored by Coutin (2015) relates to all four clusters. It is intended as a tool for midwifes, doctors with obstetrics training and health care personnel who deal with obstetric emergencies.

9. Department for International Development (2013) Violence against Women and Girls in Humanitarian Emergencies CHASE Briefing Paper

The CHASE Briefing paper is relevant to several DCP3 clusters. It synthesises guidance on what can be done to prevent and respond to VAWG in humanitarian settings.

10. Emergency Nutrition Network et al. (2019) *C-MAMI Tool: Community management of at-risk mothers and infants under six months of age (C-MAMI)*

The C-MAMI tool provide guidance on how to assess, classify, and manage at-risk mothers and infants under 6 months of age who are nutritionally vulnerable.

11. Geibel (2012) Guide to maternal, newborn and child health and nutrition in emergencies

Funded by World Vision, this guide prioritises low-cost, evidence-based, measurable and preventive interventions to address the primary causes of maternal and child mortality in emergency settings.

12. Gender-based Violence Area of Responsibility Working Group (2010) Handbook for Coordinating Gender-based violence interventions in humanitarian settings

This handbook provides comprehensive guidelines for all sectors of the humanitarian community to prevent and respond effectively to gender-based violence.

13. Grouzard et al. (2018) Clinical guidelines - Diagnosis and treatment manual: For curative programmes in hospitals and dispensaries; Guidance for prescribing

These comprehensive clinical guidelines are designed for medical professionals involved in curative care at dispensaries and primary hospitals.

14. IASC (2008) Establishing gender-based violence standard operating procedures (SOPs) for multisectoral and inter-organisational prevention and response to gender-based violence in humanitarian settings

The goal of these guidelines is to enable humanitarian actors to implement at least the minimum standards for prevention and response to sexual violence in the early stages of an emergency and into more stabilised phases.

15. IASC (2010) Guidelines for addressing HIV in humanitarian settings

These guidelines provide a standard operating procedures template with the aim of assisting mid-level programme planners and implementers to plan the delivery of a minimum set of HIV prevention, treatment, care and support services to people affected by humanitarian crises.

16. IASC (2015) *Guidelines for integrating gender-based violence interventions in humanitarian action: Reducing risk, promoting resilience and aiding recovery*

The aim of these guidelines is to assist humanitarian actors and communities affected by humanitarian emergencies to coordinate, plan, implement, monitor and evaluate actions for the prevention and mitigation of gender-based violence across all sectors of humanitarian response.

17. IASC Global Nutrition Cluster and Standing Committee on Nutrition (SCN) Task Force on Assessment (2009) Fact sheet on the implementation of 2006 WHO Child Growth Standards for *emergency nutrition programmes for children aged 6-59 months*

These guidelines provide a rationale and guide for transitioning from the 1977 National Centre for Health Statistics/EHO growth reference to the 2006 WHO Child Growth Standards.

18. IAWG SAC sub-working group (no date) Safe abortion care: 10 steps for starting/expanding programming

This guideline outlines the best practices for initiating safe abortion care programming in 10 steps.

19. ICEC and IAWG (2015) *Emergency contraceptive pills: Fast facts for decision-makers and program mangers in crisis-affected settings*

This is a leaflet which aims to assist decision-makers and program managers in crisis-affected settings to increase access to emergency contraception, spanning maternal, reproductive, and HIV-related interventions.

20. ICRC (2008) *HIV/AIDS field guide: A planning and practice guide to integrating HIV/AIDS into the ICRC's health work*

This is a comprehensive guide to integrating HIV/AIDS into the ICRC's other health interventions.

21. ICRC (2016) Nutrition matters: Guidance for nutrition programming

These guidelines highlight tangible, evidence-based priorities in health and Water, Sanitation and Hygiene programs to achieve nutrition targets.

22. ICRC (2018) Anaesthesia handbook

This handbook is an extensive reference manual intended to provide guidance for anaesthetists working for the ICRC and to offer advice in areas where practice will differ from that in their home country. The guidance is designed to supplement the practical training given in ICRC war-surgery seminars and to support the work of the ICRC in war surgery.

23. Inter-Agency Task Team on HIV and Young People (No date) *HIV interventions for young people in humanitarian emergencies: Guidance brief*

This guidance brief is targeted at staffs, governments, development partners, civil society and other implementing partners to provide effective HIV interventions for young people (age 10-24) in humanitarian emergencies.

24. Inter-Agency Task Team to Address HIV in Humanitarian Emergencies (2013) Assessment of HIV in internally displaced situations

This rapid HIV assessment tool is aimed at programme planners and implementers, primarily at central and sub-national levels, including Governments, UN agencies and NGOs. It provides guidance on how to conduct an assessment of crisis-induced vulnerabilities, and specific HIV-related needs among IDPs.

25. International Rescue Committee (2012) *Caring for Child Survivors of Sexual Abuse Guidelines for health and psychosocial service providers in humanitarian settings*

This document suggests guidelines for implementing a model of care for child survivors of sexual abuse in humanitarian settings.

26. Lilley et al. (2015) *Evaluation of child friendly spaces: Tools and guidance for monitoring and evaluating CFS*

Funded by World Vision, this document provides guidelines on how to monitor the quality of Child Friendly Spaces implementation. Child Friendly Spaces may provide educational and psychosocial support and other activities that improve development and mental health outcomes for children whose lives have been disrupted by war, natural disaster or other emergency situations.

27. MSF (2017) *Tuberculosis: Practical guide for clinicians, nurses, laboratory technicians and medical auxiliaries*

This guide, developed jointly by MSF and Partners In Health, aims at providing useful information for clinicians and health staff to comprehensively manage TB. Forms of susceptible and resistant tuberculosis, tuberculosis in children, and HIV coinfection are covered.

28. Pilon (2018) Essential drugs: Practical guide intended for physicians, pharmacists, nurses and medical auxiliaries

This comprehensive guide developed by MSF is designed to give practical, concise information to physicians, pharmacists and nurses to improve the rational use of drugs across a range of conditions.

29. Save the Children (2016) Newborn health in emergencies summary sheet

This leaflet outlines key priorities and how to plan a prevention and/or response program regarding newborn health in emergencies.

30. Snider et al. (2011) Psychological first aid: Guide for field workers

This WHO-funded guide focuses specifically on psychological first aid for those exposed to humanitarian emergencies. The guide covers psychological first aid which involves humane, supportive and practical help to fellow human beings suffering serious crisis events, written for people in a position to help others.

31. The Sphere Association (2018) *The Sphere handbook: Humanitarian charter and minimum standards in humanitarian response*

The comprehensive Sphere guidelines touch upon all clusters. It seeks to provide pragmatic guidance, and evidence to support humanitarian staff based on a rights-based response.

32. UNHCR (2014) *Guidelines for the delivery of antiretroviral therapy to migrants and crisis-affected persons in sub-saharan Africa*

This document for clinicians, NGOs and governments provides guidelines on the provision of ART among displaced populations (including all types of migrants and crisis-affected populations, including those forcibly displaced).

33. Van Den Noorgate et al. (2010) Public health engineering in precarious situations: Manual intended for the setting up of public health programmes in disadvantaged areas, particularly in refugee and displaced persons camps, and in health structures

This is a manual useful for setting up public health programmes in disadvantaged areas, including refugee and IDP camps. The purpose of the guideline is to increase the effectiveness with which relief workers can provide sound water, hygiene and sanitation assistance in precarious situations.

34. WHO (2013) Malaria control in humanitarian emergencies: An inter-agency field handbook

Supported by the WHO, this guideline sets out effective malaria control responses in humanitarian emergencies, particularly during the acute phase when reliance on international humanitarian assistance is greatest. It is aimed at policy-makers, planners, and field coordinators, providing them with practical advice on designing and implementing measures to reduce morbidity and mortality due to malaria in both man-made and natural disasters.

35. WHO (2015) *mhGAP Humanitarian Intervention Guide (mhGAP-HIG): Clinical management of mental, neurological and substance use conditions in humanitarian emergencies*

These guidelines comprise a simple, practical tool that aims to support general health facilities in areas affected by humanitarian emergencies in assessing and managing mental, neurological and substance use conditions.

36. WHO (2017) Vaccination in humanitarian emergencies: Implementation guide

These comprehensive guidelines focus on strengthening vaccination services in the context of humanitarian crisis.

37. Women's Refugee Commission (2015a) Including Adolescent Girls with Disabilities in Humanitarian Programs: Principles and Guidelines

This document outlines principles to guide the inclusion of adolescent girls with disabilities into humanitarian programs.

38. Women's Refugee Commission (2015b) *Working with refugees engaged in sex work: A guidance note for humanitarians - 14 practical steps for field staff*

These guidelines were drafted to raise awareness and initiate a conversation about how to ensure the protection of and access to vital services for refugees engaged in sex work.

39. World Vision (2017) *World vision policy governing the procurement and use of milk products in field programmes*

This policy document outlines World Vision's guidelines on the use of milk and milk-derived products in field programmes in emergency contexts. They aim to support, protect and promote immediate and exclusive breastfeeding of infants for the first six months of life, with continued breastfeeding for two additional years or beyond. Starting at six months, complementary foods may be introduced. This stance applies to all programming, advocacy, internal policies and practices and marketing.