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# Integrating Non-communicable Disease Care in Humanitarian Settings

AN OPERATIONAL GUIDE

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UNHCR, IRC and the Informal Inter-Agency  
Group on NCDs in Humanitarian Settings

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## **ACRONYMS**

<b>DM</b>	Diabetes Mellitus
<b>GAP</b>	Global Action Plan
<b>GDPR</b>	General Data Protection Regulation
<b>HPC</b>	Humanitarian Program Cycle
<b>IASC</b>	Interagency Standing Committee
<b>ICRC</b>	International Committee of the Red Cross
<b>IFRC</b>	International Federation of the Red Cross and Red Crescent Societies
<b>IEHK</b>	Interagency Emergency Health Kit
<b>IDP</b>	Internally Displaced Person
<b>IRC</b>	International Rescue Committee
<b>LMICs</b>	Low-and-middle income countries
<b>mhGAP</b>	Mental Health Gap Action Programme
<b>MIRA</b>	Multi Cluster Initial Rapid Assessment
<b>MoH</b>	Ministry of Health
<b>MSF</b>	Médecins Sans Frontières
<b>NCD</b>	Non-communicable Disease
<b>PEN</b>	Package of Essential Noncommunicable Disease Interventions
<b>PHC</b>	Primary Health Care
<b>UNHCR</b>	United Nations High Commissioner for Refugees
<b>WHO</b>	World Health Organization

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## **PURPOSE AND SCOPE**

The purpose of this document is to serve as an operational guide for public health staff of humanitarian organizations providing healthcare in humanitarian settings<sup>i</sup> in order to ensure that care for persons with noncommunicable disease is included and integrated within the primary health care services.

This document describes the rationale and guiding principles for addressing NCDs in a humanitarian context and provides operational guidance for addressing NCDs through an integrated approach at primary health care level. The guidance applies to all types of humanitarian settings and covers the initial acute and ongoing response phases.

The priority NCDs targeted are diabetes, hypertension, cardiovascular disease, asthma and Chronic Obstructive Pulmonary Disease (COPD). Mental Health and many neurological conditions are not included in the scope of this guidance but covered under the mhGAP Humanitarian Intervention Guide (WHO and UNHCR Mental Health Gap Action Programme MhGAP Humanitarian Intervention Guide- see under programmatic Guidance).

The document does not provide clinical guidance on the management of NCDs but clinical guidelines and resources that may be useful include:

- ▶ National clinical guidelines (if available)
- ▶ PEN-Humanitarian (open source)
- ▶ MSF clinical guides
- ▶ UNHCR- Primary Care International field guides

## **RATIONALE**

The NCD burden is increasing globally in all age groups and in all regions of the world. In 2015, 71.3% (39.8 million) of global deaths were due to NCDs.<sup>1</sup> Almost three quarters of these deaths and 82% of premature deaths (before the age of 70 years of age) occur in low-and-middle income countries (LMICs). LMICs will also see the highest increase in NCD burden in the coming years.

In addition to being disproportionately affected by NCDs, LMICs also share the highest burden of humanitarian crises. Importantly, due to an increased average duration of displacement<sup>ii</sup> (average 26 years in 2015), the humanitarian community has increasingly needed to address NCD care in its operations.

NCD management in general is difficult and humanitarian settings add to this challenge due to a variety of factors. The diversity of challenges includes the varied demographics of the populations affected, the different types of humanitarian crises, as well as the breadth of NCD diseases and presentations. Recent changes in humanitarian emergencies such as conflicts occurring in higher income countries, the increasing number of protracted crises, multiple crises occurring within the same country, and more people being internally displaced (IDP) compared to refugees, impact the type of response needed.<sup>3</sup> Displaced people are more likely to be housed in urban areas rather than camp settings. Furthermore, increased urbanization and population density means that natural disasters are impacting far larger populations.

Any humanitarian emergency is likely to cause disruption to the provision of health services for those with NCDs, due to the damage or destruction of health facilities, limited access to health personnel, medication and

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i Natural or man-made disasters, armed conflicts and other situations of violence, or disease outbreaks are included in this category and will be the focus of this guideline.

ii A protracted refugee situation refers to 25,000 or more refugees from the same nationality that have been in exile for five or more years in a given country of asylum.



supply unavailability, and difficulties in physically accessing health facilities (e.g. damaged roads, transportation networks, or security constraints).

Responses to NCD care needs in these challenging emergency contexts have so far lacked standardization,<sup>4,5,6</sup> as well as suffered from a lack of an evidence base to inform the response and adapted guidance.<sup>7,2</sup>

This document aims to address the gap in operational guidance for NCD care in humanitarian settings by providing a framework for public health programme managers to ensure that care for NCDs is included and mainstreamed in humanitarian responses.

## HOW TO USE THIS GUIDE

This document presents an overarching framework for ensuring integration of NCD care in humanitarian health responses outlining the key considerations for NCDs to be included in the needs assessment through to planning, implementation and monitoring of a response. It highlights prioritization of actions in the acute phase, defined as the first 6 months of a response, and considerations for the ongoing response phase beyond the first 6 months.

## FRAMEWORK FOR INTEGRATING NCD CARE IN PRIMARY HEALTH CARE IN HUMANITARIAN SETTINGS DURING ACUTE AND ONGOING PHASES

Component	Actions	
	Acute phase (0-6 months)	Ongoing phase (>6 months)
<b>Needs Assessment and Planning</b>		
Needs Assessment and Analysis	In general health assessments, include NCD burden  Health system and facilities assessment	Reassess according to evolution of situation and more data that may be available
Response Planning	Define priority needs and gaps including for NCD care  Define resources required including for NCD care	Reassess needs and remaining gaps
Resource Mobilization	Include NCD care systematically as part of health response budgets, proposals and appeals	Same and ongoing reassessment of resources required and supporting data
<b>Implementation</b>		
Coordination and Partnerships	Coordinate initial response with national authorities, International and national NGOs, civil society, development actors and donors. This should be part of the health sector cluster or Refugee Coordination Model depending on context and coordination structure	Same and consider establishing an NCD working group within the health coordination mechanism with clear ToR and deliverables  Ensure active engagement with development actors and donors

Component	Actions	
	Acute phase (0-6 months)	Ongoing phase (>6 months)
Service Delivery	<p>Clinical guidelines/ protocols in place</p> <p>Triage and lifesaving care</p> <p>Management of acute complications and exacerbations</p> <p>Follow-up of known patients</p> <p>Diagnosis of new patients</p> <p>Referral procedures in place (at all above stages)</p> <p>Patient education and self-care</p> <p>Community engagement</p>	<p>Strengthen service delivery elements</p> <p>Strengthen community engagement, use of CHWs</p> <p>Strengthen prevention interventions</p>
Human Resources	<p>Ensure team of health care workers (HCW)</p> <p>Training of HCW on NCD care</p> <p>Clearly identified tasks to be shared/shifted between different staff members</p>	<p>Formal training of health care workers on NCD management. Training of the Trainers and cascade training</p> <p>Consider creation of a dedicated NCD team including a doctor and a nurse</p> <p>Support and supervision and knowledge transfer on standardized NCD management to staff</p> <p>Inclusion of health providers and cultural mediators and translators from the community in the NCD team</p> <p>Audit staff performance</p>
Supplies	<p>Identification of a list of essential medicines, equipment and diagnostics for NCD care</p> <p>Support to existing supply system or establishment of an emergency supply system</p> <p>Source/ purchase of the essential medicines based on the WHO/national list of essential medicines, include buffer stock</p> <p>Consider procurement of WHO Interagency Emergency Health Kit (includes some NCD medicines) and the WHO NCD kit</p> <p>Establishment of a cold chain</p> <p>Monitor stocks, storage and consumption and ensure timely orders for replenishment</p> <p>Establishment of basic laboratory capacity</p>	<p>Transition to national supply system if possible</p> <p>Establishment of extended laboratory capacity</p>

Component	Actions	
	Acute phase (0-6 months)	Ongoing phase (>6 months)
Health Information	Establish individual patient records Establish an NCD patient register Establish a Health Information System (HIS) if not able to use national system and Include data collection on NCDs	Expand HIS and collection of NCD indicators, integrate with national HMIS if possible
Monitoring and Evaluation	Collection of aggregate data on NCD care and monitor core indicators Monitor availability of stocks and equipment for NCD care	Expand from core to extended indicators Monitor staff performance Conduct periodic evaluation to assess outcome and impact of intervention Monitor access to NCD services if non camp setting e.g. through health access and utilisation surveys
Transition to national health services	Integrate services within existing health care system from outset if feasible	Build and assess capacity of national authorities and systems to manage services Work with development partners to ensure ongoing support for national systems to include humanitarian affected persons
Advocacy and Research	Advocate for inclusion of NCDs in emergency health responses including financing for primary and referral care	Same AND Operational research and documentation of interventions and models Advocacy for access to affordable medicines and supplies Advocacy for innovative/ more cost effective / generic tools for delivering quality NCD care in humanitarian settings e.g. point of care testing, glucose monitoring, insulin delivery systems

## KEY COMPONENTS OF NCD MANAGEMENT

NCD management should be provided and integrated into primary health care as soon as possible in a humanitarian crisis, with the goal of preventing excess mortality and morbidity. Inclusion within functioning national systems, and strengthening those systems is the best approach to ensure sustainability. This may not be possible in all contexts and humanitarian agencies may need to consider direct service provision or support to government service provision but should endeavor to transition to inclusion in national systems. In some countries NCD care is provided at the secondary care level through specialists. This is less cost effective and limits access for many people. As much as possible efforts should be made to shift provision of care to an integrated approach at primary care level and referrals to specialists for more complicated case management.

The following are the essential components of providing NCD care and are not always addressed in 'traditional' medical humanitarian responses, particularly that of follow-up and continuity of care.

### A. Triage and Life-saving care

In a humanitarian emergency, saving lives is the immediate priority and capacity to identify, triage and manage patients with life-threatening presentations of disease is essential – whether by direct care or through stabilization

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and referral. Examples include diabetic ketoacidosis, acute severe asthma, and acute heart failure. Patients with acute complications and exacerbations should be identified and provided with care as soon as possible.

## **B. Follow up care**

Most NCDs require ongoing care including the monitoring of disease progression, and management of long-term complications. This follow-up care includes regular access to clinical consultations, medicines, medical devices, and laboratory tests. Patients should be monitored for treatment adherence, side effects and for complications.

## **C. Continuity of Care**

Care for people with NCDs requires reliable and affordable access to medicines to avoid interruption of treatment that may worsen patients' conditions and cause rebound effects.<sup>3,8</sup> Maintenance during an acute emergency of expensive complex medical regimens might not be possible; it is recommended to use generic medicines and to train health care providers and patients on their use. New medicines should not be introduced if the treatment cannot be continued after transition to management by local authorities.

The medicines prescribed and provided should be aligned with those recommended by the national essential medicines list if one exists or the WHO or UNHCR list of essential medicines.

Collaboration between all health providers and with local health authorities as well as integration of care into existing health structures will facilitate continuity of care. For people on the move, sufficient medication and a handheld medical summary of the condition and treatment should be provided.



## **D. Referral Pathways**

The management of acute conditions beyond initial stabilization requires referral to secondary and even tertiary level care centers (e.g. acute kidney injury, myocardial infarcts, or stroke). These referral pathways should be established rapidly, based on local availability and context. The initial needs assessment should map referral and transport options. Agreements may need to be established with referral facilities as well as means to pay for referrals if they are not free under the national system. Likewise, a system should be established for the



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referral of patients back to primary care level including to community level.<sup>iii</sup> Referrals may not be possible due to contextual factors or lack of suitable referral facilities in which case the patient should be stabilized and managed locally within the capacity of staff and equipment available. There may be situations where referral is possible but of limited value due to end stage diseases or treatment at prohibitive cost. Referral decisions need to then be based on prognosis and cost. Referrals should be tracked and monitored, and the implementation of a referral information system or database is recommended. For further guidance refer to UNHCR's Principles and Guidance for Referral Health Care for Refugees and Other Persons of Concern.<sup>iv</sup>

### **E. Therapeutic Patient Education/ Patient Self-Management**

Besides medical treatment, people with NCDs require information, education and tools to assist in the management of their conditions. Therapeutic patient education promotes patient self-management and empowerment, both of which are key components of the management of any chronic condition. Patient education is particularly important in the case of a mobile population where patients access different health services and providers. Adherence to treatment can be enhanced by staff following simplified protocols, good consultation and communication skills and prescribing essential medicines known and tolerated by patients.

### **F. Community Engagement**

Community engagement can contribute to NCD management by enhancing continuity of care, preventing overburdening of health structures, and promoting community autonomy and support. Activities such as information on available services, follow up care (e.g. supervision of therapy), and patient education (e.g. healthy lifestyle) can be delegated to community health volunteers, self-help groups, or NCD community leaders. Global awareness days could also be used to promote healthy behaviors, such as World Diabetes Day on 14th November every year, and World No-Tobacco Day on 31st May.



iii <https://www.medicalaidfilms.org/film/understanding-diabetes-and-hypertension-symptoms-risk-factors-and-treatment/>

iv UNHCR's Principles and Guidance for Referral Health Care for Refugees and Other Persons of Concern, accessed on May 12, 2017 at <http://www.unhcr.org/4b4c4fca9.pdf>.





## G.Prevention

Primary preventive measures are not the immediate priority of the emergency humanitarian response but can be implemented when the context is stabilized. However, in patients with an existing diagnosis, secondary preventive measures are important to prevent the progression of disease and development of complications. These include simple, cheap and proven measures such as regular foot care in diabetic patients, and aspirin after myocardial infarction.

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**Primary prevention** is the reduction of the incidence and prevalence of diseases through risk factor modification, diet and physical activity to prevent type 2 diabetes.

**Secondary prevention** is the reduction of prevalence but not necessarily the incidence of the disease, e.g., screening for cervical and breast cancers and are effective when implemented at an early treatable stage.

**Tertiary prevention** is the management of disease post diagnosis to slow disease progression, e.g., post myocardial infarction rehabilitation exercise programme.

Addressing prevention of NCDs at a population level is not a priority in the acute phase, but where community programs exist, promotion of healthy behaviors (including exercise, smoking cessation, healthy diet) can be integrated in the outreach activities and be part of community engagement efforts. Furthermore, key messages on healthy lifestyle could be promoted during therapeutic education to individuals with NCDs.

Diet is very important for cardiovascular disease and diabetes management, but populations in humanitarian settings may be dependent on food assistance and have limited access to a balanced diet. In this case, collaboration with organizations providing food assistance is needed to promote the provision of sufficient and balanced diet which may include fresh food vouchers systems. Ensuring that food rations do not contain excessive sugar and salt can provide a population benefit as well as addressing the needs of specific patient groups. Physical activity promotion should focus on exercises that can be done at home during a conflict situation if it is unsafe to walk or be active outside.

Specific groups, such as pregnant women, children with metabolic disorders, or people with type 2 diabetes, might require specific appropriate food rations very early in an intervention. Examples include the provision of fresh food vouchers for pregnant women or people with type 2 diabetes or special infant formula for metabolic disorders.

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## **OPERATIONALIZATION**

Before operationalization of the response (i.e. before a crisis occurs), agencies should be prepared to integrate the management of NCDs in humanitarian contexts. However, these guidelines do not cover preparedness plans and each agency should refer to their own plans and strategy.

### **Humanitarian Program Cycle**

The humanitarian program cycle (HPC) is a specific and widely used framework that can be applied to the NCD response. It starts with the Needs Assessment and Analysis that defines the response planning and implementation which may be adjusted over time based on monitoring and evaluation.

For UNHCR operations please refer to the UNHCR Emergency Handbook and UNHCR Programme Manual in Key Documents and Reference Material for guidance on the UNHCR programme cycle.

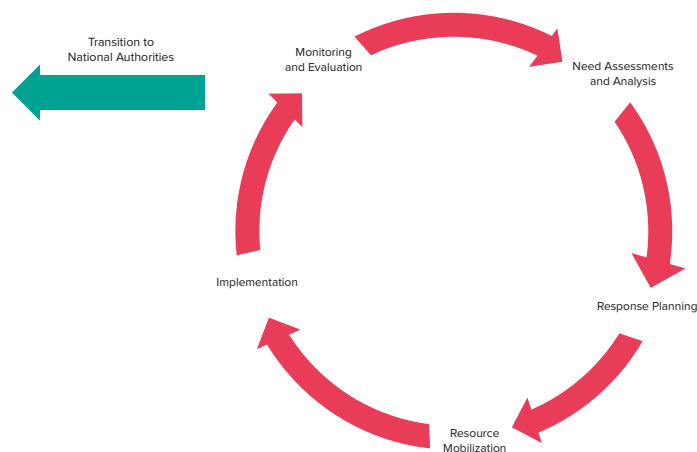


Figure 1 – The Humanitarian Program Cycle (HPC)

The HPC developed by the Inter Agency Standing Committee (IASC) is a coordinated and joint effort to which actors on the ground cooperate. The 5 successive interrelated actions frame the preparation, implementation and management of the humanitarian response. The success of implementation further depends on the agency preparedness, effective coordination with actors on the ground, and effective management of information.

#### **A. Needs assessments and analysis**

Information on NCDs should be integrated into general needs assessments, and should include the following:

- ▶ Demographics of affected population (age, gender, etc.)
- ▶ NCD burden in affected population (i.e. type of NCDs and respective prevalence)
- ▶ Health system infrastructure and services for the delivery of NCD care
- ▶ General access to health services and barriers (cost, distance, security, legal)



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- ▶ Available services for NCD patients, i.e. qualified staff, medicines and supplies, diagnostics at primary and referral levels
  - ▶ Existing national NCD guidelines and essential drug lists
  - ▶ NCD medicines and supplies procurement and supply systems
  - ▶ Patient records, registers, Health information system and inclusion (or not) of NCDs
  - ▶ Actors involved in NCD care (local and international), 3 W matrix: Who is doing What Where?

Information can be gathered through the following means:

- ▶ Existing data sources such as:
  - Updated health assessments and surveys (e.g. WHO NCD country profiles, IATF country level assessments, STEP surveys)
  - Ministry of Health (e.g. health information management systems, policies, protocols)
  - Interagency information portals
- ▶ Assessments:
  - Existing general and health assessment tools often do not include NCDs specifically, Refer to PEN H 'Facility Readiness Checklist' as a useful guide.
  - Some examples of tools used for general health assessment include: MIRA, HERAMS, other agency specific health assessments
  - Interviews with key informants (MOH, health providers, patients and caregivers)

## **B. Response planning**

The planning of the response includes the identification of the most urgent needs, the existing gaps in NCD management and the available resources (human and financial).

NCD interventions should be planned and implemented to complement and strengthen the health system service delivery at primary health care level.

### **B.1. Priority NCDs in humanitarian settings**

NCDs is a broad term covering many diseases, and any intervention addressing them needs to select the diseases for which medication and care will be available. For this guidance document, the following conditions are considered priority NCDs:

- ▶ Cardiovascular diseases (including heart failure, coronary heart disease and stroke),
- ▶ Hypertension,
- ▶ Asthma, chronic obstructive pulmonary diseases,
- ▶ Diabetes mellitus, and

► Epilepsy.<sup>v</sup>

These conditions have been prioritized based on disease burden and feasibility of care in field operations and taking into consideration the WHO's priority NCDs.<sup>9</sup> However, in a specific humanitarian setting, a degree of flexibility is needed to select the NCDs to be addressed. Priority conditions should be further defined based on the needs of the affected population, the context, the existing response and the agency capacity.

Long-term complications of NCDs, such as disability, stroke or amputation from diabetes should also be considered. Other chronic conditions relevant to humanitarian settings or highly prevalent in certain regions of the world could be added when appropriate. Mental Health conditions including neurological conditions such as epilepsy should be managed according to the MhGAP Humanitarian Intervention Guide (see under Reference Material).

## B.2. Prioritization of the delivery of care

In humanitarian settings, prioritization of NCD services/interventions might be required depending on availability of resources (human, financial, etc.) and the context. NCDs encompass a spectrum from those with risk factors, to disease (which may be asymptomatic or symptomatic), to complications of the disease. In a humanitarian response, it may not be possible to address the full spectrum initially and priorities should be defined according to the response capacity and its evolution over time.

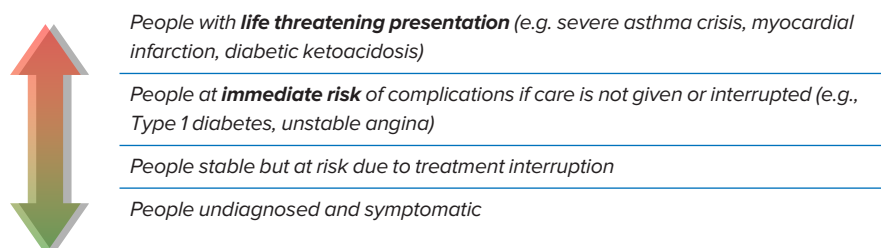


Figure 2 –Prioritization of individuals with NCDs in the acute response phase

Some services/interventions might need to be temporarily deprioritized in the initial phase of the response and integrated later when the response enters a more stable phase. Others might not be feasible at the health facility where care is provided. For example, provision of cancer chemotherapy or dialysis for end-stage renal disease is rarely possible *and not sustainable by agencies with short-term mandates*.<sup>10</sup>

### Triage and provision of lifesaving and acute care

Care of life-threatening and symptomatic presentations should be the first priority of care, implemented early in the response. In some contexts, this will involve stabilization and referral, where capacity for direct care does not exist or higher care is required. It may include, for example, response to patients with diabetic ketoacidosis, acute severe asthma and chest pain.

### Avoiding interruptions in care for those with NCDs at immediate or high risk

NCDs include a wide range of diseases and clinical presentations that require continuous care, but some individuals with NCDs are more prone to critical acute exacerbations and need to be prioritized to reduce morbidity and mortality. For example, an individual with type 1 diabetes is at high risk of serious complications and even death if unable to access insulin for just a few days, whereas patients with stable isolated hypertension

<sup>v</sup> Epilepsy is included in mhGAP and may be part of a mental health interventional response, but where it is not already addressed, it should be considered as part of an NCD intervention.

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may tolerate short-term medication interruption without immediate consequences.

Therefore, in an emergency, consider prioritizing patients considered to be at higher risk of complications: those who are symptomatic, those for whom medication interruption is likely to have significant consequences, those who have had recent disease instability, and those with multiple co-morbidities.

### **Newly diagnosed patients**

In general, patients may be diagnosed with an NCD because they present for medical attention with symptoms (passive case finding), because the clinician elects to investigate them due to clinical suspicion or risk factors (active case finding), or because of a screening program. In the acute phase of the response, diagnosis of new patients is not usually a priority, although symptomatic patients should always be investigated. Implementing systematic screening is not within the scope of most acute phase responses, although could be considered later where the capacity to manage newly diagnosed patients is assured, and if there is evidence of the cost-effectiveness of the screening planned. Clear diagnostic criteria should be available and follow international or national guidelines (such as PEN).

### **Complications**

The complications of NCDs may require more sophisticated care – such as management of renal failure, advanced diabetic foot disease or stroke. These may not be readily available or accessible in an emergency setting, but a referral system should be established where possible.

## **B.3. Organization of Care**

NCD care should be integrated into primary health care, preferably within existing national structures where possible.

Follow-up care should be provided to all patients, but the required frequency may vary according to the disease stability on treatment, complexity and risk of complications. Those with a poorly controlled NCD or recovering from an acute exacerbation may require weekly follow-up visits, whereas those with stable and controlled disease may only require quarterly biannual visits.

Patient follow-up can be particularly challenging in humanitarian contexts, and regular evaluation of access constraints is important to be able to adapt the system where necessary. In clinics receiving unscheduled visits, most of the patients come early in the morning in order to be seen the same day. Introduction of an appointment follow up system allows better planning of the work and is preferred by patients and staff. It can be implemented using simple tools (e.g. paper appointment book for health facility and appointment cards given to patients). When mobile phone ownership is high, it may be possible to set up an appointment and reminder system by SMS.

Given the chronic nature of NCD care and prevalence of comorbidities, consultation time per patient is usually longer which should be factored in when determining the organization of care. Should follow-up be possible at the same place, consultation times (potentially with dedicated days and/or appointments) should be established with dedicated clinical staff. Whether to set up dedicated NCD clinic hours, or whether to integrate NCD follow up care into the routine OPD system, depends largely on the caseload, and the capacity of the clinic.

In some humanitarian settings, health services are delivered through mobile clinics and outreach programmes, into which NCD care can also be integrated. Furthermore, there may be specific vulnerable groups who are unable to access services, and for whom home visits may be provided if resources allow, such as the elderly or those with disabilities.

Task-shifting - as done in HIV programs where stable patients are followed-up by nurses - should be considered to allow rational and prioritized use of resources.<sup>11,12</sup> For example, doctors might manage treatment initiation, and nurses who have been trained in NCD care continue routine treatment and prescription refills.

Task-shifting is also important for patient education, which can be provided by a variety of team members including health promotion staff and community health workers (CHWs). An example of the role of CHWs to

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support NCD patients is outlined in Box 1. Topics such as disease literacy, treatment adherence, medication side effects, and healthy lifestyles should be discussed. Patient education should be provided at each visit during any phase of the response. When resources are limited and in the early phase of the response, health care providers can give standardized messages covering the basics of NCD management during medical visits. Later in the response, education can be expanded according to the patient's specific needs and be given by other actors. For instance, community activities or NCD support groups are good venues to deliver educational messages and can be done in collaboration with the community.



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### Role of Community Health Workers in NCDs

The International Rescue Committee has been providing training to CHWs on NCDs to support NCD patients. This approach began in 2018 and is taking place in various humanitarian contexts including refugee camps in Thailand, Kenya and Uganda, and among displaced populations in Syria, Jordan, Somalia, and Democratic Republic of Congo. Depending on the level of training they receive, CHWs can undertake various tasks such as community health promotion activities and follow up NCD patients in their homes. They can provide lifestyle advice, promote medication adherence and clinic attendance, and even take blood pressure measurements if they have the equipment and have received adequate training.<sup>vi</sup>

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vi Video aimed at Community Health Workers, Understanding Diabetes and Hypertension available online here: <https://www.medicalaidfilms.org/film/understanding-diabetes-and-hypertension-symptoms-risk-factors-and-treatment/>.



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When feasible and available, patients-held clinical records should be used to promote clinical continuity and systematic care, especially in mobile populations.

## Organization of Care in the Context of COVID-19

The COVID-19 pandemic declared in early 2020 has had, and continues to have, a significant impact on persons living with NCDs who are at increased risk of developing severe disease, complications and dying from COVID-19 infection.

The pandemic has resulted in disruptions to regular health services including for persons with NCDs resulting in reduced access to services and challenges maintaining continuity of care. This has been exacerbated by disruption of global medicine supply chains.

In this context, maintaining continuity of care for persons with NCDs is essential and requires implementation of adapted approaches to be sustained until community transmission reduces and regular services can be reinstated.

Specific measures recommended include:

- ▶ Risk Communication and Community Engagement:
  - Increase awareness of patients with NCDs about their heightened susceptibility to severe forms of COVID-19, ways to reduce the risk of contracting it and to recognize COVID-19 symptoms. This activity should also include information regarding the implications for self-management of NCDs.
  - Taking into account transmission patterns and local recommendations, persons with NCDs should be advised to wear masks (preferably medical masks) when in public places to protect themselves from possible infection and minimise contact during times of community transmission.
  - Ensure that patients, their families and the wider community are aware of the implications of COVID-19 for people with NCDs. Messages should be context-specific and culturally appropriate, taking age and gender into consideration.
- ▶ Continuity of access to medicines and supplies:
  - Provide stable and well controlled patients with a 2-3 month supply of medication to avoid unnecessary health facility visits
  - For stable patients prescription renewals can be collected by well family members or community health workers after telephone consultation
  - Community health volunteers need to be trained in principles of physical distancing, infection prevention measures and should be provided with masks.
- ▶ Remote consultations and support:
  - Create self-management plans, and support self-monitoring of disease, where appropriate, that is backed up by support from trained health care workers.
  - Plan for home monitoring of blood glucose levels and blood pressure; support access to glucometers, tests strips and electronic sphygmomanometers held by community members and CHWs.
  - Modify routine clinical reviews (e.g. frequency, means of delivery), as appropriate
    - a. Prioritise follow-up in clinic or community settings for unstable or newly diagnosed patients.
    - b. Conduct home visits for patients with limited mobility or multiple chronic conditions.
    - c. Reduce frequency of in-person follow-up visits for stable patients (3 to 6 months depending on the condition)

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- d. Conduct telephone or internet consultations if possible, barriers to accessing such methods (e.g. lack of Wi-Fi /phone credit) should be considered in planning
  - Consider use of digital tools that may be available to facilitate follow-up, recall and self-management
  - Expand use of community health workers for patient follow up, monitoring and provision of medications
  - Ensure patients with chronic NCDs are aware of when and how to access telehealth or online services for regular monitoring or urgent care for acute exacerbations or deterioration.
- ▶ Maintain emergency care systems:
  - ▶ Persons with NCDs that are not stable or who require emergency care and referral should still be able to access it. These should be separated from COVID-19 care services.
  - ▶ Additional recommended resources on COVID-19 and NCDs are listed in Key Documents and Reference materials. Note these are valid at time of publication but new and updated material may become available.

#### **B.4. Coordination and Partnership**

The response to NCDs should be aligned with the national health system and integrated into existing primary health care services and any existing NCD services and programs when possible. National NCD protocols and national essential medicines list should always be used if existing. Early engagement and coordination with the national authorities including Ministry of Health is essential in the response at local, regional and national levels. Ownership by the Ministry of Health of service delivery and decision making should be encouraged and supported to facilitate inclusion in national systems and integration into service delivery. This approach will encourage local participation and facilitate future transition of the overall management of activities by the Ministry of Health.

Coordination with international and local organizations involved in NCD care should be ensured. Whether or not to set up a specific working group on NCDs under the health cluster/sector coordination mechanisms, can be decided during the assessment or prioritization process.

In addition, other local resources such as HIV and TB programs, community groups, women's groups, older persons and patient associations can also be useful partners in assisting with the management of NCDs during the crisis, as well as being a link to post-crisis care. The organizations might already have resources, such as patient education programs or support networks.

#### **B.5. Resources**

##### **Human resources**

Staffing requirements for the management of NCDs includes nurses, general medical practitioners, health promotion staff, community health workers and specialist doctors.

If existing human resources do not have the necessary skills or experience for NCD management, they may need to be supported by additional experienced staff and/or capacity building. Consider this during the needs assessment and planning.

Standardized training material and context-appropriate guidelines should be made available to enhance knowledge and skills for NCD management (UNHCR-PCI training manual and clinical guides, 2019). Regular evaluation of staff performance should be performed. A core curriculum may be useful for rapid upskilling early in the response.

##### **Supplies**

NCD patients should have uninterrupted access to affordable medical supplies (i.e. essential medicines, laboratory tests, and medical devices such as glucose meters). There are several considerations to keep in mind regarding supplies:



- ▶ **Medicine and medical devices** - The type of medicine and medical devices should be based on the national essential drug list (if existing and updated), otherwise the WHO model list for essential medicines 2018<sup>vii</sup> and the 2010 WHO PEN list<sup>viii</sup> for devices can be used or the UNHCR essential medicines and medical supplies list for refugee operations. It is essential to provide quality assured medicines. Although patients and health professionals may be used to brand-name medicine, generic medicines are more cost effective. Training, monitoring and supervision in rational prescription of medicine and patient education on the safety and efficacy of generic medicines should be conducted to address this issue. In insecure settings where there may be supply chain challenges, consider larger buffer stocks of medication to avoid stock outs.
- ▶ **Emergency health kits** - The 2017 version of the Interagency Emergency Health Kit (IEHK) includes medicines for patients presenting with acute exacerbations of NCDs.<sup>ix</sup> A dedicated WHO NCD kit for the management of acute and stable NCDs is also available.<sup>x</sup>
- ▶ **Laboratory tests** - In addition to medicines, diagnostic tools are needed. The choice of the required equipment will be based on the context and needs assessment as for medicines (including capacity of staff to interpret results). It may be possible to use existing laboratories, if they have reliable supply and quality control mechanisms, but several relevant point-of-care tests exist and should be considered, e.g, glucometer, HbA1C , creatinine.

vii WHO Essential Medicines and Health Products. Accessed on May 15, 2017 at <http://www.who.int/medicines/publications/essentialmedicines/en/>

viii Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care in Low-Resource Settings. Geneva: World Health Organization; 2010. Accessed on May 12, 2017 at [http://www.who.int/int/nmh/publications/essential\\_ncd\\_interventions\\_lr\\_settings.pdf](http://www.who.int/int/nmh/publications/essential_ncd_interventions_lr_settings.pdf).

ix The WHO Interagency Emergency Health Kit. Accessed on May 15, 2017, at <http://www.who.int/emergencies/kits/iehk/en/>

x The WHO Non Communicable diseases kit 2016. Accessed on 13 January, 2020, at <https://www.who.int/emergencies/kits/ncdk/en/>

Key supply considerations:

- ▶ A list of supplies based on the prioritized interventions.
- ▶ A system for procurement, storage, monitoring and replenishment of supplies.
- ▶ Cold chain capacity for insulin. This aspect can be coordinated with other agencies providing services requiring cold chain such as immunization. Insulin should not be stored together with vaccines however to avoid accidental administration of insulin.
- ▶ In the acute emergency phase, cold chain maintenance may not always be possible. Insulin is life saving and should still be used with close blood glucose monitoring. Research has been done by insulin thermostability (pending publication) and anecdotal evidence indicates that it retains effectivity when kept out of cold chain for up to one month but published evidence is needed.
- ▶ A buffer stock in the event of an interruption in the supply chain, a rapid displacement of the services for security reason, or a massive increase in the needs for NCD care.
- ▶ Local versus international procurement and quality assurance of medicines.
- ▶ Importation and licensing requirements.
- ▶ Options for maintenance of equipment, renewables and spare parts and ability to hand over.
- ▶ Language used in product information, and understandability to end users.

Range	Supplies
Minimum	<p>Glucometer &amp; glucose test strips</p> <p>Urine dipstick protein &amp; ketones</p> <p>Peak flow meter, spacers for inhalers Sphygmomanometer, thermometer, stethoscope, measurement tape, weighing machine</p> <p>NCD essential medicines (National list of medicines or WHO/UNHCR EML)</p> <p>Clinical management guidelines</p> <p>Risk prediction charts</p> <p>Flow chart for triage of severely ill patients</p> <p>Clinical guidelines</p> <p>Referral flow charts</p> <p>Clinical records (patient held records)</p>
Extended	<p>Same as above plus</p> <p>Pulse oximeter, nebulizer, monofilament &amp; tuning fork</p> <p>Laboratory or point of care tests (e.g. HbA1C, creatinine)</p> <p>Laboratory for extended chemistry and hematology in blood and urine (e.g. Cholesterol (lipid profile), potassium, INR (PT), troponin, complete blood count, micro-albuminuria, liver transaminases, Creatinine, TSH)</p> <p>Fundoscope</p> <p>ECG (if interpretation possible)</p> <p>Defibrillator</p>

TABLE 1 – Minimum and Extended Range of Equipment, Supplies and Laboratory tests



An example of a low cost solution is presented below on the creation of an improvised spacer for an inhaler using a readily available plastic bottle.



### Improvised Inhaler Spacer

Inhaling medicine can be facilitated by attaching a spacer to the inhaler. If a conventional spacer is not available, a 500 ml plastic bottle can be used as a spacer. The mouthpiece of the inhaler is inserted into a hole made in the bottom of the bottle as shown here. Patient breathes from the mouth of the bottle in the same way as from a spacer. If more than one dose is needed, repeat the steps. After using the inhaler, rinse mouth out with water, or brush teeth, or get a drink. Clean the inhaler each week.

From: PEN H. Illustrations Reuben Nyaora, International Rescue Committee

## B.6. Health Information System

Information needed and the systems for collecting it are presented in table 2. The systems should be well interlinked to avoid duplication of data collection. Patient data should feed into the facility data, which in turn should feed into the programmatic and operational data and overall monitoring and evaluation.

Data collection for NCDs should include more information than the aggregate consultation numbers and diagnoses that are typically collected in humanitarian settings although this may be the only data possible to collect in the acute phase. Information on cohort size, quality of care, patient outcomes, and co-morbidities enables better monitoring of the intervention. Individualized data collection is recommended when possible. Furthermore, a strategy allowing the patient to have access to their key medical information independently of their mobility should be developed. An example of this is the concept of a patient-held record (e.g. health passport). Patient-held records can include context-adapted patient education messages.

Data protection systems should be in place for any data tool that is used.

Information level	Type of system	Indicators=
Patient	A patient file	Data to inform clinical care, patient follow up, and collect individualized data points. Ensure filing system and retrievability.
	A patient held record	Specific clinical information that is useful for patients to retain, particularly to facilitate follow up where there is no file or when they have moved.
Clinic	Register held at the facility or electronic database	Data to inform the management of the day-to-day clinic activities, call and recall system, and to improve service quality.
Programme (HIS)	An electronic database	Data for programme monitoring, and to inform programmatic planning, management of resources (medicines, human resources, etc.), and advocacy.

TABLE 2 – Data Collection Systems

### C. Resource mobilization

Funds for NCD care in humanitarian settings should be included in the budget of any health interventions. The availability of funds for short-term projects only may be problematic for the management of chronic diseases. Regular evaluation of the needs should be done to adjust the budget and raise supplementary funds. Coordination with other actors on the ground is essential to optimize use of available resources.

Available funds should be used to support the prioritized NCD services/interventions. When resources are particularly limited, the program should target interventions to address the risk of complications if care is interrupted.

### D. Monitoring and evaluation

Monitoring is a continuous process that allows the identification of shortcomings and gaps in the delivery of the planned interventions. It also serves to improve accountability to the beneficiaries and other stakeholders by showing results achieved.

The Sphere handbook (2018) lists four NCD indicators (see box below) which provide a useful overview of availability of NCD care at PHC level, staff trained and availability of medicines and supplies. It is recognized that further indicators are required to monitor the quality of NCD care and outcomes and there is ongoing work to propose a list of the most appropriate indicators for this purpose.

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## Sphere Handbook NCD Indicators (2018)

% of primary healthcare facilities providing care for priority NCDs

# of days essential medicines for NCDs were not available in the past 30 days (<4d)

# of days for which basic equipment for NCDs was not available (or not functional) in the past 30 days (< 4d)

% of healthcare workers providing NCDs treatment are trained in NCD management (100%)

**Review** should be performed periodically (ideally annually or biannually in a longer-term response) to assess the quality of services, the outcomes and the impact of the response delivered.

### E. Transition of Management of Services to National System

As continuity of care is critical for adequate NCD care, a strategy should be thought of from the start of the operation for transition to local authorities and/or relevant health actors. Ideally, NCD services will have been integrated in existing national primary care services from the outset of the emergency with the emphasis on strengthening national services and including displaced populations in such services. It is recognized that this is not always possible where national services do not reach or are poorly functional and humanitarian actors may be required to provide services directly or support national service provision. There should be a mid to long term transition plan for national authorities to assume responsibility for such services and support mobilized including with development actors to promote this transition.

### F. Return, Repatriation, Onward movement

In contexts of displacement or refugee settings, conditions may normalize allowing return of people to their place of origin be it within the same country or across borders, or people may be in transit moving to another destination. Important considerations are to provide sufficient medication and counselling to avoid interruption during travel and reinstallation. Patients should also be provided with a patient-held medical record including relevant history and medications to facilitate continuity of care. The data protection risks of online patient records and cloud-based storage need to be analyzed thoroughly and strong security measures put in place before implementing or recommending such systems.

## ADVOCACY AND RESEARCH

More efforts are required to improve the capacity to address the needs of increasing numbers of people worldwide who are affected by both NCDs and emergencies. As is the case in stable contexts, increased investment is needed to ensure that NCD care is integrated in essential primary care services in humanitarian settings.

Areas requiring more research include how NCD care can be delivered in the most effective and evidence-based way including cost effectiveness which is important to be assessed when funding is limited.

To advocate for increased funding, more evidence on cost-effective interventions and best practices is needed. Sharing of experience on NCD management in humanitarian settings and creative solutions for service delivery in unstable contexts is also necessary. Currently there is a lack of research on how to address NCDs effectively in emergencies.<sup>11</sup> Most interventions are based on evidence from low and middle-income countries in stable settings. Conducting research in emergencies would contribute to the evidence base.

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The provision and use of affordable NCD treatments, an essential component of NCD care, also requires strong advocacy efforts. Affordable generic medicines for hypertension and type 2 diabetes exist and are available at low cost, but insulin and asthma treatments remain costly. Advocacy for availability of NCD medications will be important in many contexts where they are not readily available for all in need.

Linking with other sectors such as food security, nutrition, shelter and site planning, would help in advocating for preventive behavior through healthier lifestyles. Provision of healthy food is a particularly relevant example, as affected populations are often dependent on food distribution and choice/control of their diet therefore relies on humanitarian agencies. Also, smoke free areas and sites for physical activities can be organized when planning a camp.

## **ETHICAL ISSUES**

Access to healthcare for all persons, including those living with an NCD, is a basic Human Right.

### **Equity in care**

When providing access to healthcare services for affected populations, the inclusion of services with national systems is one way of ensuring equitable access to health care with local populations, reduce stigma and discrimination and promote peaceful co-existence.

Strengthening existing health services will ensure sustainability and enhance the overall capacity of the health system to provide adequate levels of services to all populations.

### **Screening for NCDs**

Screening is the testing of asymptomatic people in order to classify them as likely or unlikely to have a disease. The primary purpose of screening tests is to detect the disease early in apparently healthy individuals.

It is different from case finding which is the examination of an individual or group suspected of having, or being at risk of, the condition. Case finding is a targeted approach to identifying conditions in select patients e.g. those who already have an NCD, such as testing for hypertension in persons with diabetes.

The following questions should be considered carefully before deciding on screening:

- ▶ Is there the ability for patients to access treatment? (Do not screen if you cannot treat).
- ▶ Is there sufficient disease specific evidence that justifies the screening in terms of its impact and cost-benefit in resource-constrained contexts?

Screening is not recommended during the acute phase of a humanitarian response. Screening for the high prevalence NCDs hypertension and diabetes could be considered during the protracted phase of a humanitarian setting. However, there is currently no evidence base to support this in humanitarian contexts and more research is needed.

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### **Any screening programme that is implemented should consider the following criteria:**

- The screening programme should respond to a recognized need.
- The objectives of screening should be defined at the outset.
- There should be a defined target population.
- There should be scientific evidence of screening programme effectiveness.

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- The programme should integrate education, testing, clinical services and programme management.
  - There should be quality assurance, with mechanisms to minimize potential risks of screening.
  - The programme should ensure informed choice, confidentiality and respect for autonomy.
  - The programme should promote equity and access to screening for the entire target population.
  - Programme evaluation should be planned from the outset.
  - The overall benefits of screening should outweigh the harm.

### Public health approach

In emergencies when resources are often limited, resources should be directed to the most common conditions at primary care level to benefit the most people. Referral pathways to existing secondary level should be set up. For cases requiring more complex and often higher level health care interventions (i.e. advanced cancer care, chronic renal failure etc.), the possibility of providing care will depend on availability of resources, appropriate health facilities, costs and the sustainability of the proposed interventions. In addition, means of providing palliative care should be considered.

### Data protection

Populations affected by humanitarian crises are particularly vulnerable. Their protection, including data confidentiality, is a high priority. Service providers often collect highly sensitive data including patient identifying information. Medical data is sensitive and has to be protected against unauthorized disclosure or use. This requires safe storage and transmission, and other measures in line with data protection principles.<sup>13</sup> Data protection needs to be guaranteed at each step of its collection, transfer (same organization, different organizations, between organizations and third parties) and use. Any party having access to data must be bound by contractual clauses detailing data protection.<sup>xi</sup>

Organizations remain subject to the legislation of countries where they operate. This may pose protection challenges if health records or medical data are under the authorities of the country of operation. It is essential to ensure that persons keep control over their own data and are informed about their rights and consent to their data being used.

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xi Standards for data protection, such as the European General Data Protection Regulation (GDPR), and the EU Data Protection Directive (1995/46/EC), the Draft Recommendation on the Protection of health-related data of the Council of Europe consultative committee T-PD (2016) should be considered as benchmarks for data confidentiality.

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## KEY DOCUMENTS AND REFERENCE MATERIALS

### Programmatic Guidance

- ▶ Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care in Low-Resource Settings. Geneva: World Health Organization; 2010. [http://www.who.int/nmh/publications/essential\\_ncd\\_interventions\\_lr\\_settings.pdf](http://www.who.int/nmh/publications/essential_ncd_interventions_lr_settings.pdf)
- ▶ WHO and UNHCR Mental Health Gap Action Programme MhGAP Humanitarian Intervention Guide. [https://www.who.int/mental\\_health/publications/mhgap\\_hig/en/](https://www.who.int/mental_health/publications/mhgap_hig/en/)
- ▶ WHO Mental Health Gap Action Programme (MHGAP). [http://www.who.int/mental\\_health/mhgap/en/](http://www.who.int/mental_health/mhgap/en/)
- ▶ IMC Mental Health Toolkit. <https://www.mhinnovation.net/collaborations/IMC-Mental-Health-Integration-Toolkit>
- ▶ UNHCR Programme Manual (Chapter 4 of the UNHCR Manual), February 2020
- ▶ UNHCR Intranet: <https://wcms.unhcr.org/en/about/unhcr-manual/a-content-page/ch04-programme-manual.html>
- ▶ UNHCR Emergency Handbook <https://emergency.unhcr.org/>
- ▶ UNHCR Policy on Independent Oversight. UNHCR Intranet: <https://wcms.unhcr.org/en/policy-guidance/policies/policy-on-independent-oversight.html>
- ▶ UNHCR's Principles and Guidance for Referral Health Care for Refugees and Other Persons of Concern. <http://www.unhcr.org/4b4c4fca9.pdf>
- ▶ UNHCR, Promoting treatment adherence for refugees and persons of concern in health care settings (2019). <https://www.unhcr.org/5cd962bc7.pdf>
- ▶ Noncommunicable Diseases in Emergencies: WHO, 2016. <https://www.who.int/ncds/publications/ncds-in-emergencies/en/>
- ▶ WHO Palliative Care guide. <https://apps.who.int/iris/bitstream/handle/10665/274565/9789241514460-eng.pdf?sequence=1&isAllowed=y>

### Global/ Country-level Resources

- ▶ Global Health Observatory <http://www.who.int/gho/en/>
- ▶ Global Burden of Diseases [http://who.int/healthinfo/global\\_burden\\_disease/gbd/en/](http://who.int/healthinfo/global_burden_disease/gbd/en/)
- ▶ Noncommunicable diseases country profiles 2014. Geneva: World Health Organization <http://www.who.int/nmh/publications/ncd-profiles-2014/en/>
- ▶ Institute for Health metrics and evaluation <http://www.healthdata.org/>
- ▶ WHO STEPwise [www.who.int/chp/steps/en/](http://www.who.int/chp/steps/en/)
- ▶ International Diabetes Federation Diabetes Atlas <https://www.idf.org/e-library/epidemiology-research/diabetes-atlas/13-diabetes-atlas-seventh-edition.html>

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## Essential Medicines and Supplies

- ▶ WHO Essential Medicines and Health Products. <http://www.who.int/medicines/publications/essentialmedicines/en/>
- ▶ The WHO Interagency Emergency Health Kit. <http://www.who.int/emergencies/kits/iehk/en/>
- ▶ The WHO Noncommunicable disease kit 2016. <http://www.who.int/emergencies/kits/iehk/en/>

## Risk Profiles

- ▶ WHO prediction charts for 14 WHO epidemiological sub-regions: It indicates a 10-year risk of a fatal or nonfatal major cardiovascular event (myocardial infarction or stroke), according to age, sex, blood pressure, smoking status, total blood cholesterol and presence or absence of diabetes mellitus. [http://www.who.int/cardiovascular\\_diseases/publications/Chart\\_predictions/en/](http://www.who.int/cardiovascular_diseases/publications/Chart_predictions/en/) and [http://ish-world.com/downloads/activities/colour\\_charts\\_24\\_Aug\\_07.pdf](http://ish-world.com/downloads/activities/colour_charts_24_Aug_07.pdf)
- ▶ SCORE - European high risk chart: 10-year risk of fatal CVD in high risk regions of Europe by gender, age, systolic blood pressure, total cholesterol and smoking status. [https://www.escardio.org/static\\_file/Escardio/Subspecialty/EACPR/Documents/score-charts.pdf](https://www.escardio.org/static_file/Escardio/Subspecialty/EACPR/Documents/score-charts.pdf)

## Clinical Management

- ▶ UNHCR PCI: 2017 NCD Field Guides (Asthma, secondary prevention of CVD, COPD, Hypertension, severe Hypertension, Type 2 Diabetes).
- ▶ Package of Essential NCD Interventions in Humanitarian settings (PEN-H). In Press.
- ▶ MSF: Diabetes, Cardiovascular Diseases. <https://medicalguidelines.msf.org/viewport/MG/en/guidelines-16681097.html>
- ▶ ICRC: Diabetes, Hypertension.
- ▶ National guidelines: depends on context.
- ▶ Diabetes and Asthma: WHO Guidelines for primary health care in low-resource settings. [http://apps.who.int/iris/bitstream/10665/76173/1/9789241548397\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/76173/1/9789241548397_eng.pdf?ua=1)
- ▶ Diabetes: Definition and diagnosis of diabetes mellitus and intermediate hyperglycemia. Report of a WHO/IDF consultation. WHO 2006. [http://www.who.int/diabetes/publications/diagnosis\\_diabetes2006/en/](http://www.who.int/diabetes/publications/diagnosis_diabetes2006/en/)
- ▶ Asthma: A Pocket Guide for health professionals. Global initiative for asthma. Updated 2017. [www.who.int/respiratory/copd/definition/en/](http://www.who.int/respiratory/copd/definition/en/)
- ▶ High Blood Pressure: 2003 WHO/International society of hypertension statement on management of hypertension. Journal of Hypertension 2003, 21:1983-1992. [http://www.who.int/cardiovascular\\_diseases/guidelines/hypertension\\_guidelines.pdf](http://www.who.int/cardiovascular_diseases/guidelines/hypertension_guidelines.pdf)
- ▶ Cardiovascular diseases: CVD fact sheet 2017 WHO. <http://www.who.int/mediacentre/factsheets/fs317/en/>
- ▶ Integrated management of adult and adolescent illness (IMAI) modules. Geneva: World Health Organization; 2004-2009. Accessed May 25, 2017 at ([http://www.who.int/hiv/capacity/modules\\_description/en/](http://www.who.int/hiv/capacity/modules_description/en/)). Including the tools on triage (Quick Check).

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- ▶ Palliative care: symptom management and end-of-life care. Geneva: World Health Organization; 2004. Accessed May 25, 2017 at ([http://www.who.int/hiv/pub/imai/primary\\_palliative/en/](http://www.who.int/hiv/pub/imai/primary_palliative/en/)).

## **COVID-19 and NCDs**

- ▶ WHO. Maintaining essential health services: operational guidance for the COVID-19 context; Interim guidance 1 June 2020. Available at <https://www.who.int/publications/i/item/10665-332240>
- ▶ International Rescue Committee-COVID-19 guidance for people with chronic illnesses, Version 2, May 2020 (available in ENG, FR, SP and Arabic). Available on request at <https://rescue.app.box.com/file/639493469351>



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## ANNEX 1: CHECKLIST FOR IMPLEMENTATION

The following checklist highlights the key components of integrating NCD care within PHC and serves as an aide memoire to managers.

Component	Actions	
	Acute phase (0-6 months)	Ongoing phase (>6 months)
Implementation		
Coordination and Partnerships	Overall health coordination mechanism in place which includes national authorities, International and national NGOs, civil society, development actors and donors <input type="checkbox"/>	Development actors and donors are actively included in the health coordination mechanisms <input type="checkbox"/>
Service Delivery	Clinical guidelines and protocols in place <input type="checkbox"/> Triage and lifesaving care in place <input type="checkbox"/> Management of acute complications and exacerbations <input type="checkbox"/> Follow up of known patients <input type="checkbox"/> Diagnosis of new patients <input type="checkbox"/> Referral procedures in place <input type="checkbox"/> Patient education and self-care advice provided <input type="checkbox"/> Community engagement <input type="checkbox"/>	CHWs providing education and support <input type="checkbox"/> Prevention interventions <input type="checkbox"/>
Human Resources	Adequate human resources in place <input type="checkbox"/> Training of HCW on NCD care <input type="checkbox"/> Task shifting between different staff members is defined and in place <input type="checkbox"/>	Training of the Trainers and cascade training done <input type="checkbox"/> Support and supervision in place and includes audit of staff performance <input type="checkbox"/>
Supplies	List of essential medicines, equipment and diagnostics in place including for NCD care (national/ WHO/ UNHCR) <input type="checkbox"/> Supply system in place <input type="checkbox"/> Consider procurement of WHO Interagency Emergency Health Kit (includes NCD medicines) and/ or the WHO NCD kit <input type="checkbox"/> Cold chain in place <input type="checkbox"/> Stock management, consumption and ordering system in place <input type="checkbox"/> Basic laboratory capacity in place <input type="checkbox"/>	Supply chain has transitioned to national supply system if possible <input type="checkbox"/> Establishment of extended laboratory capacity <input type="checkbox"/>
Health Information	Individual patient records in place <input type="checkbox"/> NCD patient register in place <input type="checkbox"/> A Health Information System (HIS) in place and includes data collection on NCDs <input type="checkbox"/>	Collection of NCD indicators <input type="checkbox"/> Integrated with national HMIS if possible <input type="checkbox"/>

