REPORT OF THE 3RD ANNUAL SYMPOSIUM ON

DIABETES IN HUMANITARIAN CRISIES

Kraków, Poland, October 20-21, 2022

PREPARED BY:
The International Alliance for Diabetes Action
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Executive Summary

On October 20-21, 2022, the International Alliance for Diabetes Action (IADA) and London School of Hygiene and Tropical Medicine (LSHTM) Centre for Global Chronic Conditions and NCD Knowledge Hub co-hosted the 3rd Annual Symposium on Diabetes in Humanitarian Crises in Kraków, Poland, sponsored by The Leona M. and Harry B. Helmsley Charitable Trust. The symposium aimed to present evidence and update the shared analysis of barriers and opportunities to improve care for diabetes in humanitarian settings; to review the 2019 ‘Boston Declaration’ which outlined the priority actions for the Alliance from 2019-2022; and to define objectives and collaborative actions for the coming years (2023-2025).

The symposium attendees concluded that many of the initial barriers (and proposed solutions) identified in 2019 remain relevant today. However, the experience of the intervening years – especially the lessons learnt from maintaining continuity of diabetes care during the COVID-19 epidemic, as well as the specific challenges of insulin access in conflicts in Ukraine and Tigray – highlighted the potential value of initiatives around access to newer diabetes treatments and diagnostics, new operational guidance, specific advocacy initiatives and work on indicators. A set of priorities for 2023-2025 was agreed by the attendees and is outlined in this report, together with a list of specific project proposals that are now under development by member organizations.
I. Background

Over half a billion people globally live with diabetes, of which 80% live in lower- and middle-income countries. Many of these are amongst the 100 million people globally who have been forcibly displaced from their homes, of which over 80% are hosted in lower- and middle-income countries (LMICs), or the 200 million people who are affected by natural disasters each year. Most crises are protracted, often lasting decades, and humanitarian aid organizations are providing long-term primary care to both the local and displaced populations. However, the provision of diabetes care in humanitarian settings remains inadequate and poorly coordinated and there is limited evidence regarding which interventions are effective and feasible.

In April 2019, Harvard University convened an inaugural meeting in Boston (MA, USA; April 4–5, 2019) with humanitarian and other organizations in global health to discuss the immediate needs and barriers to tackling diabetes in humanitarian crises, and to adopt a unified, action-oriented agenda to address this pressing global health issue. The meeting resulted in the Boston Declaration which was signed by 64 signatories from over 40 international organizations. The Boston Declaration set four major targets for the group to work towards:

1. Unified and strengthened policy and financing advocacy for diabetes in humanitarian crises
2. Universal access to insulin and other essential medicines and diagnostics
3. Improving care for diabetes through establishment of a unified set of clinical and operational guidelines for diabetes in humanitarian crises
4. Improved and coordinated data and surveillance for diabetes in humanitarian settings

To achieve these targets successfully, sustained collaborative commitment of a diverse network of partners is required. The International Alliance for Diabetes Action (IADA) was therefore established with the goal of ensuring availability and affordability of diabetes treatments and diagnostics and improving care for every person with diabetes affected by humanitarian crises. IADA is a partnership of over 40 international humanitarian organizations, intergovernmental and UN agencies, academic institutions, civil society, and the private sector, that is developing concrete collaborative initiatives that will increase access to and quality of care for people with diabetes in humanitarian settings.

Since 2019, several trends have further impacted on diabetes care in humanitarian settings:

- **COVID-19 pandemic** – essential service disruption affecting noncommunicable diseases (NCDs) above all; widespread realization that people living with noncommunicable diseases (PLWNCDs) represent a highly vulnerable group, like pregnant women.
- **Escalating climate crisis** with increasing frequency of extreme weather events / worsening water and food insecurity in larger areas of the world, particularly Sub-Saharan Africa.
- **Growing concern about health equity** in humanitarian settings – the commendable response for PLWNCDs in Ukraine is not matched by investment in humanitarian crises in Sub-Saharan Africa.

On October 20-21, 2022, IADA and London School of Hygiene and Tropical Medicine Centre for Global Chronic Conditions and NCD Knowledge Hub co-hosted the 3rd Annual Symposium on Diabetes in Humanitarian Crises in Kraków, Poland, sponsored by The Leona M. and Harry B. Helmsley Charitable Trust, to review the initial Boston Declaration and define objectives for the coming years (until 2025).
II. Achievements since the Boston Declaration

Since the publication of the Boston Declaration, members of the alliance have been connecting, sharing, and collaborating bilaterally and through a wide variety of events and activities.

Policy, Financing, and Advocacy

- IADA partner organizations have contributed to the development of the Landmark Resolution on Diabetes (WHA74.4) which was adopted at the 74th World Health Assembly (WHA) in May 2021.
- IADA members have provided input and expertise in the development of the World Health Organization (WHO) Global Diabetes Compact.

Access to Insulin, Essential Medicines, and Diagnostics

- IADA members have worked with various stakeholders on evaluating the thermostability of insulin (convened a Chatham House Meeting, published peer-reviewed research, dialogued with insulin manufacturers around the needs in the field which led to a recent positive scientific review by the European Medicines Agency recommending expanding the storage conditions of insulin).
- IADA members have contributed to the work of the Foundation for Innovative New Diagnostics (FIND) to improve affordability of home glucose monitoring and laboratory testing.
- IADA members have worked with Clinton Health Access Initiative (CHAI) working on bundling commodities for insulin-requiring patients in LMICs and humanitarian settings.

Improving Operations and Clinical Care

- IADA members set up Diabetes Education for All (DEFA), an open-access eLearning platform.
- IADA members have participated in the development of a WHO Guideline on Type 1 Diabetes Management in Low Resource and Humanitarian Settings.
- IADA members created insulin switching guides during the crisis in Ukraine.
- IADA members have convened a working group on nutrition in humanitarian settings.
- A consortium of IADA agencies were awarded a grant by the Helmsley Charitable Trust evaluating analogue vs human insulin for youth with type 1 diabetes in low-resource settings.

Improved and Coordinated Data and Research

- IADA members published the UNITED study (the first interagency study on diabetes care in humanitarian settings, highlighting the paucity of diabetes data in humanitarian crises).
- IADA members have provided input and technical expertise supporting the ELRHA-funded NCDs in humanitarian settings research prioritization exercise.
- IADA members are working with WHO on a landscaping review of the literature on NCDs in emergencies (literature review, and qualitative analysis of WHO’s practice and support provided).
- IADA members have drafted a proposal to work with stakeholders on developing a shared set of indicators to monitor and evaluate NCD service delivery and quality of care during crises.
- IADA members are working on the creation of a live mapping tool to track operations and research projects and key stakeholders working on diabetes and other NCDs in humanitarian settings, in collaboration with LSHTM.
- IADA convened a virtual 2nd Symposium on Diabetes in Humanitarian Settings in December 2021 which featured 44 speakers from 18 countries in 5 global regions.
III. Emerging challenges and unmet needs

**Coordination:** Multiple humanitarian actors need to integrate their work with national health systems, which is paradoxically more challenging in countries with functional and strong health systems and established ways of dealing with service disruption. There is a need to coordinate health systems strengthening (HSS) and Emergency Preparedness and Response Plan (EPREP) functions with the Ministry of Health, national diabetes federations and private sector, and other sectors (i.e., nutrition, mental health, transport).

**Policy advocacy:** Efforts are needed to ensure people living with diabetes (PLWD) and NCDs (PLWNCDs) are considered by member states as a vulnerable group and prioritized in humanitarian emergency preparedness planning and in emergencies in general. There is value of learning from or evaluating operational experiences where diabetes was effectively included, such as the COVID-19 and Ukraine response programs. Little work has been done to turn this into clear investment cases. There has been relatively little input from PLWD in policy development.

**Access to insulin and diagnostics:** Each humanitarian setting raises unique and not always predicted barriers, with diversity within each crisis; sometimes we are slow to analyze and understand these e.g.:

- In some settings, work on insulin thermostability and storage is key
- Medication labelling and translation is a barrier (possible solutions: IT and AI tools)
- Drug needs estimation and procurement in insecure settings
- Access to glucose monitoring devices (glucometers/strips, HbA1c, continuous glucose meters (CGMs))
- Specific challenging environments (shelters or extremes of temperature)
- Inadequate buffer stocks (solution: WHO NCD emergency kit)
- Pharmacies closing (possible solutions: creating pharmacy, dispensary, and medication distribution networks and expanding multi-month prescriptions)
- Non-inclusion of refugees in Universal Health Coverage (UHC) (possible solutions: insurance)
- Food / cash shortages (possible solutions: intersectoral coordination)
- Cost of care, medication, and supplies (possible solutions: bundling of supplies or pooled procurement)

**Access to care:** Is there sufficient understanding of bottlenecks / barriers to care across settings? E.g., Ukraine – barriers included access to endocrinologists for e-prescription, time limits on prescriptions (which was extended in response to the crisis) and communication to clinicians about changes in policy/guidance. Deliberate attacks on healthcare facilities or deliberate disruption of supply can interrupt both access to medications and care more generally.

**Ongoing lack of data** to ensure awareness of needs (who/where/what) and enable advocacy for financing: medical (patient) data in needed to calculate disease burden and needs; medical supply / logistics data is needed to guide procurement. This involves both

- routine health systems data (Health Information System and surveillance data e.g., STEPS surveys)
• emergency preparedness / disaster risk reduction (DRR) minimum datasets, which in the absence of routine health system data is very limited

Therefore, the conversation needs to involve HSS / UHC departments in Ministries of Health (often represented by their WHO counterparts), humanitarian emergency responders (including the Health Emergencies Program of WHO (WHE) and international non-governmental organizations (INGOs)). There are substantial differences in needs and priorities; humanitarian data collection must not duplicate routine data collection, instead being integrated with it where possible (indeed humanitarian data collection can reinforce the routine HIS) given the chronicity of most crises. Data for rapid needs assessment will remain a high priority given the frequent limitations of HIS data, as this is essential for resource mobilization.

**Pandemic and climate resilience:** Climate change and pandemics create challenges for continuity of care, as well as increasing overall risk for people with diabetes. However, this also brings the promise of more funding through the health security agenda.

**Financing:** NCDs and diabetes are dramatically underfunded in LMICs and humanitarian settings. Long term financing for NCDs often depends on development aid, whereas humanitarian financing involves different mechanisms and different donors. There is no clear mechanism for transitioning from humanitarian financing to longer term development financing for health services / systems that are stabilizing.

**IV. Reviewing the long-term vision**

Participants at the symposium voiced the following *long-term vision for diabetes care* in humanitarian settings for 2040:

• **Best global diabetes practice includes all of humanity** (rights-based approach). Diabetes care is holistic (whole person approach), empowers and puts the PLWD at the centre of care, and includes insulin and glucose monitoring tools, as well as other hypoglycemic and anti-hypertensive agents for type 2 diabetes. Continuum of care is provided from screening and diagnosis, treatment and care, to palliation and rehabilitation. Tools that support quality of care and quality of life, e.g., non-invasive glucose monitoring (continuous glucose monitors (CGMs)), analogue insulins for type 1 diabetes and use of pens should be available in all settings. Early diagnosis and access to care also occurs in emergency contexts.

• **Health systems** will have largely achieved UHC, and the benefits package will be extended to people who are displaced (including refugees) or experiencing humanitarian emergencies. Chronic care delivery will be integrated in primary health care, which will be resilient to natural disasters and humanitarian emergencies.

• **Humanitarian programming:** Diabetes is included in all preparedness and response planning; a continuum of care model exists in emergencies (full package including prevention / palliation); health equity issues are addressed (e.g., host and internally displaced/refugee populations); humanitarian actions and programs are integrated and coordinated with and complement local/national health system actions.

• **NCD investment frameworks:** Development and emergency funding are integrated/coordinated.
V. What are the priorities for 2023-2025?

IADA member agencies propose to maintain the four initial pillars of the Boston Declaration, with the addition of a fifth pillar on coordination to clarify the relationship of IADA with WHO, and to highlight the need for sustainable financing for the IADA secretariat. Within these pillars, IADA seeks to map work, identify evidence gaps, and advocate for funding to fill those gaps. Those projects that are already under development are outlined in Annex: Proposed Collaborative Projects.

1. Advocacy, Financing, and Policy
   - Support WHO / normative agencies to produce context-specific guidance to member states on policy making to integrate diabetes and other NCDs in preparedness plans (including buffer stocks, grab bags, transportable or cloud-based individual medical records, and no co-payments) and in the humanitarian response (translating the World Health Assembly resolution WHA74.4 into policy).
   - Work with WHO on the Global Diabetes Compact to ensure the goals are achieved through extending global diabetes targets to humanitarian settings and getting this into national plans (i.e., access to insulin and other medicines for NCD management free of charge for displaced people).
   - Carry out ‘investment analyses’ reviewing existing evidence to identify where and how investment cases need to be made; showing where we are not investing in diabetes and monetize the cost of inaction, to support donor dialogues.
   - Advocacy for the diabetes response to include diet / attention to food (accessibility of appropriate food, and consideration of people with type 1 diabetes as a high-risk group for purposes of food distribution/food vouchers etc.); and to include community engagement and civil society engagement in care design and delivery.
   - Advocate towards long-term funders for the continuation of emergency-phase NCD services, ensuring integration into primary health care, using program data and patient testimonies.

2. Access to Medicines and Diagnostics (Note: transversal requirement of actively engaging with people living with diabetes in humanitarian settings to guide demand for medicines and diagnostics that may improve diabetic control and quality of life)
   - Advocate for the routine inclusion of “essential medications” for diabetes and hypertension in humanitarian preparedness and response plans, with insulin, monitoring devices/supplies, oral hypoglycemics and anti-hypertensive medications being an immediate priority.
     - 3-yearly inter-agency surveys of the proportion of responses that include diabetes care
   - Support the sharing of transparent pricing data for the diabetes bundle (oral medications and insulin), insulin delivery devices (including pens) and monitoring tools across humanitarian agencies and from selected countries with the goal of setting a target price per patient per year for type 1 and type 2 diabetes care reflecting cost of production data. Broaden the offer in preferential pricing schemes for LMICs and humanitarian actors to include insulin in vials, cartridges, and pens.
   - Support creation and/or dissemination of storage guidance for insulin based on updated evidence, to ensure guidance on the thermostability of insulin is not a barrier to access.
   - Improve the availability and suitability of tools for diagnosis, self- and clinical monitoring of diabetes (blood glucose meters and strips, hemoglobin A1c testing, sphygmomanometers) and explore the role and appropriateness of new diagnostics and CGMs in humanitarian settings.
• Explore the role and cost effectiveness of newer diabetes (long-acting insulin analogues, SGLT-2 inhibitors, GLP-1 receptor agonists) and hypertension (single pill combination therapies as recommended by WHO hypertension guidance 2021) medication in the management of diabetes in humanitarian settings, including their role as insulin sparing agents. Explore access mechanisms for generic and biosimilar production of new diabetes medicines.

• Explore the relevance of diabetes medications that are in the pipeline (phase 2 and 3), to simplify and improve diabetes care in humanitarian settings and the opportunities for early market entry in LMICs and humanitarian settings.

3. Clinical Care and Service Delivery
• Develop and test evidence-based clinical guidance and educational materials on diabetes care and prevention in humanitarian crises (for healthcare providers and PLWD), including simple, appropriate, safe, and effective algorithms, diagnostic cut-offs, and treatment targets (goals of care) in different emergency phases (acute vs chronic).
  ▪ Simplified, standardized guidelines are particularly needed for acute emergencies (i.e., guidance to support the use of the NCD Emergency Kit) and hyperglycemic crises.
  ▪ Develop emergency preparedness plans for PLWD.
• Document models of care that exist, and if required conduct operational research to develop and test different cost-effective models of care that are centered on empowering PLWD and other NCDs and take local health systems and food supplies into consideration.
• Support innovation around treatment, monitoring and therapeutic patient education, including low-cost medical delivery and diagnostic devices, and patient-held medical records.
• Contribute to WHO operational guidance (and training) on NCDs in humanitarian settings with meaningful engagement of PLWD, including rapid NCD service provision assessments and modelling tools for rapid NCD needs assessments; task-sharing; group, peer and self-management support; prevention / nutrition / health promotion.

4. Data and Research (Note: transversal theme: Include crisis-affected populations and PLWD in research agenda setting, design, and implementation)
• Support and enable national (and WHO) work on NCD integration in Health Information Systems and facility based electronic medical records (EMR). Collaborate with key stakeholders to develop standardized indicators and new/adapted data collection tools for NCD care in emergencies, focusing on a) situational /rapid needs assessment b) health system assessment and service delivery and c) facility-based indicators for service delivery and quality of care, including patient-centered/reported outcomes. These would ideally be linked to a specific, interoperable platform / collection method, ideally feeding directly into national HIS and EMRs.
• Develop a data-driven simulation model that can be used to predict resource needs and prioritize response options under different scenarios.
• Expand the diversity of studies of diabetes in humanitarian crises across regions, types of crises (e.g., natural disasters, armed conflict, pandemic etc.), and crisis stages, including epidemiological studies to understand geographical variations and prioritize sub-populations; implementation/evaluation studies (including cohort monitoring and costing studies) to identify and test new models of care; and qualitative studies to better understand patient experience, burden, and priorities.
• Conduct a longitudinal study to look at clinical (and potentially cost) impact of care interruption on a cohort of PLWD.

5. Coordination
• Obtain sustainable financing for the IADA secretariat to perform its convening role.
• Work closely with WHO (who has primary responsibility for coordination and advising Ministries of Health) to inform and support their activities on diabetes, as well as identify and fill gaps in evidence to improve the standards and access to care.

Conclusion

We must continue to build on the gains of the last few years to ensure the promise of Universal Health Coverage extends to those living in fragile, conflict-affected, and vulnerable settings. This will require seamless working between health systems and humanitarian agencies, in close collaboration with PLWD, to ensure diabetes care is properly included in preparedness plans, but also that primary health care is fully utilized for diabetes care delivery during crises. The climate crisis, threat of future pandemics, and growing health inequities make this a pressing imperative.

VI. Signatories

1. Éimhín Ansbro (London School of Hygiene and Tropical Medicine)
2. Stéphane Besançon (ONG Santé Diabète)
3. Lamia Bezer (World Health Organization)
4. Philippa Boulle (Médecins Sans Frontières)
5. Helen Bygrave (MSF Access Campaign)
6. Angelica Cristello Sarteau (University of North Carolina, Chapel Hill)
7. Apoorva Gomber (Brigham and Women’s Hospital)
8. Kiran Jobanputra (Médecins Sans Frontières)
9. Sylvia Kehlenbrink (Brigham and Women’s Hospital, Harvard Humanitarian Initiative)
10. Lilian Kiapi (International Rescue Committee)
11. Jing Luo (University of Pittsburgh)
12. Anna Nakayama (International Alliance for Diabetes Action)
13. Amulya Reddy (Médecins Sans Frontières)
14. Bayard Roberts (London School of Hygiene and Tropical Medicine)
## Annex: Proposed Collaborative Projects

### 1. ADVOCACY, POLICY, AND FINANCING

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<thead>
<tr>
<th>Nr.</th>
<th>Title</th>
<th>Background</th>
<th>Proposed Project</th>
<th>Possible Partners</th>
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<tbody>
<tr>
<td>1.1</td>
<td>Investment Cases for Diabetes/NCDs in Low Resource and Humanitarian Settings</td>
<td>The proportion of all global health financing dedicated to combating NCDs has ranged from 2-3% per year for decades, despite NCDs dominating the global burden of disease. This inequitable funding appears even worse in humanitarian contexts, with less than 0.5% of all Overseas Development Aid disbursed for health between 2010 and 2019 for around 35 million IDPs allocated specifically for NCDs. As numbers of crisis-affected people rise around the world, it is imperative to recognize both their immediate and their on-going health needs in policy and funding priorities. This alignment is important for global health equity and the achievement of Universal Health Coverage and Sustainable Development Goals.</td>
<td>Develop investment cases for diabetes and NCDs care in humanitarian settings to demonstrate the economic costs and benefits from strengthening investments in diabetes care in these settings. The availability of a business case for NCDs care in humanitarian settings can influence decisions and catalyze transformative change. This analysis would evaluate the social and health system costs and benefits of providing NCDs care to affected populations and provide the cost of inaction.</td>
<td>Project proposed by colleagues at RTI International and the Clinton Health Access Initiative</td>
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<tr>
<td>1.2</td>
<td>Global Advocacy Campaign</td>
<td>Creative policy advocacy campaigns are urgently needed to raise awareness, reduce stigma, and address inequalities in diabetes funding. Policy and funding priorities must align more equitably with the global burden of disease, and the needs of crisis-affected populations better recognized to achieve Universal Health Coverage and Sustainable Development Goals. It is imperative that the voice PLWD is central in these campaigns, such that PLWD are meaningfully involved in efforts to improve care for diabetes in humanitarian settings.</td>
<td>Identify and fund a group of global advocates comprised of people living with diabetes in humanitarian settings. The objective of the group would be to advocate to improve the care (i.e., diagnosis, linkage to care, access to treatment and clinical outcomes) of patients living with diabetes in low resource/humanitarian settings, address stigma and define a set of activities, linking with other campaigns. Build capacity of and support PLWD who have been affected by humanitarian crises (survivor-led activism) and link with other organizations. Coordinate and identify patient advocates and set up webinars to build capacity and plan. Fund travel, tools, and campaigns. Identify a group of ~6 advocates who are ready and have capacity to take a leadership role, meeting regularly and developing / driving the advocacy agenda. Develop an action plan to support the implementation of the WHO Resolution on NCD/Diabetes Care. Campaign/strategy around build up to the UN high level meeting on NCDs in 2025.</td>
<td>People living with diabetes Coalition of organizations, including UN, advocacy, humanitarian, and other global/public health organizations</td>
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### 2. ACCESS TO MEDICINES AND DIAGNOSTICS

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<tr>
<td>2.1</td>
<td>Developing a simplified treatment formulary and algorithm to improve type 2 diabetes and NCD care in humanitarian and low-resource settings</td>
<td>Most discussions on diabetes care in humanitarian crises and in low-income settings focus on access, availability, and cost of insulin. However, only a subset of people with type 2 diabetes (T2D) require insulin treatment. Moreover, insulin therapy in these settings comes with a variety of clinical and operational challenges/complexities, including: the need for a cold chain, risk of hypoglycemia, syringes/needles, and home glucose monitoring, which is often associated with stigma and impacts quality of life for people living with diabetes. The advent of the new hypoglycemic agents, GLP-1 receptor agonists (GLP1RA) and SGLT-2 inhibitors (SGLT2i), might make it possible to delay or obviate the need for insulin in T2D and simultaneously provide cardiorenal benefits and support weight management. Their oral or once weekly injectable formulations which do not require home glucose monitoring could simplify treatment regimens and eliminate the additional costs of glucose strips, which would be of great added value in low-resource and humanitarian settings. However, there is limited data on the use of SGLT-2is and GLP1RAs in low resource and humanitarian settings and the main barrier to use is their cost.</td>
<td>Develop and cost a simplified formulary and associated algorithm of diabetes care for T2D including SGLT-2is and GLP1RAs in the context of low resource and humanitarian settings using a 4-pronged approach: 1. Assess baseline diabetes (+/-NCD) care patterns (% metformin, %sulfonylureas, % insulin, #visits/ year, etc.) and patient characteristics (age, sex, BMI, HbA1c level, established cardiovascular disease, heart failure, chronic kidney disease, history of hypoglycemia and hyperglycemic emergencies) across different humanitarian settings (e.g., rural South Africa, Iraq). 2. Using baseline data from these settings, updated ADA/EASD clinical guidelines, and RCT evidence to develop a simplified insulin-sparing formulary and associated algorithm for optimal diabetes management which preferentially includes SGLT-2is and GLP1RAs in these populations and settings. 3. Use modeling to evaluate the cost threshold analysis of this formulary and algorithm against existing standard of care for people with T2D in these settings prior to insulin initiation (or substituting for insulin). 4. Perform a prospective study at two sites supported by a humanitarian agency introducing SGLT-2 inhibitors and/or GLP-1RA as part of a simplified algorithm to assess feasibility, cost, safety, and acceptability of these agents in these settings.</td>
<td>Project proposed by colleagues at Stanford, Yale, MSF, and Harvard</td>
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<tr>
<td>2.2</td>
<td>Diabetes in Humanitarian Settings Tracker</td>
<td>In March 2022 the Humanitarian NCD Interagency Study in Emergencies and Disasters (UNITED) research consortium (International Committee of the Red Cross (ICRC), International Rescue Committee (IRC), Médecins Sans Frontières (MSF), and UN High Commissioner for Refugees (UNHCR)) published a study which reported on diabetes services in humanitarian medical services across 83 randomly selected sites in 27 countries and five global regions in 2018. The study outlined significant gaps in diabetes care with only 3% of sites providing a basic package of diabetes services.</td>
<td>Q3 yearly survey of inclusion of diabetes care in project activities in eligible MSF, IRC, ICRC and UNHCR programs to be carried out in 2024 based on the activities in 2023 (follow on to the UNITED study). Could this be done by cross referencing projects against supply data as a simpler method?</td>
<td>Project proposed by MSF in collaboration with the UNITED consortium. Resources needed: Intern/ consultancy 6-8 weeks</td>
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<tr>
<td>2.3</td>
<td>$1 Insulin Pen Campaign</td>
<td>Insulin prices vary among countries and health sectors and analogue insulins are substantially higher priced than human insulins. Pens and cartridges are significantly more expensive than vials and therefore infrequently available. However, insulins in pens may have several advantages in humanitarian settings, potentially addressing clinical and operational challenges, such as reducing treatment complexity, improving adherence, and quality of life. Moreover, dosing and administration with a needle and syringe is difficult for many people, especially those with visual impairment, lacking numeracy skills, and for parents administering insulin to their children. For most people in high-income settings, pen devices are the norm for delivery of insulin. This contributes to a double standard of care for people living with diabetes in low-resource settings. Campaign for $1 (or less) per insulin pen (disposable or cartridge) for low-income settings, humanitarian actors and WHO emergency kits.</td>
<td>Project proposed by colleagues at the MSF Access Campaign and University of Pittsburgh, Project would be collaborative with a coalition of organizations, most importantly including people living with diabetes. Needs 0.5 - 1 FTE of an advocacy coordinator to support this campaign.</td>
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<td>2.4</td>
<td>Early Market Entry Project</td>
<td>New products (medications and diagnostics) in the pipeline may be particularly useful and impactful in humanitarian settings. Explore the relevance and opportunities for future early market entry opportunities for new products and those in the pipeline.</td>
<td>Medical, legal, policy, and market shaping specialists, organizations, and UN agencies.</td>
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<td>2.5</td>
<td>CGMs in Humanitarian Settings</td>
<td>CGMs have revolutionized the management of diabetes in high-income countries, allowing for more patient-centered and intensive glucose monitoring, and empower patients by providing knowledge. Their high cost and poor availability remain major barriers to their use globally. However, these devices could have particularly valuable in humanitarian settings where people are exposed to stress, food insecurity, and are at risk for hypoglycemia. In addition, they would allow for remote glucose monitoring and support. Evaluate feasibility, cost effectiveness and acceptability of CGMs in low resource and humanitarian settings. A follow-on aim would be to compare the cost-effectiveness of CGMs versus self-monitoring with glucometers and test strips.</td>
<td>Humanitarian organizations, Market shaping and product development organizations.</td>
<td></td>
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<td>2.6</td>
<td>Active demand generation for glucose monitors and HbA1c POC devices</td>
<td>47% of the global population has little to no access to diagnostics. Diagnostic testing is also a key barrier to diabetes care in humanitarian settings. In the UNITED-1 study which evaluated diabetes care across four humanitarian organizations, capillary glucose testing, the most basic diagnostic tool for diabetes management, was unavailable at 29% of sites. HbA1c and home glucose monitoring were only available at 18% and 22%. Active demand generation for blood glucose monitors and HbA1c POC devices under FIND preferential price agreements to drive uptake in resource limited settings and countries. This entails strong stakeholder engagement at global, national, and local level to identify procurement gaps, support needs definition and demand quantification.</td>
<td>Project proposed by FIND.</td>
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<td>2.7</td>
<td>Patient Journey Mapping</td>
<td>Patient journey mapping to identify weaknesses in the diabetes care cascade that contribute to the significant diagnostic, monitoring and treatment gap currently seen in</td>
<td>Project proposed by FIND.</td>
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respectively. Without glucose monitoring, adequate diabetes management is practically impossible.

LMICs (Lancet Commission). This will enable definition and implementation of optimized context-dependent testing and care-delivery strategies to reduce the gaps in the care cascade.

Humanitarian and global health organizations
### 3. CLINICAL AND OPERATIONAL GUIDANCE

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<td>3.1</td>
<td>Minimum Initial Service Package or Toolkit for Diabetes (MISP-DM)</td>
<td>In acute emergencies, following an initial situation assessment, a minimum package of health services should be defined and deployed by humanitarian actors, in coordination with national and local authorities and other responding agencies, to ensure access to and continuation of life-saving health care. Minimum service packages have been designed and standardized for other health needs, such as the Minimum Initial Service Package for Reproductive Health (MISP-RH), which is a predefined set of evidence-based priority activities that is implemented at the onset of a humanitarian crisis. However, diabetes services delivered by organizations vary significantly and there are no predefined minimum standards or services for diabetes care in a crisis. Even insulin is not routinely provided in acute emergencies, despite this being a life-saving intervention.</td>
<td>Work with WHO to create a Minimum Initial Service Package for Diabetes (MISP-DM) with effective and practicable standard operating procedures for assessing and facilitating the availability of essential medications and diagnostics for management of diabetes and NCDs and establish a predefined and coordinated set of activities to manage diabetes that are implemented at the onset of every emergency. 1. Needs analysis and confirmation of what the product needs to be (foundational work establishing the needs and product structure/specifications) 2. Develop the product (toolkit vs MISP)</td>
<td>UN agencies Humanitarian organizations</td>
</tr>
<tr>
<td>3.2</td>
<td>Clinical Guidance for Acute Humanitarian Emergencies</td>
<td>Evidence-based clinical guidance for the management and follow-up of diabetes in humanitarian settings is currently not available. The WHO is working on guidelines for type 1 diabetes in low resource and protracted humanitarian settings, and already has the PEN and HEARTS-D guidelines for type 2 diabetes, however guidance on acute emergencies is needed.</td>
<td>1. Develop simplified clinical guidance/ algorithms for ready use by less experienced clinicians implementing diabetes care in acute emergencies and to support use of the WHO NCD Emergency Kits 2. Develop simplified algorithms and clinical guidance on the management of hyperglycemic emergencies in resource limited settings.</td>
<td>UN agencies Humanitarian organizations Academic medical centers</td>
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<td>3.3</td>
<td>Insulin Storage Tools</td>
<td>Manufacturers' specifications recommend storing unopened insulin in a refrigerator. However, domestic refrigeration is unavailable or unreliable in many low-resource settings and maintaining insulin within this range during transport and in people’s homes is challenging. Policy and knowledge guiding healthcare providers how to prescribe insulin for patients without access to refrigeration are lacking. There is some recent evidence on the stability of insulin out of cold chain at higher temperatures, but some organizations do not dispense insulin for home use if refrigeration is not available, which requires the individual to attend clinics 2-3 times daily for their insulin injections.</td>
<td>Create tools to support providers and patients with storage of insulin outside of the cold chain. Pending the forthcoming Cochrane Review (commissioned by WHO), see what information/data is still needed and to be done and is needed to provide guidance on insulin storage and use out of cold chain and at hot temperatures, and if needed, support studies to close gaps in knowledge. Create tools to guide clinicians and patients on the safe storage of insulin out of cold chain, including the use of local cooling devices. Advocate with other insulin manufacturers to review their labelling.</td>
<td>Humanitarian organizations Academic research institutions</td>
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<td>3.4</td>
<td>Crisis Preparedness Toolkit and Education for PLWD</td>
<td>Emergency preparedness is crucial for anyone living with diabetes and can be a matter of life or death. In a humanitarian crisis, identifying and accessing PLWD in the affected population is critical. Moreover, PLWD may need to self-manage their diabetes in extreme circumstances until medical aid arrives.</td>
<td>Develop an emergency preparedness toolkit and education/training for PLWD to be implemented prior to an emergency in collaboration with PLWD, people affected by humanitarian crises, and humanitarian organizations.</td>
<td>People living with diabetes People affected by humanitarian crises</td>
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and/or the medications available may not be the ones they have been used to. Therefore, education, awareness, and emergency preparedness prior to onset of a crisis are imperative.

1. Needs analysis and confirmation of what the product needs to be (foundational work establishing the needs and product structure/specifications)

2. Develop the product

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<th>3.5</th>
<th>Warrior Coordinator Training in Humanitarian Settings</th>
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<td><strong>The Sonia Nabeta Foundation (SNF)</strong> has Warrior Coordinator Training Workshops which equip young leaders and exemplars with T1D in the community to use his/her own experiences living with T1D to educate, motivate, inspire, encourage, and empower other warriors (PLWT1D) in their community. They work closely with the local clinic nurses providing assistance and supporting newly diagnosed warriors, providing insulin and medical supplies to warriors, identifying complications, providing psychosocial support, mentoring fellow warriors, coordinating home visits and leading local outreach initiatives.</td>
<td>Develop a Warrior Coordinator Program including the hosting of Warrior Coordinator Training Workshops adapted to humanitarian settings with SNF and humanitarian organizations to train new peer supporters in humanitarian settings. Identify local PLWT1D who are willing to be peer supporters; train, empower, capacity build through use of existing warriors/peer supporters; support the development and implementation of activities (e.g., peer counseling, support groups, and education) and annual plan. Initial selection and implementation of targeted regional groups can be expanded and adapted to other sites.</td>
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<th>3.6</th>
<th>Operational NCD Guidance for Humanitarian Crises</th>
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<td><strong>The Landmark Resolution on Diabetes</strong> (WHA74.4) that was adopted at the 74th World Health Assembly (WHA) included the request to the WHO Director General “to provide concrete guidance to Member States for uninterrupted treatment of people living with diabetes in humanitarian emergencies.”</td>
<td>Support the WHO in developing normative operational guidance for uninterrupted treatment of people living with diabetes in humanitarian emergencies (TP 2522.03). Create clear operational guidance that harmonizes existing guidance, includes assessment tools / toolkit, provides clear guidance on list of medications needed, contains SOPs according to different capacity levels, and contains a monitoring / QA frame.</td>
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<th>3.7</th>
<th>Continuing Education Program for Healthcare Providers in Humanitarian Settings</th>
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| The need for diabetes training for healthcare providers has repeatedly been shown to be a significant need and barrier to diabetes care in humanitarian settings. In humanitarian settings, there are often a deficient number of healthcare workers, and a lack of experience and skill set required to manage diabetes. | Develop continuous, interagency clinical support and education programs and a community of learning for humanitarian healthcare teams managing people living with diabetes (physicians, nurses, psychologists, nutritionists, pharmacists, social workers, NCD advisors etc.). 

**Modality:** Regular (e.g., monthly) online multidisciplinary meetings between health staff of humanitarian projects providing diabetes care and relevant medical and paramedical experts (e.g., endocrinologists, nephrologists, cardiologists, nutritionists, patient education experts). These meetings will be a chance to review challenging current clinical cases with peers and specialists, as well as exchange experiences and skills between peers with a participatory approach.

Meetings can be conducted between multiple projects grouped together by language and contextual similarities and aim to facilitate exchange and peer learning through a community of practice approach, as well as the access to specialist expertise. | Project proposed by MSF

Partners would include humanitarian and global health organizations, and academic medical centers/public health institutions |
## 4. RESEARCH AND DATA

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<th>Background</th>
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<th>Possible Partners</th>
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<td>4.1</td>
<td>Standardized indicators and new/adapted data collection tools for NCD care in emergencies</td>
<td>For people with noncommunicable diseases (NCDs) in the acute emergency phase, maintaining access to pre-emergency treatments should be the mainstay of the response. This requires identification of individuals with diagnosed NCDs, determining whether they have access to care, and identifying treatment and referral options for people with life-threatening exacerbations or for whom treatment interruption could be life-threatening or cause significant avoidable suffering (e.g., type 1 diabetes). To achieve this, humanitarian responders undertake rapid situational analyses to evaluate needs and determine the type of assistance required. Data on the burden and effective management of diabetes in these settings are lacking. As crises evolve, reliable data are necessary to support response planning, medication supply, and to enable humanitarian programs to adjust to changing contexts. In addition, ensuring the consistent availability of life-saving essential medications, such as insulin and diagnostics, is critical. However, as was outlined in the UNITED-1 study, there are currently no uniform or standardized indicators or data collection systems for NCDs, including diabetes, across humanitarian organizations. Furthermore, we know little about the true impact of interrupted care due to crises or of the current responses on those with existing NCDS, in terms of rates of complications and deaths.</td>
<td>UNITED-2 study: we propose a three-stage study: 1. Convene a consortium of key stakeholders, including WHO, to agree on standardized indicators and new/adapted data collection tools for NCD care in emergencies, focusing on a) situational /rapid needs assessment b) health system assessment and service delivery and c) facility-based indicators for service delivery and quality of care, including patient-centered/reported outcomes. These would ideally be linked to a specific, interoperable platform / collection method, ideally feeding directly into national health information systems (HIS) and electronic medical records (EMRs). 2. Proof of concept application of these indicators and tools across 3-5 diverse humanitarian settings, involving multiple implementing actors, evaluating their application using implementation research approaches. 3. Cross-sectional survey using the data from Step 2 to perform a multi-center burden analysis and assess the delivery of care, the levels of risk factors, multimorbidity, and population needs. 4. Create a multi-center cohort, following these populations longitudinally to determine longer-term impacts on clinical outcomes.</td>
<td>Project proposed by members of the Informal Interagency Group on NCDs in Humanitarian Settings, LSHTM, and the Royal College of Surgeons in Ireland</td>
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<td>4.2</td>
<td>Participatory Implementation Research</td>
<td>The rapid adoption, integration and implementation evidence-based programs, best practices, and strategies to improve diabetes care in humanitarian settings is crucial. However, implementing scientific knowledge into real-world settings is often long and challenging. Participatory implementation science has the potential to support increased adoption, implementation, and sustainability of evidence-based practices in clinical, operational, and community practice. It engages stakeholders in the co-production of knowledge and solutions, which may increase the likelihood that implementation efforts are useful, scalable, and sustainable in real-world settings.</td>
<td>Conduct participatory implementation research around what approaches to NCD care provision work best for whom and why, and how best to integrate patients/families/communities affected by crises into programming and research.</td>
<td>UN agencies, Humanitarian organizations, Academic research institutions</td>
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## 5. COORDINATION AND COLLABORATION

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<td>5.1</td>
<td>IADA Start-Up Funding</td>
<td>Despite projections of increases in both diabetes and humanitarian crises, the provision of diabetes care in humanitarian settings remains scarce and poorly coordinated. This was highlighted in the <a href="https://example.com/boston_declaration">Boston Declaration</a> which was signed by 64 signatories from over 40 international organizations and set four major targets for the group to work towards. To achieve these goals successfully, sustained collaborative commitment of a diverse network of partners is required. The <a href="https://example.com/iada">International Alliance for Diabetes Action</a>, Inc. (IADA), a 501(c)(3) non-profit organization, was therefore established, bringing together over 40 international organizations from different sectors and is developing concrete collaborative initiatives that will increase access to and quality of care for people with diabetes in humanitarian settings.</td>
<td>Provide 3-year funding of the IADA secretariat to build coordination, collaboration, advocacy, and capacity for IADA. This will help with advancing and expanding key programs, ensure sustainability, provide accountability, information sharing, maximize effectiveness of grants made to help optimize diabetes care in humanitarian settings.</td>
<td>International Alliance for Diabetes Action</td>
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<td>5.2</td>
<td>Annual Symposium on Diabetes in Humanitarian Crises</td>
<td>One of the key activities of the International Alliance for Diabetes Action (IADA) is to host an annual symposium to provide a platform for shared learning, exchange, and development of new collaborative initiatives between key agencies involved in diabetes care of people experiencing humanitarian crisis. The symposia allow the group to chart ongoing trends and emerging challenges in service provision for diabetes for people in fragile and conflict affected settings, identifying gaps in the humanitarian response, and defining solutions; continue to build exchange between global health organizations involved in diabetes care in humanitarian crisis, with identification and agreement around new areas of collaborative work.</td>
<td>Provide support for the annual symposium, including travel grants to allow people from lower resourced settings to attend the events.</td>
<td>International Alliance for Diabetes Action</td>
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