Report of the third meeting of the WHO Technical Advisory Group on Diabetes

hybrid meeting
9–10 June 2022
Report of the third meeting of the
WHO Technical Advisory Group on Diabetes

hybrid meeting
9–10 June 2022
Contents

ABBREVIATIONS/ACRONYMS iv

SUMMARY OF DISCUSSIONS 1

Session 1: Executive Board and World Health Assembly 1

Session 2: Prioritized research agenda 4

Session 3: Global Diabetes Compact 5

Session 4: Diabetes and tuberculosis 6

Session 5: Diabetes and mental health 7

CLOSING REMARKS 8

Next steps 8

ANNEX 1. MEETING AGENDA 9

ANNEX 2. MEETING PARTICIPANTS 12
## Abbreviations/acronyms

| Abbreviation | Definition                                      |
|--------------|------------------------------------------------|---|
| LMICs        | low- and middle-income countries               |   |
| NCD          | noncommunicable disease                        |   |
| TAG-D        | Technical Advisory Group on Diabetes           |   |
| TB           | tuberculosis                                    |   |
| UN           | United Nations                                  |   |
| WHA          | World Health Assembly                           |   |
| WHO          | World Health Organization                      |   |
Overview

The World Health Organization (WHO) convened the third meeting of the WHO Technical Advisory Group on Diabetes (TAG-D) on 9 and 10 June 2022. Briefly, the remit of TAG-D is: to identify and describe challenges to WHO’s work on diabetes; to advise on strategic directions to be prioritized; to advise WHO on the development of global strategic documents; and to propose other strategic interventions and activities for WHO to implement. All 11 current members of TAG-D attended the hybrid meeting.1 WHO personnel from regional offices were also invited to attend as part of the WHO TAG-D secretariat. Dr Amanda Adler, the standing chair, chaired the meeting. Dr Jennifer Manne-Goehler acted as rapporteur, and TAG-D secretariat members provided technical support.

The agenda and list of attendees can be found in Annex 1 and 2 respectively.

All participants provided declarations of interests (DOIs); all DOIs were reviewed by the WHO. Five TAG-D members declared interests that triggered further review. For four of these members, declared interests were considered minimal and deemed unlikely to affect the experts’ judgement. One member’s declared interest in a specific subject matter resulted in partially restricting the member’s participation.

Summary of discussions

TAG-D discussed five main topics: the Executive Board and World Health Assembly; prioritized research agenda; the Global Diabetes Compact; diabetes and tuberculosis; diabetes and mental health.

Session 1: Executive Board and World Health Assembly

Dr Slim Slama, Unit Head NCD Management, and Dr Francesco Branca, Director of the WHO Department of Nutrition for Health and Development, presented updates relevant to TAG-D from the recent Seventy-fifth World Health Assembly (WHA),2 the main governing body of WHO, which took place in Geneva on 22 to 28 May 2022 and was attended by delegations from WHO Member States. The WHA resulted in a record number of decisions on NCDs. The outcomes can be summarized as:

- Implementation road map 2023–2030 for the global action plan for the prevention and control of noncommunicable diseases 2013–2030;
- recommendations to strengthen and monitor diabetes responses within national noncommunicable disease programmes, including adoption of the proposed global coverage targets for diabetes;
- recommendations for the prevention and management of obesity over the life course, including the proposed global targets and acceleration plan; and

---

1 Dr Kaushik Ramaiya was previously a member but has excused himself from TAG-D.
• recommendations strengthening the design and implementation of policies, including to establish resilient health systems and health services, to strengthen infrastructure to treat people living with noncommunicable diseases, and to treat people with diabetes in humanitarian emergencies.

The WHO Secretariat’s progress in supporting Member States to strengthen and monitor their responses to diabetes within national NCD programmes, including potential targets, is performed through the Global Diabetes Compact. Currently, these ongoing activities include:

• convening partners through the Global Diabetes Compact to raise awareness and harness collective capacity of global, regional and national actors working to improve diabetes prevention and control (for example, the Global Diabetes Compact Forum, a consultation of people with lived experience);
• engaging the private sector to commit to increasing access to essential medicines and health technologies for diabetes;
• developing normative products;
• providing a prioritized research agenda for diabetes;
• estimating the cost of achieving the proposed global coverage targets;
• developing a monitoring framework; and
• providing technical support to countries and further strengthening country work.

The WHO Secretariat implements these activities, collaborating closely with all WHO regional offices.

TAG-D discussed the Implementation roadmap 2023–2030 for the global action plan for the prevention and control of noncommunicable diseases 2013–2030. The roadmap will guide and support Member States to take urgent measures in 2023 and beyond, to reorient and accelerate their progress and domestic action plans to place themselves on a sustainable path to achieve the nine voluntary global targets for NCDs and Sustainable Development Goal (SDG) 3.4 as measured by SDG indicator 3.4.1.

TAG-D proposed three main strategic directions:

1. Accelerate national response based on data to understand the risk factors for and descriptive epidemiology of NCDs as well as research on country-specific barriers and enablers.
2. Prioritize and scale up feasible interventions likely to have most impact.3
3. Collect timely, reliable and long-term data on NCD risk factors, diseases and mortality to inform actions.

To complement the roadmap, WHO is developing or undertaking a number of technical products and activities.

The TAG-D secretariat outlined the WHO Acceleration plan to stop obesity.\(^4\) The plan includes:

- **Life-course approaches:** implementing strategies to reduce obesity and diabetes across individuals’ entire lives, including specific support during key transitions, for example from childhood to adulthood, and from pre- to post-pregnancy.

- **Whole-of-government and whole-of-society approaches:** ensuring policies across society focus on reducing obesity. These include fiscal policies, regulations of marketing for food and drinks, policies in schools surrounding physical activity, wider public education and awareness campaigns.

- **Integrated health care services:** developing services in which obesity, diabetes and other NCDs could be prevented, diagnosed, and treated across health care settings, including in primary care.

TAG-D acknowledged that Member States, society and WHO must work together to address obesity.

### Observations by TAG-D in discussion on diabetes and obesity

- Supporting transitions for people with diabetes, especially from childhood to adulthood, is key to helping low- and middle-income countries (LMICs) manage diabetes in their populations. There is a need for recommendations to support these critical periods, such as establishing and supporting “transition clinics”.

- Recommendations on managing weight should be included to a greater degree in diabetes management guidelines.

- The stigma around diabetes when accompanied by obesity is a barrier to strategies to encourage management and increase adherence. There may also be a stigma surrounding weight loss in some societies.

- There is a need to involve patients in designing services and integrating their support needs, given the implementation gap.

- Self-monitoring has an important role in aiding diabetes management, e.g. through blood glucose monitors. These products need to be standardized to facilitate use in LMICs.

- TAG-D noted the need to create a minimum set of easily monitored indicators that every country could record to aid standardized evaluation.

---

Diabetes in emergency settings

TAG-D had addressed this topic during its meeting in December 2021. However, because of the war in Ukraine it again discussed the topic. There is a clear need to develop more resilient health care systems that can respond to NCDs in emergencies. Current WHO initiatives on NCDs and diabetes in humanitarian emergencies include two WHO resolutions.\(^5\)\(^6\)

Dr Slama outlined the technical products in the pipeline and the ongoing country support. There is a need for clinical guidelines on managing diabetes in humanitarian emergencies and improving supply chains of critical medications, for example through having emergency kits already in place. There is an ongoing WHO review of managing NCDs in the humanitarian setting which will identify gaps and inform future recommendations.

TAG-D understood that excess deaths from the ongoing COVID-19 pandemic are now estimated to surpass 14.9 million, many of which are expected to relate directly or indirectly to NCDs.

Session 2: Prioritized research agenda

To support workstream 5, research and innovation, of the Global Diabetes Compact, TAG-D discussed how to prioritize diabetes research at a global level. This project was presented by Dr Gojka Roglic. The University of Sydney, University of Geneva, and the Geneva Science Policy Interface\(^7\) are collaborators.

TAG-D was invited to evaluate research gaps and to recommend participants for the survey to prioritize research, with women from LMICs notably under-represented.

TAG-D discussed the five proposed research categories from WHO. They include problem, cause, solutions, evaluation and monitoring, and implementation, of which TAG-D agreed that solutions, evaluation and monitoring, and implementation were the most important.

TAG-D discussed scoring criteria for deciding on research criteria, proposing that WHO also consider innovation, generalizability of the research to other NCDs, and acceptability of the research. Some TAG-D members expressed that interventions helping LMICs and specific vulnerable populations should be given additional weight when prioritizing the research agenda. Another point raised by TAG-D was the importance of formal health economic (cost utility) evaluations rather than cost-minimization. The TAG-D acknowledged that what are perceived to be expensive interventions may reflect good value for limited resources.

---


Session 3: Global Diabetes Compact

The TAG-D secretariat presented the recent developments on the workstreams of the Global Diabetes Compact. The Global Diabetes Compact is a WHO-led initiative that aims to reduce the risk of diabetes and ensure that all people diagnosed with diabetes have access to equitable, comprehensive, affordable and high-quality treatment and care.  

**Workstream 1, access to essential diabetes medicines and health technologies.** There has been ongoing work to improve access to medicines and health technologies for diabetes, particularly through leveraging existing mechanisms of pooled procurement and by integrating insulin into cold chains for vaccines. By the end of the year, WHO aims to have completed a roadmap for coordinating procurement and logistics for diabetes products. Furthermore, WHO aims to have a joint statement from the United Nations Population Fund (UNFPA), United Nations Development Programme (UNDP), United Nations International Children’s Emergency Fund (UNICEF) and WHO on integrating temperature-sensitive products into immunization supply chains.

**Workstream 2, technical products.** TAG-D discussed global diabetes coverage targets and the need to develop ideas further prior to the next meeting.

**Workstream 3, prevention, health promotion and health literacy.** The TAG-D secretariat informed TAG-D about the key lessons from a survey on language and diabetes, noting the findings surrounding language that is considered stigmatizing. The results will be published.

**Workstream 4, country support.** The recent successful visit by WHO Director-General Dr Tedros Ghebreyesus to the Barbados Diabetes Foundation was highlighted to members. The TAG-D secretariat provided TAG-D with regional updates, including adaptation by the regional offices of the Americas and of Europe.

**Workstream 5, research and innovation.** The establishment of the WHO Technical Advisory Group of Experts on NCD-related Research and Innovation (TAG-NCD-R&I)  was mentioned, as was the focus on implementation research to accelerate progress in NCD management.

**Workstream 6, governance, strategy and partnership.** TAG-D discussed the activities to engage stakeholders held recently. These include the Global Diabetes Compact Forum  and People Living with Diabetes focus group.

Moving forward, the Global Diabetes Compact is preparing for World Diabetes Day on 14 November 2022.

---

Session 4: Diabetes and tuberculosis

Tuberculosis (TB) was the second leading cause of death from a single infectious agent in 2020, after COVID-19, and almost 10 million people fell ill with TB in 2020. Diabetes is one of the key risk factors for TB, and in 2020 was estimated to be responsible for 370 000 new cases of TB (3% of the global total). An estimated 15% of people with TB also have diabetes. Besides increasing the risk of developing TB disease, diabetes is associated with an increased risk of death among people with TB.

In 2018, at the first United Nations (UN) high-level meeting on TB, Member States committed to developing community-based health services with integrated care for people with TB with related health conditions, for example, HIV, undernutrition, mental illness, substance-use disorders, tobacco smoking, and NCDs, including diabetes. This commitment was reiterated in the 2018 third high-level meeting on NCDs.

To address the joint burden of TB and diabetes, WHO released the Collaborative framework for care and control of tuberculosis and diabetes in 2011. WHO recently conducted a policy review of the uptake of collaborative TB and diabetes activities by 30 countries with a high burden of TB. This review showed that 21 of the countries (70%) referred to the importance of TB screening among people with diabetes, and 24 (80%) referred to managing diabetes in people with TB in at least one of their national documents. However, only two countries had included plans for joint or bidirectional screening and co-managing TB and diabetes within their national strategic plans for NCDs.

The Framework for collaborative action on TB and comorbidities, published in 2022, aims to support countries in aligning services for delivering people-centred care for TB and comorbidities. Furthermore, WHO is currently developing an operational handbook, which will comprise the latest recommendations on TB and diabetes and aims to support countries in implementing and scaling up collaborative activities for TB and diabetes.

Observations by TAG-D in discussion on the interaction between diabetes and TB

- There is a lack of awareness and understanding surrounding the interaction between the two conditions, particularly in clinical practice, where clear protocols are needed to encourage best practice.\textsuperscript{16}
  - TAG-D heard that the stigma associated with both conditions may hinder the delivery of healthcare for people with TB and diabetes.

- There is a need to align advocacy efforts.

- There is a need to support countries by:
  - co-opting existing health-care systems to provide combined care; and
  - adopting a person-centred approach focusing on educating people with either condition about the other condition.

- There is a need to recognize that people with diabetes and TB are at risk for other comorbidities, including HIV, malnutrition, and mental health conditions,\textsuperscript{17} necessitating a holistic approach to care.

There is the potential for future collaborations between TAG-D and other groups working on TB (and other NCDs).

Session 5: Diabetes and mental health

The interaction between diabetes and mental health was outlined to TAG-D by Dr Dan Chisholm and Dr Aiysha Malik. TAG-D appreciated that living with one condition increases the risk of developing the other, notably in LMICs.\textsuperscript{18} Furthermore, when diabetes and mental health problems co-exist, these may result in reduced medication adherence, poorer outcomes, increased care needs, lower quality of care, and reduced quality of life compared with having either condition alone.

Managing diabetes can be stressful, and it itself is associated with a higher risk of mental health conditions. Many diabetes health care providers are not trained to help people with mental health issues. The challenges in receiving care for mental health may be compounded by diabetes. Furthermore, there is a significant stigma surrounding mental health conditions, hindering diagnosis and care.

Acknowledging the importance of improving support for people with mental health conditions in the setting of diabetes, TAG-D was informed of the Collaborative Care Model.\textsuperscript{19}


This model involves a multidisciplinary approach to managing both conditions pro-actively and introduces care for mental health into diabetes health care settings. It involves a multi-disciplinary approach, with non-specialist care managers being trained to screen at-risk individuals with diabetes for mental health conditions and refer them to appropriately trained staff for psychosocial and/or pharmacological support. The model proposes that managing mental health and diabetes can occur in a single health care setting to reduce the burden. TAG-D also considered interventions that included scalable digital technologies, peer support with the help of grassroot organisations, and increased physical activity. WHO has issued guidance on managing physical health conditions for people with severe mental disorders, which could be applied to people with diabetes and mental health conditions.

To address the stigma around both mental health conditions and diabetes, TAG-D highlighted the need to prioritize the provision of mental health care and to provide education within health systems on strategies to diminish stigma.

TAG-D extended the discussion to the link between diabetes and dementia. Given the association between these conditions, dementia will likely represent an increasing health care burden, especially in countries with an ageing population, and further work will be needed to address it.

Closing remarks

The Rapporteur summarized the highlights of the third TAG-D meeting. The Chair emphasized that it will be crucial to maintain global momentum following Resolution WHA.74.4 and the global diabetes coverage targets. Focusing on addressing the implementation gap is a top concern and will be discussed specifically at the next TAG-D meeting.

Next steps

TAG-D members are encouraged to advocate and support the WHA targets on diabetes and obesity as well as the Implementation roadmap.

TAG-D plans to publish a paper highlighting its support for diabetes coverage targets. TAG-D will consider an evidence-to-policy initiative which could carry out further research on prioritizing interventions.

The next TAG-D meeting will be held on 30 November and 1 December 2022.

---


## Annex 1. Meeting agenda

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Session</th>
<th>Speakers</th>
<th>Details, questions, comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opening session</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 13:00–13:10 | Welcome and presentation of agenda | Dr Slim Slama, Unit Head MND, NCD, WHO | Dr Bente Mikkelsen welcomes the group, presents the agenda and introduces the Chair (Amanda Adler) and the Meeting Rapporteur (Dr Jennifer Manne-Goehler)  
Material shared:  
- Report of first TAG-D meeting  
- Report of second TAG-D meeting |
| 13:10–13:15 | Housekeeping and meeting rules | Dr Amanda Adler | Dr Adler presents the housekeeping rules (camera on etc) |
| **Executive Board and World Health Assembly** | | | |
| 13:15–13:30 | Update on diabetes and obesity-related agenda items at the WHO Executive Board and World Health Assembly | Dr Slim Slama and Dr Francesco Branca | Objective: TAG-D members to have a clear understanding of the content and decisions from the World Health Assembly  
Material sent to participants for preparation:  
- Political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases (https://apps.who.int/gb/ebwha/pdf_files/EB150/B150_7-en.pdf) |
| 13:30–13:40 | Update on WHO response in emergencies | Dr Slim Slama | Objective: requests from resolutions to WHO on humanitarian settings, role of WHO in Ukraine  
Material sent to participants for preparation:  
Follow-up to the political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases and to prevent and control their risk factors in humanitarian emergencies (https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_10Add2-en.pdf)  
| 13:40–14:40 | Discussion | Dr Amanda Adler | Moderated discussion with the TAG-D group based on incoming questions:  
- Anything that remains unclear regarding the executive board, World Health Assembly and the Diabetes Resolution?  
- Which of the recommended actions for WHO to strengthen diabetes responses do you see as being the most important?  
- What would be the largest challenge in achieving the proposed targets?  
What could WHO do to improve the humanitarian response for people living with diabetes (Ukraine as example)? |
| 14:40–14:50 | Break | | |
### Prioritized research agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
<th>Details, questions, comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:50–15:15</td>
<td>Prioritizing the research agenda</td>
<td>Dr Gojka Roglic</td>
<td>Objective: present the preliminary results of the commissioned research gap analysis</td>
</tr>
<tr>
<td>15:15–16:15</td>
<td>Results of prioritizing the research agenda to improve diabetes care in low-and middle-income countries</td>
<td>Dr Amanda Adler</td>
<td>Moderated discussion with TAG-D group based on incoming questions</td>
</tr>
<tr>
<td></td>
<td>— How can WHO better support the use of the prioritized research for improving diabetes care?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:15–16:30</td>
<td>Summary and close</td>
<td>Dr Amanda Adler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting Rapporteur (Dr Jennifer Manne-Goehler)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Details, questions, comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00–13:10</td>
<td>Welcome and recap from Day 1</td>
<td>Dr Amanda Adler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting Rapporteur (Dr Jennifer Manne-Goehler)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:10–13:30</td>
<td>Update on the six workstreams:</td>
<td>Dr Bente Mikkelsen</td>
<td>Objective: what progress has there been in the GDC since last meeting, with focus on workstream 1 (access to medicine), results of language survey and workstream 6 (governance)</td>
</tr>
<tr>
<td></td>
<td>— Access to essential diabetes medicine and associated health technologies</td>
<td></td>
<td>Material sent to participants for preparation: The WHO Global Diabetes Compact: an opportunity for lasting change (<a href="https://www.who.int/initiatives/the-who-global-diabetes-compact/">https://www.who.int/initiatives/the-who-global-diabetes-compact/</a>)</td>
</tr>
<tr>
<td></td>
<td>— Prevention, health promotion and health literacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Country support</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Research and innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Governance, strategy and partnership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:30–13:55</td>
<td>Discussion</td>
<td>Dr Amanda Adler</td>
<td>Moderated discussion with the TAG-D group based on incoming questions</td>
</tr>
<tr>
<td></td>
<td>— Any potential partners that we should engage further in the current governance structure?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>— How to create synergies and alignment of different initiatives?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Ongoing projects stigma and language that WHO could leverage on?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>— How can feedback from people with lived experience be implemented in the workstreams?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>— What initiatives should WHO be made aware of as workstreams are developed?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Diabetes and Tuberculosis

| Time    | Topic                                                                                   | Speaker                                                                 | Details                                                                                                                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13:55–14:05 | Diabetes and Tuberculosis – WHO update                                               | Dr Tereza Kasaeva, Director of the WHO Global Tuberculosis Programme                                                 | Objective: to provide a general overview of the joint burden of tuberculosis and diabetes and an update on WHO work to scale up people-centred care for tuberculosis and diabetes. Material sent to participants for preparation: Collaborative framework for care and control of tuberculosis and diabetes. ([https://apps.who.int/iris/handle/10665/44698](https://apps.who.int/iris/handle/10665/44698)) |

**Discussion:**
- What do you perceive as the major obstacles for assuring people-centered care for people with diabetes and tuberculosis?
- What more can be done to catalyse scale-up of collaborative action on tuberculosis and diabetes as a part of universal health coverage in countries?
- How can TAG-D inspire own governments to include diabetes/NCDs in application for World Bank and Global Funds?

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>TAG-D members, moderated by Dr Amanda Adler</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:05–14:50</td>
<td>Discussion:</td>
<td></td>
</tr>
</tbody>
</table>
- What do you perceive as the major obstacles for assuring people-centered care for people with diabetes and tuberculosis?
- What more can be done to catalyse scale-up of collaborative action on tuberculosis and diabetes as a part of universal health coverage in countries?
- How can TAG-D inspire own governments to include diabetes/NCDs in application for World Bank and Global Funds?

## Mental Health and Diabetes

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Dan Chisholm and Dr Aiysha Malik, Mental Health Specialist, Mental Health and Substance Use, WHO</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00–15:15</td>
<td>Mental health and diabetes</td>
<td></td>
</tr>
</tbody>
</table>

Objective: to present existing evidence, inputs on potential ways for WHO to leverage existing initiatives on diabetes and mental health.

**Discussion**
- What is the evidence for the risk of mental health conditions among people living with diabetes?
- What interventions should be discussed with regards to diabetes and mental health; what is the evidence for these interventions?
- Is there any other information, evidence, initiatives or efforts the WHO should be made aware of with regard to mental health and diabetes?

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>TAG-D Members, moderated by Dr Amanda Adler</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:15–16:00</td>
<td>Discussion</td>
<td></td>
</tr>
</tbody>
</table>
- What is the evidence for the risk of mental health conditions among people living with diabetes?
- What interventions should be discussed with regards to diabetes and mental health; what is the evidence for these interventions?
- Is there any other information, evidence, initiatives or efforts the WHO should be made aware of with regard to mental health and diabetes?

## Summary of Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Meeting Rapporteur (Dr Jennifer Manne-Goehler)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00–16:15</td>
<td>Summary of day 2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Dr Amanda Adler, Dr Slim Slama</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:15–16:30</td>
<td>Next steps and closure</td>
<td></td>
</tr>
</tbody>
</table>


Annex 2. Meeting participants

TAG-D members

Dr Amanda Adler
Professor of Diabetic Medicine and Health Policy
Oxford University
United Kingdom of Great Britain and Northern Ireland

Dr Fatima Al Slail
Director of the Diabetes Prevention and Control Programme and Director of Cardiovascular Prevention and Control Programme
Ministry of Health
Saudi Arabia

Dr David Beran
Assistant Professor, Faculty of Medicine, Department of Community Medicine, Primary Care and Emergency Medicine
University of Geneva
Switzerland

Dr Stephen Colagiuri
Professor of Metabolic Health
University of Sydney
Australia

Dr Adel Abdel Aziz El-Sayed
Professor Emeritus of Internal Medicine and Diabetes
Sohag University
Egypt

Dr Apoorva Gomber
Student enrolled in the Master of Public Health Program, Department of Global Health and Population
Harvard T.H. Chan School of Public Health
India

Dr Jennifer Manne-Goehler
Faculty member
Brigham and Women’s Hospital, Massachusetts General Hospital and Harvard Medical School
United States of America

Dr Mitsuru Ohsugi
Director, Diabetes and Metabolism Information Center
National Center for Global Health and Medicine
Japan
Dr Anjumanara Anver Omar  
Lecturer, Consultant, and Pediatric Endocrinologist and Diabetologist  
University of Nairobi  
Kenya

Ms Daniela Rojas Jimenez  
Psychologist  
Autonomous University of Central America, San José  
Costa Rica

Dr Nikhil Tandon  
Professor and Chair of the Department of Endocrinology and Metabolism  
All India Institute of Medical Sciences  
India

WHO TAG-D secretariat

Mr James Elliott  
Consultant, Department of Noncommunicable Diseases  
World Health Organization  
Canada

Mr Bashier Enoos  
Technical Officer, Department of Noncommunicable Diseases  
World Health Organization  
Switzerland

Dr Bianca Hemmingsen  
Medical Officer, Department of Noncommunicable Diseases  
World Health Organization  
Switzerland

Mrs Nicoletta de Lissandri  
Assistant to Director, Department of Noncommunicable Diseases  
World Health Organization  
Switzerland

Dr Bente Mikkelsen  
Director, Department of Noncommunicable Diseases  
World Health Organization  
Switzerland

Dr Slim Slama  
Unit Head, Management of NCDs, Department of Noncommunicable Diseases  
World Health Organization  
Switzerland

Mr Abraham Tolley  
Consultant, Department of Noncommunicable Diseases  
World Health Organization