

International Telecommunication Union

# ITU-T FG-AI4H Deliverable

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

16 March 2023

# PRE-PUBLISHED VERSION

---

**DEL10**

**AI4H use cases: Topic description documents**

ITU-T

## Summary

This document provides an overview of the ITU/WHO Focus Group on AI for Health (FG-AI4H) "AI4H use cases: Topic Description Documents". Each use case is represented by a topic group that is dedicated to a specific health topic in the context of AI. The topic group proposes a procedure to benchmark AI models developed for a special task within this health topic. All members of a topic group create a topic description document (TDD) that contains information about the structure, operations, features, and considerations of the specific health topic. This document serves as an introduction to the topic groups and their topic description documents.

## Keywords

Artificial intelligence; health; topic groups; overview; ethics; regulations; data quality; data audit; clinical relevance

## Change Log

This document contains Version 1 of the Deliverable DEL10 on "*AI4H use cases: Topic description documents*" approved on 16 March 2023 via the online approval process for the ITU-T Focus Group on AI for Health (FG-AI4H).

<b>Editor:</b>	Eva Weicken Fraunhofer HHI, Germany	E-mail: <a href="mailto:eva.weicken@hhi.fraunhofer.de">eva.weicken@hhi.fraunhofer.de</a>
	Monique Kuglitsch Fraunhofer HHI, Germany	E-mail: <a href="mailto:monique.kuglitsch@hhi.fraunhofer.de">monique.kuglitsch@hhi.fraunhofer.de</a>
	Markus Wenzel Fraunhofer HHI, Germany	E-mail: <a href="mailto:markus.wenzel@hhi.fraunhofer.de">markus.wenzel@hhi.fraunhofer.de</a>

## CONTENTS

	Page
1 Scope.....	4
2 References.....	4
3 Terms and definitions .....	5
4 Abbreviations.....	5
5 Introduction.....	6
5.1 TDD template update.....	7
6 Structure.....	8
7 Resources of all topic groups.....	10
7.1 Cardiovascular disease risk prediction (TG-Cardio) .....	10
7.2 Dermatology (TG-Derma) .....	10
7.3 Diagnosis of bacterial infection and anti-microbial resistance (AMR) (TG-Bacteria).....	10
7.4 Falls among the elderly (TG-Falls).....	10
7.5 Histopathology (TG-Histo).....	10
7.6 Malaria detection (TG-Malaria) .....	11
7.7 Maternal and child health (TG-MCH).....	11
7.8 Neurological disorders (TG-Neuro) .....	11
7.9 Ophthalmology (TG-Ophthalmology).....	11
7.10 Outbreak detection (TG-Outbreaks) .....	11
7.11 Psychiatry (TG-Psy) .....	12
7.12 Radiology (TG-Radiology).....	12
7.13 Snakebite and snake identification (TG-Snake) .....	12
7.14 Symptom assessment (TG-Symptom) .....	12
7.15 Tuberculosis (TG-TB) .....	12
7.16 Volumetric chest computed tomography (TG-DiagnosticCT).....	12
7.17 Dental diagnostics and digital dentistry (TG-Dental).....	13
7.18 AI-based detection of falsified medicine (TG-FakeMed) .....	13
7.19 Primary and secondary Diabetes risk prediction (TG-Diabetes).....	13
7.20 AI and endoscopy (TG-Endoscopy) .....	13
7.21 Musculoskeletal Medicine (TG-MSK) .....	13
7.22 AI for human reproduction and fertility (TG-Fertility) .....	13
7.23 Traditional Medicine (TG-TM) .....	14
7.24 AI for point-of-care diagnostics (TG-POC) .....	14

## **List of Tables**

	<b>Page</b>
Table 1 – List of the 24 topic groups, their corresponding deliverables and status at the end of the FG-AI4H .....	8

## **List of Figures**

	<b>Page</b>
Figure 1 – Interaction between topic groups ("vertical") and working groups ("horizontal").....	7

# ITU-T FG-AI4H Deliverable DEL10

## AI4H use cases: Topic description documents

### Summary

The deliverable No. 10 "*AI4H use cases: Topic description documents*" of the ITU/WHO Focus Group on Artificial Intelligence for Health (FG-AI4H) serves as an introduction to the 24 use cases, respectively topic groups and their deliverables (topic description documents). The topic groups involve stakeholders from the medical field and ML/AI domain who are dedicated to specific health topics that could benefit from AI. Under the guidance of the topic group driver, the members of each topic group develop a topic description document (TDD) that contains all requirements of the AI-related benchmarking for their health topic. The TDD describes the background of the health topic in the context of AI and the structure, operations, and considerations of the topic group. This document provides an overview of the various TDDs developed by FG-AI4H topic groups.

In total, 24 topic groups were established by March 2023. The topic groups represent various health topics in the context of AI including medical fields, e.g., histopathology, cardiology, neurology, radiology. Table 1 includes an overview of all topic groups and their TDDs.

Each topic group works on a TDD that represents the ongoing work of the benchmarking process for the specific health topic. The development of the TDD is an iterative process and updates are presented at each meeting. All topic groups use the same TDD template that reflects the requirements for the benchmarking process defined by the FG-AI4H working groups on regulation, ethics, clinical evaluation, data and AI solution handling and assessment methods.

More information about the topic groups and TDDs can be found on the FG-AI4H website (<https://itu.int/en/ITU-T/focusgroups/ai4h>) and on the collaboration site in the list of deliverables including most recent TDD versions (DEL10.01-10.24)).

### 1 Scope

This document introduces the topic description documents of the ITU/WHO Focus Group on AI for Health. Further, it provides an overview of the status of the various topic groups, their TDDs and the TDD template.

### 2 References

Approved Deliverables are published at the following page: <https://www.itu.int/pub/T-FG-AI4H>. Archived TDDs are available from the FG-AI4H deliverables repository at <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx>.

[DEL10.01]	FG-AI4H Deliverable DEL10.1, <i>cardiovascular disease management (TG-Cardio)</i> .
[DEL10.02]	FG-AI4H Deliverable DEL10.2, <i>Dermatology (TG-Derma)</i> .
[DEL10.03]	FG-AI4H Deliverable DEL10.3, <i>Diagnosis of bacterial infection and anti-microbial resistance (TG-AMR)</i> .
[DEL10.04]	FG-AI4H Deliverable DEL10.4, <i>Falls among the elderly (TG-Falls)</i> .
[DEL10.05]	FG-AI4H Deliverable DEL10.5, <i>Histopathology (TG-Histo)</i> .
[DEL10.06]	FG-AI4H Deliverable DEL10.6, <i>Malaria detection (TG-Malaria)</i> .
[DEL10.07]	FG-AI4H Deliverable DEL10.7, <i>Maternal and child health (TG-MCH)</i> .
[DEL10.08]	FG-AI4H Deliverable DEL10.8, <i>Neurological disorders (TG-Neuro)</i> .

[DEL10.09]	FG-AI4H Deliverable DEL10.9, <i>Ophthalmology (TG-Ophthalmology)</i> .
[DEL10.10]	FG-AI4H Deliverable DEL10.10, <i>Outbreak detection (TG-Outbreaks)</i> .
[DEL10.11]	FG-AI4H Deliverable DEL10.11, <i>Psychiatry (TG-Psy)</i> .
[DEL10.12]	FG-AI4H Deliverable DEL10.12, <i>Radiology (TG-Radiology)</i> .
[DEL10.13]	FG-AI4H DEL10.13, <i>Snakebite and snake identification (TG-Snake)</i> .
[DEL10.14]	FG-AI4H Deliverable DEL10.14, <i>Symptom assessment (TG-Symptom)</i> .
[DEL10.15]	FG-AI4H Deliverable DEL10.15, <i>Tuberculosis (TG-Tuberculosis)</i> .
[DEL10.16]	FG-AI4H Deliverable DEL10.16, <i>Volumetric chest computed tomography (TG-Diagnostic CT)</i> .
[DEL10.17]	FG-AI4H Deliverable DEL10.17, <i>Dental diagnostics and digital dentistry (TG-Dental)</i> .
[DEL10.18]	FG-AI4H Deliverable DEL10.18, <i>AI-based detection of falsified medicine (TG-FakeMed)</i> .
[DEL10.19]	FG-AI4H Deliverable DEL10.19, <i>Primary and secondary Diabetes risk prediction (TG-Diabetes)</i> .
[DEL10.20]	FG-AI4H Deliverable DEL10.20, <i>AI for endoscopy (TG-Endoscopy)</i> .
[DEL10.21]	FG-AI4H Deliverable DEL10.21, <i>AI for Musculoskeletal medicine (TG-MSK)</i> .
[DEL10.22]	FG-AI4H Deliverable DEL10.22, <i>AI for human reproduction and fertility (TG-Fertility)</i> .
[DEL10.23]	FG-AI4H Deliverable DEL10.23, <i>Traditional Medicine (TG-TM)</i> .
[DEL10.24]	FG-AI4H Deliverable DEL10.24, <i>AI for point-of-care diagnostics (TG-POC)</i> .
[FGAI4H-I-004]	FG-AI4H TDD template editors, <i>TDD template: Proposed draft update</i> , Meeting I, Online, 7-8 May 2020. <a href="https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-004.docx">https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-004.docx</a> and <a href="https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-004-A01.pptx">https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-004-A01.pptx</a> (presentation).
[FGAI4H-C-105]	FG-AI4H, <i>Generic topic description document (TDD) outline</i> , Meeting C, Lausanne, 22-25 January 2019. <a href="https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-C-105.docx">https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-C-105.docx</a>
[FG-AI4H-J-105]	FG-AI4H, <i>Updated Topic description document (TDD) template</i> , Meeting J, Online, 30 Sep. - 2 Oct. 2020. <a href="https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx">https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx</a>

### 3 Terms and definitions

This document does not rely on terms defined elsewhere. It also does not define any new terms.

### 4 Abbreviations

AI	Artificial Intelligence
AI4H	Artificial Intelligence for Health
CE	Clinical evaluation
CfP	Call for Participation (to join a Topic Group)

DAISAM	Data and AI solution assessment methods
DASH	Data and AI solution handling
FG-AI4H	Focus Group on Artificial Intelligence for Health
ITU	International Telecommunication Union
MCH	Mother and child health
ML	Machine Learning
MSK	Musculoskeletal
RC	Regulatory considerations
TDD	Topic Description Document
TG	Topic Group
WG	Working Group
WHO	World Health Organization

## 5 Introduction

This draft gives an overview of the various topic description documents developed by the ITU/WHO Focus Group on AI for Health, which is a collaboration between the International Telecommunication Union (ITU) and the World Health Organization (WHO). The initiative is developing a framework for the standardized benchmarking of AI technology for health and operates at the interface of multiple fields, including AI, machine learning, medicine, public health, regulation, statistics, evaluation, and ethics.

The activities of the initiative include topic groups that take charge of specific health domains with corresponding AI/ML tasks. Under the guidance of a topic group driver each topic group develops a topic description document (TDD). Each TDD introduces the health topic being explored, explains the role of AI within this context, and proposes a procedure to benchmark AI models developed for a specific task. The TDDs also provide information about the structure, operations, features, and considerations of each topic group. The TDDs are written in a collaborative effort and are iteratively improved over time by all members of a topic group. Topic group members are stakeholders from the medical field and the AI/ML domain dedicated to specific health topics that could benefit from AI.

A generic outline of the topic description documents was proposed in the TDD template document [FGAI4H-C-105](#) and has been updated during meeting J as found in [FG-AI4H-J-105](#). The latter document serves as the final FG-AI4H TDD template and is applicable for all topic groups.

The TDD content can be categorized into four components:

- *Topic background:* What is the health topic considered? Is this of relevance (e.g., does it affect a large and diverse transect of the global population and/or represent a challenge to the healthcare community)? What is the current gold standard for addressing this health topic? Could AI provide a tangible improvement (e.g., in terms of better care, better results, and/or savings in cost and time)? Are there existing AI solutions for this health topic? Has already been worked towards the benchmarking of the aforementioned solutions?
- *Topic group features:* What subtopics belong to the topic group? How do members of the topic group participate and interact (e.g., via online communication, regular meetings)? What is the status update for this topic group to each meeting?
- *Topic group operations:* How will the benchmarking be executed (e.g., with regard to input/output data, data labelling/annotation, test dataset acquisition, scores/metrics, architecture, and data sharing policies)? How will the outcome of the benchmarking be

disseminated? How will feedback be implemented? Are there existing benchmarking processes of AI systems that are of interest for the benchmarking of this topic group (e.g., publications, frameworks)? How is the retirement after benchmarking of the AI task managed?

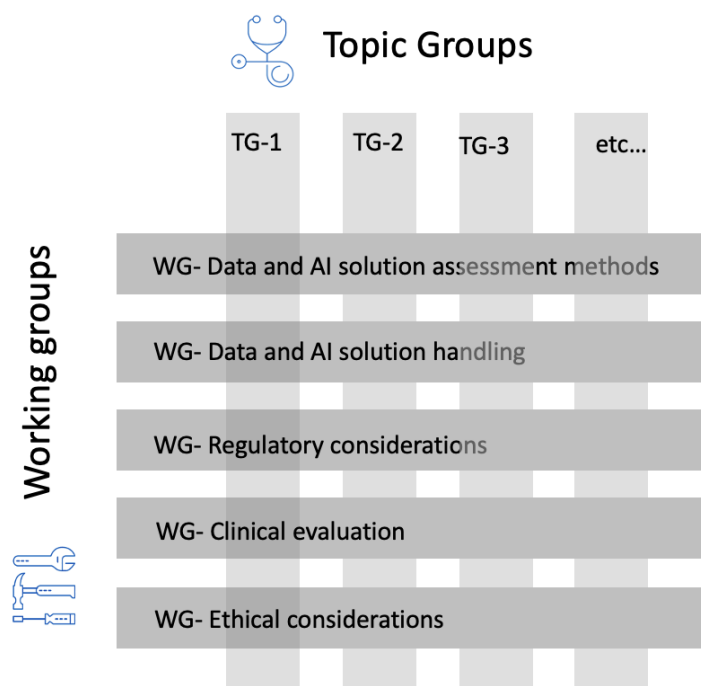
- *Topic group considerations:* How are ethics and legalities addressed by the topic group? What are the regulatory considerations that apply for this topic group (e.g., what are existing regulatory frameworks? Which regulatory requirements are used for the benchmarking of the AI4H system in this topic group?)

In the end, an annex for a declaration of conflict of interest by each contributor to the TG is provided.

As progress was made within the topic groups, revised versions of the TDDs were developed. These were submitted as input documents and presented at each meeting by the topic group driver(s). The changes were discussed and integrated into the improved version and made available from the FG-AI4H deliverables collaboration site page, <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx>.

In parallel to the topic groups, there were working groups that are dedicated to overarching themes that affect all topic groups in a specific aspect of an AI health technology, for example, the *Working Group on Regulatory Considerations on AI for Health* and the *Working Group on Ethical Considerations on AI for Health*. Working groups defined best practices, established processes and related policies, defined ways to successfully benchmark AI for health algorithms and created reference documents. The TDD template incorporates these important considerations for the benchmarking to facilitate the exchange of information.

Figure 1 illustrates the interaction between FG-AI4H topic groups ("vertical") and working groups ("horizontal").



**Figure 1 – Interaction between topic groups ("vertical") and working groups ("horizontal")**

## 5.1 TDD template update

During the further development and the subsequent activities within the working groups and topic groups, an update to the generic template in [FGAI4H-C-105] became necessary and agreed in principle at meeting H (Brasilia, 21-24 January 2020). The objective was to create a consistent



structure of the TDD template that would work for all topic groups, would establish clear connections between horizontal deliverables and the health use case at hand, and would facilitate the review process of the TDDs.

A revised version of the TDD template document was initially reviewed in Meeting I (online, May 2020) [FGAI4H-I-004] that included additional sections, change notes, mentioning of the contributors, restructuring of some sections, lists of figures and tables, consideration of health economics and regulation, and a list of optional sub-topics.

During this meeting, FG-AI4H members agreed on further adjustments and more detailed information about the requirements defined by the working groups and their output documents (Deliverables 1 to 9) on regulatory and ethical considerations, on clinical evaluation and on the data related aspects (e.g., data acquisition, handling, annotation, storing). Feedback from editors of Deliverables 1 to 9 was implemented in the TDD template update and the final document was reviewed at FG-AI4H meeting J (Online, September 2020). After passing the FG-AI4H approval process, the updated TDD template was finally allocated as [FG-AI4H-J-105]. TDD editors were asked then to update the existing deliverables to the new document structure.

The four components of the TDD (TG background, TG features, TG operations, and TG considerations) described before in section 5 were complemented and updated, including:

- a new structure with more guidance
- an updated table of contents
- new sections, e.g., regulatory section
- updated sections, e.g., ethical considerations section
- new structuring of the subtopics
- new structuring and description of the benchmarking versions
- a more detailed description of the benchmarking process

## 6 Structure

This document DEL 10 "AI4H use cases: Topic Description Documents" serves as an introduction to a set of documents that describe several use cases of a specific health topic in the context of AI.

Table 1 gives an overview of the use cases/topic groups, their topic group drivers, and the document number of the TDD. Only the TGs marked with Status "A" completed the 1st edition of their TDDs; the other TGs did not produce an approved deliverable and were archived.

Approved TDDs are published in the collection of FG-AI4H deliverables, see <https://itu.int/pub/T-FG-AI4H>. Archived TDDs are available from the FG-AI4H deliverables repository at <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx>. More information about the topic groups and TDDs can be found on the FG-AI4H website (<https://itu.int/en/ITU-T/focusgroups/ai4h>).

**Table 1 – List of the 24 topic groups, their corresponding deliverables and status at the end of the FG-AI4H**

N°	Topic group	Topic driver(s)	Status*
DEL10.1	Cardiovascular disease management (TG-Cardio)	<a href="#">Benjamin Muthambi</a> (Institutes of Epidemiology & Public Health, South Africa, and Watif Health, South Africa)	X

DEL10.2	Dermatology (TG-Derma)	<a href="#">Harsha Jayakody</a> (Flash Health, Sri Lanka), <a href="#">Ivy Lee</a> (American Academy of Dermatology, USA)	A
DEL10.3	Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria)	<a href="#">Nada Malou</a> (Médecins Sans Frontières, France)	X
DEL10.4	Falls among the elderly (TG-Falls)	<a href="#">Pierpaolo Palumbo</a> (University of Bologna, Italy)	A
DEL10.5	Histopathology (TG-Histo)	<a href="#">Frederick Klauschen</a> (LMU Munich & Charité Berlin, Germany)	X
DEL10.6	Malaria detection (TG-Malaria)	<a href="#">Rose Nakasi</a> (Makerere University, Uganda)	A
DEL10.7	Maternal and child health (TG-MCH)	<a href="#">Alexandre Chiavegatto Filho</a> (University of São Paulo, Brazil)	A
DEL10.8	Neurological disorders (TG-Neuro)	<a href="#">Marc Lecoultré</a> (MLlab.AI, Switzerland) and <a href="#">Ferath Kherif</a> (University Hospital of Lausanne/CHUV, Switzerland)	A
DEL10.9	Ophthalmology (TG-Ophthalmology)	<a href="#">Arun Shroff</a> (MedIndia)	A
DEL10.10	Outbreak detection (TG-Outbreaks)	<a href="#">Auss Abbood</a> and <a href="#">Alexander Ullrich</a> (Robert Koch Institute, Germany); <a href="#">Khahlil Louisy</a> and <a href="#">Alexander Radunsky</a> (Institute for Technology & Global Health, ITGH, USA)	A
DEL10.11	Psychiatry (TG-Psy)	<a href="#">Nicolas Langer</a> (Swiss Federal Institute of Technology/ETH Zurich, Switzerland)	X
DEL10.12	AI for radiology (TG-Radiology)	<a href="#">Darlington Ahiale Akogo</a> (minoHealth AI Labs, Ghana)	A
DEL10.13	Snakebite and snake identification (TG-Snake)	<a href="#">Rafael Ruiz de Castaneda</a> (UniGE, Switzerland)	X
DEL10.14	Symptom assessment (TG-Symptom)	<a href="#">Henry Hoffmann</a> (Ada Health, Germany) and <a href="#">Martin Cansdale</a> (Healthily, UK)	A
DEL10.15	Tuberculosis (TG-TB)	<a href="#">Manjula Singh</a> (ICMR, India)	A
DEL10.16	Volumetric chest CT (TG-DiagnosticCT)	<a href="#">Kuan Chen</a> (Infervision, China)	X
DEL10.17	Dental diagnostics and digital dentistry (TG-Dental)	<a href="#">Falk Schwendicke</a> and <a href="#">Joachim Krois</a> (Charité Berlin, Germany); <a href="#">Tarry Singh</a> (deepkapha.ai, Netherlands)	A
DEL10.18	Falsified Medicine (TG-FakeMed)	<a href="#">Franck Verzeffé</a> (TrueSpec-Africa, DRC)	X
DEL10.19	Primary and secondary diabetes prediction (TG-Diabetes)	<a href="#">Andrés Valdivieso</a> (Anastasia.ai, Chile)	X
DEL10.20	AI for endoscopy (TG-Endoscopy)	<a href="#">Jianrong Wu</a> (Tencent Healthcare, China)	A
DEL10.21	AI for musculoskeletal medicine (TG-MSK)	<a href="#">Peter Grinbergs</a> (EQL, UK), <a href="#">Mark Elliott</a> (Warwick University, UK)	A
DEL10.22	AI for human reproduction and fertility (TG-Fertility)	<a href="#">Susanna Brandi</a> , <a href="#">Eleonora Lippolis</a> , (Merck KGaA, Darmstadt, Germany)	X
DEL10.23	AI for traditional medicine (TG-TM)	<a href="#">Saketh Ram Thrigulla</a> (Ministry of Ayush, India)	A
DEL10.24	AI for point-of care diagnostics (TG-POC)	<a href="#">Nina Linder</a> (University of Helsinki, Finland)	A

\* **Status:** A: An approved TDD was produced; X: The TG was archived.

## 7 Resources of all topic groups

This section contains an overview of the resources of the topic groups to foster collaboration. This includes the topic description documents, "Call for Topic Group Participation" (CfTGP), E-Mail of the topic driver(s), and the individual collaboration sites of the topic groups. More information about the topic groups and TDDs can be found on the FG-AI4H website (<https://itu.int/en/ITU-T/focusgroups/ai4h>) and on the collaboration site in the list of deliverables including the most recent TDD versions (DEL10.01-10.24) at <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx>).

### 7.1 Cardiovascular disease risk prediction (TG-Cardio)

*Topic description document:* DEL10.01

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Cardio.pdf>

*Topic driver:* Benjamin Muthambi (Institutes of Epidemiology & Public Health (IEPH), South Africa, [brm5@caa.columbia.edu](mailto:brm5@caa.columbia.edu))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Cardio.aspx>

### 7.2 Dermatology (TG-Derma)

*Topic description document:* DEL10.02

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Derma.pdf>

*Topic driver:* Harsha Jayakody (Flash Health, Sri Lanka, [harsha@flash.health](mailto:harsha@flash.health)), Ivy Lee (American Academy of Dermatology)

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Derma.aspx>

### 7.3 Diagnosis of bacterial infection and anti-microbial resistance (AMR) (TG-Bacteria)

*Topic description document:* DEL10.03

*CfTGP:* -

*Topic driver:* Nada Malou (Médecins Sans Frontières (MSF), France, [nada.malou@paris.msf.org](mailto:nada.malou@paris.msf.org))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Bacteria.aspx>

### 7.4 Falls among the elderly (TG-Falls)

*Topic description document:* DEL10.04

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Falls.pdf>

*Topic driver(s):*

- Pierpaolo Palumbo (University of Bologna, Italy, [pierpaolo.palumbo@unibo.it](mailto:pierpaolo.palumbo@unibo.it))
- Inês Sousa (Fraunhofer Portugal, Portugal, [ines.sousa@fraunhofer.pt](mailto:ines.sousa@fraunhofer.pt))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Falls.aspx>

### 7.5 Histopathology (TG-Histo)

*Topic description document:* DEL10.05

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Histo.pdf>

*Topic driver:* Frederick Klauschen (Ludwig Maximilians University Munich & Charité, Germany, [frederick.klauschen@charite.de](mailto:frederick.klauschen@charite.de))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Histo.aspx>

## **7.6 Malaria detection (TG-Malaria)**

Topic description document: DEL10.06

CfTGP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Malaria.pdf>

Topic driver: Rose Nakasi (Makerere University, Uganda, [g.nakasi.rose@gmail.com](mailto:g.nakasi.rose@gmail.com))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Malaria.aspx>

## **7.7 Maternal and child health (TG-MCH)**

Topic description document: DEL10.07

CfTGP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-MCH.pdf>

Topic driver: Alexandre Chiavegatto Filho (University of Sao Paulo, Brazil, [alexdiasporto@usp.br](mailto:alexdiasporto@usp.br))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-MCH.aspx>

## **7.8 Neurological disorders (TG-Neuro)**

Topic description document: DEL10.08

CfTGP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Neuro.pdf>

Topic drivers:

- Ferath Kherif (University Hospital of Lausanne (CHUV), Switzerland), [ferath.kherif@chuv.ch](mailto:ferath.kherif@chuv.ch)
- Marc Lecoultre (ML Labs.AI, Switzerland, [ml@mllab.ai](mailto:ml@mllab.ai))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Neuro.aspx>

## **7.9 Ophthalmology (TG-Ophthalmology)**

Topic description document: DEL10.09

CfTGP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Ophthalmology.pdf>

Topic driver: Arun Shroff (Medindia/Xtend.ai, India/USA), [arunshroff@gmail.com](mailto:arunshroff@gmail.com))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Ophthalmology.aspx>

## **7.10 Outbreak detection (TG-Outbreaks)**

Topic description document: DEL10.10

CfTGP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Outbreaks.pdf>

Topic drivers:

- Auss Abbood (Robert Koch Institute (RKI), Germany, [AbboodA@rki.de](mailto:AbboodA@rki.de))
- Alexander Ulrich (Robert Koch Institute (RKI), Germany, [ullricha@rki.de](mailto:ullricha@rki.de))
- Alexander Radunsky (Institute for Technology & Global Health (ITGH), Harvard/MIT, USA, [aradunsky@mail.harvard.edu](mailto:aradunsky@mail.harvard.edu))
- Khahlil Louisy (Institute for Technology & Global Health (ITGH), Harvard/MIT, USA, [klouisy@hks.harvard.edu](mailto:klouisy@hks.harvard.edu))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Outbreaks.aspx>

### 7.11 Psychiatry (TG-Psy)

*Topic description document:* DEL10.11

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Psy.pdf>

*Topic driver:* Nicolas Langer (ETH/ Swiss Federal Institute of Technology Zurich, Switzerland, [n.langer@psychologie.uzh.ch](mailto:n.langer@psychologie.uzh.ch))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Psy.aspx>

### 7.12 Radiology (TG-Radiology)

*Topic description document:* DEL10.12

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Radiology.pdf>

*Topic driver:* Darlington Ahiale Akogo (minoHealth AI Labs, Ghana, [darlington@gudra-studio.com](mailto:darlington@gudra-studio.com))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Radiology.aspx>

### 7.13 Snakebite and snake identification (TG-Snake)

*Topic description document:* DEL10.13

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Snake.pdf>

*Topic driver:* Rafael Ruiz de Castaneda (University of Geneva, Switzerland, [Rafael.RuizDeCastaneda@unige.ch](mailto:Rafael.RuizDeCastaneda@unige.ch))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Snake.aspx>

### 7.14 Symptom assessment (TG-Symptom)

*Topic description document:* DEL10.14

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Symptom.pdf>

*Topic drivers:*

- Henry Hoffmann (Ada Health, Germany, [henry.hoffmann@ada.com](mailto:henry.hoffmann@ada.com))
- Martin Cansdale (Healthily, UK, [martin@livehealthily.com](mailto:martin@livehealthily.com))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Symptom.aspx>

### 7.15 Tuberculosis (TG-TB)

*Topic description document:* DEL10.15

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-TB.pdf>

*Topic driver:* Manjula Singh (Indian Council of Medical Research (ICMR), India, [singhmanjula.hq@icmr.gov.in](mailto:singhmanjula.hq@icmr.gov.in))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-TB.aspx>

### 7.16 Volumetric chest computed tomography (TG-DiagnosticCT)

*Topic description document:* DEL10.16

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-DiagnosticCT.pdf>

*Topic driver:* Kuan Chen (Infervision, China, [ckuan@infervision.com](mailto:ckuan@infervision.com))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-DiagnosticCT.aspx>

### **7.17 Dental diagnostics and digital dentistry (TG-Dental)**

Topic description document: DEL10.17

CfTGP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Dental.pdf>

Topic drivers:

- Falk Schwendicke (Charité Berlin, Germany, [falk.schwendicke@charite.de](mailto:falk.schwendicke@charite.de))
- Joachim Krois (dentalXrai, Germany, [joachim.krois@dentalxr.ai](mailto:joachim.krois@dentalxr.ai))
- Tarry Singh (deepkapha.ai, Netherlands, [tarry.singh@deepkapha.ai](mailto:tarry.singh@deepkapha.ai))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Dental.aspx>

### **7.18 AI-based detection of falsified medicine (TG-FakeMed)**

Topic description document: DEL10.18

CfP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CFP-TG-FakeMed.pdf>

Topic driver: Franck Verzefé (TrueSpec-Africa, DRC, [fverzefe@gmail.com](mailto:fverzefe@gmail.com))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-FakeMed.aspx>

### **7.19 Primary and secondary Diabetes risk prediction (TG-Diabetes)**

Topic description document: DEL10.19

CfP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Diabetes.pdf>

Topic driver: Andrés Valdivieso (Anastasia.ai, Chile, [avaldivieso@anastasia.ai](mailto:avaldivieso@anastasia.ai))

Collab. site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Diabetes.aspx>

### **7.20 AI and endoscopy (TG-Endoscopy)**

Topic description document: DEL10.20

CfTGP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Endoscopy.pdf>

Topic driver: Jianrong Wu (Tencent Healthcare, China, [edwinjrwu@tencent.com](mailto:edwinjrwu@tencent.com))

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Endoscopy.aspx>

### **7.21 Musculoskeletal Medicine (TG-MSK)**

Topic description document: DEL10.21

CfTGP: <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-MSK.pdf>

Topic Co-drivers (collectively reachable at [tgmskorg@googlegroups.com](mailto:tgmskorg@googlegroups.com)):

- Peter Grinbergs (EQL, UK)
- Mark Elliott (University of Warwick, UK)

Collaboration site: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-MSK.aspx>

### **7.22 AI for human reproduction and fertility (TG-Fertility)**

Topic description document: DEL10.22

*CfP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-Fertility.pdf>

*Topic Co-drivers:*

- Susanna Brandi (Merck KGaA, Germany, [susanna.brandi@merckgroup.com](mailto:susanna.brandi@merckgroup.com))
- Eleonora Lippolis (Merck KGaA, Germany, [eleonora.lippolis@merckgroup.com](mailto:eleonora.lippolis@merckgroup.com))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-Fertility.aspx>

### **7.23 Traditional Medicine (TG-TM)**

*Topic description document:* DEL10.23

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-TM.pdf>

*Topic driver:* Saketh Thrigulla (Ministry of Ayush, India, [dr.saketram@gmail.com](mailto:dr.saketram@gmail.com))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-TM.aspx>

### **7.24 AI for point-of-care diagnostics (TG-POC)**

*Topic description document:* DEL10.24

*CfTGP:* <https://itu.int/en/ITU-T/focusgroups/ai4h/Documents/tg/CfP-TG-POC.pdf>

*Topic driver:* Nina Linder (University of Helsinki, Finland, [nina.linder@helsinki.fi](mailto:nina.linder@helsinki.fi))

*Collaboration site:* <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-POC.aspx>

---