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| A black and white logo  Description automatically generated with low confidence | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2022-2024 | FG-AI4H-P-101 |
| **ITU-T Focus Group on AI for Health** |
| **Original: English** |
| **WG(s):** | Plen | Helsinki, 20-22 September 2022 |
| **DOCUMENT** |
| **Source:** | FG-AI4H |
| **Title:** | Report of the 16th meeting (Meeting P) of the Focus Group on Artificial Intelligence for Health (Helsinki, 20-22 September 2022) |
| **Purpose:** | Admin |
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| **Abstract:** | This document contains the report of the 16th meeting of the ITU-T Focus Group on Artificial Intelligence for Health (FG-AI4H), held in Helsinki, 20-22 September 2022. |

Executive Summary

The 16th meeting of the FG-AI4H took place in Helsinki, 20-22 September 2022 to review updates to its ten deliverables including sub-deliverables, and review progress by the existing 24 topic groups.

One important topic of discussion was the ITU/WHO Global Initiative on AI for Health, as the platform to continue and scale up the work developed by the FG-AI4H. Based on the initial views exchanged at the Meeting O, a refined proposal was reviewed and supported at this meeting P.

Other important agreements were the agreement of three Deliverables (see below).

**FG-AI4H** **leadership**: there were no changes at this meeting.

**Topic groups:**

* A new **TG on traditional medicine** (TG-TM) was created at this meeting. The Topic Driver of the new group will be Rajesh Kotecha (Ministry of Ayush, Government of India).
* The new TG driver for **TG-Derma** is Harsha Jayakody (Flash Health, Sri Lanka).
* **TG-Dental** co-driver Joachim Krois changed affiliation (Dental XR AI, Germany).

**Deliverables update:**

The following Deliverables were agreed at this meeting. All other available deliverables were reviewed, their latest version is found in the [FG-AI4H collaboration site](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx).

* [P-038-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038-R01.docx): DEL 0.1 *Common unified terms in artificial intelligence for health* (after a two-week consultation period). It will be issued as P-201.
* [P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx): DEL2 *Overview of regulatory considerations on artificial intelligence for health*. It will be issued as P-202.
* [O-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-036.docx): DEL2.2 *Good practices for health applications of machine learning: Considerations for manufacturers and regulators*. It will be issued as P-203.

All other latest version is found in the [FG-AI4H collaboration site](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx).

The following updated **output documents** were agreed:

* [P-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-102.docx): Updated call for proposals: use cases, benchmarking, and data
* [P-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-200.docx): Updated list of FG-AI4H deliverables

The following documents were reconfirmed:

* [F-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-103.docx): Updated FG-AI4H data acceptance and handling policy
* [C-104](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-C-104.docx): Thematic classification scheme
* [F-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-105.docx): ToRs for the WG-Experts and call for experts
* [F-106](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-106.docx): Guidelines on FG-AI4H online collaboration tools
* [M-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-107.docx): FG-AI4H onboarding document
* [FG-AI4H Whitepaper](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FG-AI4H_Whitepaper.pdf) ([K-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-002.docx))
* [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx): TDD Template
* [J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-103.docx): CfTGP template

The meeting had 138 participants (101 remote) over the various days and reviewed 56 documents (not counting attachments).

No outgoing reply LSs were prepared.

A list of the decisions taken at the meeting is found in [Annex E](file:///C%3A%5CUsers%5Cbanno%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5C5C9RKHVL%5CFGAI4H-O-101-Draft-v3.docx#AnnexE) of the report.

The next meeting of the FG-AI4H is planned to be held in Douala, Cameroon, 6-9 December 2022. A workshop is planned on the first day of the event. Details will be communicated in the FG-AI4H webpage and mailing list.

**CONTENTS**

[1 Opening 6](#_Toc116554585)

[2 Approval of agenda 6](#_Toc116554586)

[3 Documentation and allocation 6](#_Toc116554587)

[4 IPR 6](#_Toc116554588)

[5 Management updates 6](#_Toc116554589)

[6 Approval of Meeting O outcomes and updates 6](#_Toc116554590)

[7 Review of incoming liaison statements 6](#_Toc116554591)

[7.1 JCA-DCC 6](#_Toc116554592)

[7.2 JCA-DCC 7](#_Toc116554593)

[7.3 FG-TBFxG 7](#_Toc116554594)

[7.4 FG-AI4A 7](#_Toc116554595)

[7.5 FG-AI4EE 7](#_Toc116554596)

[8 Information on AI-related activities 7](#_Toc116554597)

[9 Horizontal and strategic topics 7](#_Toc116554598)

[9.1 Discussion on transition to ITU/WHO Global Initiative on AI for Health 7](#_Toc116554599)

[9.2 Generating evidence for artificial intelligence based medical devices 8](#_Toc116554600)

[10 Working Group updates 9](#_Toc116554601)

[10.1 Data and AI solution assessment methods (WG-DAISAM) 9](#_Toc116554602)

[10.2 Data and AI solution handling (WG-DASH) 10](#_Toc116554603)

[10.3 Operations (WG-O) 10](#_Toc116554604)

[10.4 Ethical considerations on AI for health (WG-Ethics) 10](#_Toc116554605)

[10.5 Regulatory considerations on AI for health (WG-RC) 11](#_Toc116554606)

[10.6 Clinical Evaluation (WG-CE) 11](#_Toc116554607)

[10.7 Collaborations and Outreach (WG-CO) 11](#_Toc116554608)

[10.8 Ad-hoc group on digital technologies for COVID health emergency (AHG-DT4HE) 11](#_Toc116554609)

[11 FG-AI4H Open Code Initiative 12](#_Toc116554610)

[12 FG-AI4H deliverables 13](#_Toc116554611)

[12.1 Process for assessing quality of draft FG-AI4H deliverables 13](#_Toc116554612)

[12.2 List of deliverables 13](#_Toc116554613)

[12.3 New deliverable proposals 17](#_Toc116554614)

[12.4 DEL00: Overview of the FG-AI4H deliverables 17](#_Toc116554615)

[12.5 DEL0.1: Common unified terms 17](#_Toc116554616)

[12.6 DEL01: AI4H ethics considerations 17](#_Toc116554617)

[12.7 DEL02: AI4H regulatory best practices 17](#_Toc116554618)

[12.7.1 DEL02.1: Mapping of IMDRF essential principles to AI for health software 18](#_Toc116554619)

[12.7.2 DEL02.2: Good practices for health applications of machine learning: Considerations for manufacturers and regulators 18](#_Toc116554620)

[12.8 DEL03: AI4H requirements specifications 18](#_Toc116554621)

[12.9 DEL04: AI software life cycle specification 18](#_Toc116554622)

[12.10 DEL05: Data specification 19](#_Toc116554623)

[12.11 DEL05.1: Data requirements 19](#_Toc116554624)

[12.11.1 DEL05.2: Data acquisition 19](#_Toc116554625)

[12.11.2 DEL05.3: Data annotation specification 19](#_Toc116554626)

[12.11.3 DEL05.4: Training and test data specification 20](#_Toc116554627)

[12.11.4 DEL05.5: Data handling 20](#_Toc116554628)

[12.11.5 DEL05.6: Data sharing practices 20](#_Toc116554629)

[12.12 DEL06: AI Training best practices specification 20](#_Toc116554630)

[12.13 DEL07: AI for health evaluation considerations 20](#_Toc116554631)

[12.13.1 DEL07.1: AI4H evaluation process description 20](#_Toc116554632)

[12.13.2 DEL07.2: AI technical test specification 21](#_Toc116554633)

[12.13.3 DEL07.3: Data and artificial intelligence assessment methods (DAISAM) reference 21](#_Toc116554634)

[12.13.4 DEL07.4: Clinical evaluation of AI for health 21](#_Toc116554635)

[12.13.5 DEL07.5: Assessment Platform 22](#_Toc116554636)

[12.14 DEL08: AI4H scale-up and adoption 22](#_Toc116554637)

[12.15 DEL09: AI4H applications and platforms 22](#_Toc116554638)

[12.15.1 DEL09.1: Mobile Applications 22](#_Toc116554639)

[12.15.2 DEL09.2: Cloud-based AI applications 22](#_Toc116554640)

[12.16 DEL10: AI4H use cases: Topic Description Documents 23](#_Toc116554641)

[13 Topic Group updates 23](#_Toc116554642)

[13.1 Template updates: TDD, CfTGP 23](#_Toc116554643)

[13.2 TG-Cardio (Use of AI in Cardiovascular Disease Management) 26](#_Toc116554644)

[13.3 TG-Derma (Dermatology) 26](#_Toc116554645)

[13.4 TG-Bacteria (Diagnoses of bacterial infection and anti-microbial resistance, AMR) 26](#_Toc116554646)

[13.5 TG-Diagnostic CT (Volumetric chest computed tomography) 26](#_Toc116554647)

[13.6 TG-Dental (Dental diagnostics and digital dentistry) 27](#_Toc116554648)

[13.7 TG-FakeMed: AI-based detection of falsified medicine 27](#_Toc116554649)

[13.8 TG-Falls (Falls amongst the elderly) 27](#_Toc116554650)

[13.9 TG-Histo (Histopathology) 28](#_Toc116554651)

[13.10 TG-Malaria: Malaria detection 28](#_Toc116554652)

[13.11 TG-MCH: Maternal and child health 28](#_Toc116554653)

[13.12 TG-Neuro: Neurological disorders 28](#_Toc116554654)

[13.13 TG-Ophthalmo (Ophthalmology) 29](#_Toc116554655)

[13.14 TG-Outbreaks (AI for Outbreak Detection) 29](#_Toc116554656)

[13.15 TG-Psy (Psychiatry) 29](#_Toc116554657)

[13.16 TG-Snake (Snakebite and snake identification) 29](#_Toc116554658)

[13.17 TG-Symptom (Symptom assessment) 30](#_Toc116554659)

[13.18 TG-TB (Tuberculosis) 30](#_Toc116554660)

[13.19 TG-Radiology (Radiology) 30](#_Toc116554661)

[13.20 TG-Diabetes (Primary and secondary diabetes prediction) 30](#_Toc116554662)

[13.21 TG-Endoscopy (AI for endoscopy) 31](#_Toc116554663)

[13.22 TG-MSK (AI for musculoskeletal medicine) 31](#_Toc116554664)

[13.23 TG-Fertility (AI for human reproduction and fertility) 31](#_Toc116554665)

[13.24 TG-POC (AI for point-of care diagnostics) 31](#_Toc116554666)

[14 Proposals for new topic areas 32](#_Toc116554667)

[14.1 Proposed new TG on traditional medicine 32](#_Toc116554668)

[15 Review / reconfirmation of previous output documents 32](#_Toc116554669)

[16 Working methods 33](#_Toc116554670)

[17 Outcomes of this meeting 33](#_Toc116554671)

[17.1 WG updates 33](#_Toc116554672)

[17.2 TG updates 33](#_Toc116554673)

[17.3 Output liaison statements 33](#_Toc116554674)

[17.4 Output documents 33](#_Toc116554675)

[17.5 Deliverables and parent group reporting 33](#_Toc116554676)

[18 Future work 34](#_Toc116554677)

[18.1 Schedule of future FG meetings and workshops 34](#_Toc116554678)

[18.2 Work plan and timeline 34](#_Toc116554679)

[18.3 Interim activities (online) 34](#_Toc116554680)

[19 Promotion and outreach 34](#_Toc116554681)

[20 A.O.B. 35](#_Toc116554682)

[21 Closing 35](#_Toc116554683)

[Annex A: Agenda 36](#_Toc116554684)

[Annex B: Documentation 41](#_Toc116554685)

[Annex C: List of participants 45](#_Toc116554686)

[Annex D: Summary of FG-AI4H resources and electronic working methods 53](#_Toc116554687)

[Annex E Summary of decisions 57](#_Toc116554688)

# Opening

The 16th meeting (P) of the FG-AI4H took place in Helsinki, 20-22 September 2022 chaired by the FG-AI4H Chairman, Mr Thomas Wiegand (Fraunhofer HHI, Germany). He welcomed the participants and presented an overview of the FG-AI4H work, as found in [P-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-002.pptx).

# Approval of agenda

The agenda in [P-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-001.docx) (Agenda) was approved. Various updates were issued during the meeting, the final version being found in [P-001-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-001-R01.docx).

The time allocation for the presentation of meeting documents was maintained live though the link: <https://docs.google.com/spreadsheets/d/1WY2x3m5ToAGvvfMKogKqI9HFIPjN8QLKDkw0D4kNJ9A/edit#gid=0> .

# Documentation and allocation

The initial list of documents and allocation in [P-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-001.docx) were adopted. The final list is found in [Annex B](file:///C%3A%5CUsers%5Cbanno%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5C5C9RKHVL%5CFGAI4H-O-101-Draft-v3.docx#AnnexB).

# IPR

The text in [P-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-001.docx) Annex A was read and **no declarations** were made at the meeting.

It was highlighted that the IPR question should be asked periodically under the various TG (e‑)meetings, since many of participants in those may not be attending the FG-AI4H Plenary meetings.

# Management updates

There were no updates to the FG-AI4H leadership team at this meeting.

# Approval of Meeting O outcomes and updates

The report of Meeting O (Berlin, 31 May – 2 June 2022) in [O-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-101.docx) was **approved** without comments.

The following documents from Meeting N were **noted** by the meeting:

* [O-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-102.docx): Updated call for proposals: use cases, benchmarking, and data
* [O-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-200.docx): Updated list of FG-AI4H deliverables
* [O-201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-201.docx): DEL01 – Ethics and governance of artificial intelligence for health

No comments were made.

1. The report of the meeting in Berlin, 31 May – 2 June 2022 found in [O-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-101.docx) was approved without comments and its three output documents were noted ([O-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-102.docx), [O‑200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-200.docx) and [O‑201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-201.docx)).

# Review of incoming liaison statements

## JCA-DCC

[P-029](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029.docx) – LS on highlights from the first meeting of the Joint Coordination Activity on Digital COVID-19 Certificates [from JCA-DCC]

**Abstract:** This LS informs on the highlights from the first meeting (online, 1 June 2022) of the Joint Coordination Activity on Digital COVID-19 Certificates (JCA-DCC).

The LS was noted. FG-AI4H representatives to JCA-DCC are Ana Rivière CINNAMOND (PAHO) and Shan XU (CAICT) as listed in the LS.

## JCA-DCC

[P-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-030.pptx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-030-A01.pptx) – LS on highlights from the second meeting of the Joint Coordination Activity on Digital COVID-19 Certificates [from JCA-DCC]

**Abstract:** This LS informs of the highlights of the second meeting of JCA-DCC, which was held on 26 August 2022. Also, it gives the date expected to have the third meeting (2 December 2022).

The LS was noted. Attachment contains the first draft of the Digital COVID 19 Certificates (DCC) standardization roadmap.

FG management may reply to the roadmap in coming weeks, but not as outcome of this meeting.

Simao clarified that the objective of the JCA is to coordinate activities and collect information from all over the world on digital COVID certificate, and no intention to create a FG.

## FG-TBFxG

[P-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-031.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-031-A01.docx) – LS on call for use cases on testbeds federation [from FG-TBFxG]

**Abstract:** ITU-T FG-TBFxG has issued a call for use cases on "Testbeds Federation" and asks for replies using the attached template.

The LS was noted.

## FG-AI4A

[P-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-034.docx) – LS on Current Activities of FG-AI4A [from FG-AI4A]

**Abstract:** This Liaison Statement aims to inform about the current structure of the ITU/FAO Focus Group on "Artificial Intelligence (AI) and Internet of Things (IoT) for Digital Agriculture" (FG-AI4A).

The LS was noted.

## FG-AI4EE

[P-035](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-035.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-035-A01.docx) – LS on one approved deliverable of ITU-T FG-AI4EE [from FG-AI4EE]

**Abstract:** This liaison statement aims to inform ITU-T SG20, and all other ITU-T Study Groups and Focus Groups of one deliverable completed and agreed by ITU-T FG-AI4EE at its fifth meeting, in Vienna, Austria, and online, on 4 May 2022.

The LS was noted. The completed deliverable is “Technical report on Guidelines on Digital Twin of Cities for Better Climate Mitigation Solutions” included in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-035-A01.docx).

# Information on AI-related activities

The meeting was reminded that a series of webinars took place, within the context of the AI for Good online events, <https://aiforgood.itu.int/eventcat/discovery-ai-and-health/>.

# Horizontal and strategic topics

No horizontal topics were discussed at this meeting. One important strategic topic discussed at this meeting was the follow up platform to continue the work of the FG-AI4H after its termination, as follows.

## Discussion on transition to ITU/WHO Global Initiative on AI for Health

Two sessions were dedicated to discuss the ITU/WHO Global Initiative on AI for Health, that is anticipated to be the successor platform for the FG-AI4H.

[FGAI4H-P-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-050.pptx): Initial considerations on a Global Initiative on AI for health (GI-AI4H) [FG-AI4H Management]

The slides in [P-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-050.pptx) were presented by Sameer Pujari (WHO) and used as a basis for discussions. They summarized the discussions about the transition from FG-AI4H to an ITU/WHO Global Initiative on Artificial Intelligence for Health (GI-AI4H). The main three functions are:

Enable:

* Norms, guidance, standards (including all benchmarking framework deliverables)
* Governance (ethics, regulations)
* Surveillance, research and evidence

Facilitate:

* Knowledge Sharing between countries
* Pool funding
* Cooperation between all stakeholders

Implement:

* Scale program in countries (phase 1 to target 12 – 18 countries)
* Build capacity building for AI for health programs
* Build sustainability models

Organizations that wish to join the Global initiative as donors, associate partners or academics are encouraged to contact the FG management.

There is overall support in the FG towards the GI-AI4H, which should be formalized by ITU and WHO ion the coming months, possibly with the involvement of other inter-governmental organizations (IGOs). The importance of engaging with governments was highlighted.

## Generating evidence for artificial intelligence based medical devices

[P-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-052.pptx): Generating evidence for artificial intelligence based medical devices (WHO)

**Abstract:** This presentation briefs the meeting on WHO Publication "Generating Evidence for Artificial Intelligence Based Medical Devices: A Framework for Training Validation and Evaluation (Including a use-case study for Cervical Cancer Screening)" <https://www.who.int/publications/i/item/9789240038462>.

This first-of-its-kind publication from the WHO is a framework targeted at developers and researchers of AI-based software as a medical device, as well as policy-makers and implementers. It is intended to guide those seeking to understand the evidence generation requirements from development to post-market surveillance of these devices.

The publication uses cervical cancer screening as a use-case to support the goals of the WHO strategy on cervical cancer elimination and set the foundations for WHO to be able to usher in new and emerging technologies in cancer screening and beyond.

To allow acceleration in the global effort in cancer screening and clinical decision support, WHO will begin to facilitate building the enabling environments so that the benefits of innovative technologies reaches all populations and use-cases of high disease burden globally.

Stephanie Kuku (WHO) presented [P-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-052.pptx). Workshops for stakeholder groups are planned to be held to help implementation of the framework described in the publication.

Cervical cancer screening is used as a use case in this publication, but this framework is used as a generic one for AI tool based on imaging.

For cervical cancer screening replying to the question by TG-POC, there are several devices over the world that have been developed and being tested, and real performance studies are being done.

# Working Group updates

## Data and AI solution assessment methods (WG-DAISAM)

The WG is chaired by Pat Baird (Philips, USA), assisted by vice-chair, Luis Oala (Fraunhofer HHI, Germany) and Pradeep Balachandran (Technical e-health consultant, India).

[P-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032-A01.pptx): DEL7.3: ML4H trial audits–Iteration 2.0 Playbook (Version 3.0)

Pradeep briefed the overview and the current status of the work of ML4H Trial Audits using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032-A01.pptx).

The ML4H Audit aims at conducting the verification and validation of the technical, clinical, regulatory and ethical requirements of ML4H solutions developed by the Topic Groups following a structured audit process

Twelve topic groups enrolled for the collaboration with the ML4H Trial Audit project, and 10 amog them are active. Four TGs have completed the generation of Audit Report. TG-Dental is now preparing the publication in the Journal-of-Medical Systems (JoMS) special issue. Audit Challenge is visible on the Assessment Platform (health.aiaudit.org) and reports can be accessible.



TG-Dental, TG-Psychiatry and TG-Outbreaks have completed the stage 4 that is JoMS / Peer Journal manuscript preparation.

An outreach event “Machine Learning for Health 2022” will take place in New Orleans, USA on 28 November 2022 (<https://ml4health.github.io/2022/> registration opens Sep 30). Luis invited to participate in this event, as well as to collaborate in other workshops that FG community organise.

Related discussion was made on Open Code Initiative, see §‎11.

## Data and AI solution handling (WG-DASH)

WG-DASH has Marc Lecoultre (ML Lab, Switzerland) as chair and Ferath Kherif (CHUV, Switzerland) as Vice-chair.

No particular reports were provided specifically for WG-DASH. All the focus of the work has been in the Open Code Initiative, see §‎11.

## Operations (WG-O)

The WG on operations (WG-O) is co-chaired by Markus Wenzel and Eva Weicken (Fraunhofer HHI, Germany).

No particular reports were provided specifically for WG-O. All the focus of the work has been in progressing DEL0.1 and DEL7, see §‎12.

## Ethical considerations on AI for health (WG-Ethics)

The chair of the FG-AI4H WG-Ethics, Andreas Reis (WHO).

[P-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-043.pptx): WG-Ethics progress report

Andreas presented the updates on the recent activities on Ethics and Governance of Artificial Intelligence for Health using the slides in [P-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-043.pptx).

He reported the areas of discussion at the WG meeting held on 7 September 2022: Development of online curriculum for programmers and designers that integrates WHO Ethics Guidance; Feedback on possible Code of Conduct for technology companies integrating consensus principles; and Open discussion on other potential areas of work.

WHO’s online training course is already available on WHO guidance on Ethics and governance of AI for Health.

WG discussed on how value-sensitive design could be a framework to guide curriculum for designers and programmers. Emphasis was made on that use cases can be one means to provide concrete illustrations and guidance to tackle problems.

Additional discussion is needed for next steps, to define the boundaries of the course.

In conjunction to the activity, a workshop is organized by Juan Manuel Duranat Thecnical University Delft in Pisa, Italy on designing and operationalizing vakues in AI systems for healthcare and medicine. Tentative date is 28 October 2022 (to be confirmed).

For the discussion topic of Code of Conduct, possible roundtable may be organized with selection of technology companies to obtain feedback on a potential voluntary effort.

Marc Lecoultre and Eva Weicken from the FG agreed to participate in the Ethics workshop.

Ashwini Sathnur asked if references to literature could be included in the online course, and Sameer suggested to send the link and that would be considered after the WHO’s process.

[**P-036**](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-036.docx)**+ A01 (not shared): Ethical concept of prudence in artificial intelligence – The current standing (Miroslav Radenkovic, Univ. of Belgrade, Serbia)**

**Abstract**: According to the Montréal Declaration the prudence principle states that “when the misuse of AI systems endangers public health or safety and has a high probability of occurrence, it is prudent to restrict open access and public dissemination”. Organizations that expand legal and morally justifiable AI still find themselves stressed with whether their inventions are wise, continuously establishing what are the ethical limitations of digital life forever. Moreover, the still existing inadequate diagnostic accuracy with AI requires a prudent approach. Hence, we need to be prudent about three adoptability issues of AI technologies: (1) Machine learning limitations, (2) Ethical-legal challenges related to explainability, responsibility and empathy; and (3) Issues of acceptability and adoptability. The uniqueness of new diseases resulted in growth of AI models designed to close various clinical knowledge cracks, especially with regard to diagnosis and prognosis, where the model commonly overestimates or underestimates risks of poor outcomes. In that context, we need to be prudent especially about models developed within one focus of geographic space and time, thus leading to extrapolation biases. This requires from the AI models to be consistently challenged against new incoming data.

Miroslav Radenkovic presented his research on ethical concept of prudence in AI using the slides in A01 (not shared). No specific comments or questions were made at the meeting.

## Regulatory considerations on AI for health (WG-RC)

The chair of the WG-RC is Naomi Lee (Lancet, UK), assisted by Shada Alsalamah (WHO).

No specific report was made for the WG-RC, as the focus of the work has been in the preparation of DEL2. See §‎12.7.

## Clinical Evaluation (WG-CE)

The co-chairs of the WG-CE are Naomi Lee (The Lancet, UK), Shubhanan Upadhyay (ADA Health, Germany), and Eva Weicken (Fraunhofer HHI, Germany).

The objectives of the WG-CE are to:

* Build a **community of collaboration** around clinical evaluation of AI for health
* Guidance for current **best practice evaluation**, **principles of evaluation** to ensure it is generally relevant across all countries
* Used by **researchers, clinicians, patients, developers, civil-society, policy-makers**
* Give special consideration of clinical evaluation in **LMIC settings**
* Take tasks that are applicable for **FG-AI4H**

Eva presented [P-040-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040-A01.pptx) on the overview of the WG-CE and DEL7.4 which is the focus of the WG. See §‎12.13.4.

## Collaborations and Outreach (WG-CO)

The chair of the WG-CO is Andrew Farlow (University of Oxford, UK) and Matthias Groeschel .

[P-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-048.pptx): WG-CO update

Andrew Farlow (Nuffield Department of Medicine, Oxford) introduced [P-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-048.pptx) about ITU/WHO Working Group: Collaborations and Outreach, the recent and future seminar series, and proposed activities including Digital/AI for Health Challenges. Three reports are planned to be developed within the next 6 months. The webinar series by FG-AI4H has been a success. Since its inception May 2021, approx. 25,000 viewers from 103 countries have followed one of the webinars. Andrew also briefed the activities on setting up Challenges. WG-CO is working towards evidence-based guideline for designing challenges. WG-CO has been writing a paper detailing their plans of a venture building structure

## Ad-hoc group on digital technologies for COVID health emergency (AHG-DT4HE)

The cochairs of the FG-AI4H ad hoc group on AHG on digital technologies for COVID health emergency (AHG-DT4HE) are Shan Xu (CAICT, China) and Ana Rivière-Cinnamond (PAHO/‌WHO).

A progress report was not provided at this meeting.

# FG-AI4H Open Code Initiative

The FG-AI4H open code initiative is chaired by Marc Lecoultre (ML Lab, Switzerland).

[P-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-041.pptx): Open Code Initiative – Status update [Chair]

Marc Lecoultre introduced the slides in [P-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-041.pptx) with overview.

* Develop software tools (e.g., data acquisition, data storage, annotation, prediction, evaluation, and reporting packages)
* Over 40 developers, regulators, and medical professionals from five continents are involved in the initiative
* Targeted towards a universal tool applicable across borders
* Usable by multiple stakeholders such as notified bodies and doctors

The platform is an end-to-end solution that focusses on the assessment of AI for health. It is not software to be used in a product, but rather to develop and assess it, and to provide guidance to implementers developing their own applications. The platform prototype is being tested in different proof-of concepts and the whitepaper for assessment platform is developed. Since one year, the team is implementing different features collaborating with different teams. In parallel, documentations are being developed. Marc showed how the team develops the software. The OCI contains various packages:

* Core package – Marc Lecoultre presented. This package provisions the common services to all packages: Authentication and authorization to access resources, storage. FHIR used in the implementation to facilitate secure patient data transfer. Next steps: Integrate all packages; uniformize SSO usage; implement additional user management features. A demo on the Platform was presented by Marc. VISIAN tool is being integrated to the Platform (see Data Annotation Package below)
* DAS (Data Acquisition and Storage) package – Ferath Kherif presented. This package is responsible for data ingestion, storage and management. Data is organized in principled way using TOML hierarchical concept. Details minimum metadata and context requirements. Next steps include data sourcing across different locations, and federated model implementation. Currently working on proof of concept.
* Data annotation package –Joachim Krois presented. The package delivers data annotation capabilities, good annotation practices, review of annotations. Different roles (annotator, reviewer, supervisor) were implemented with corresponding edit rights. This package is working with VISIAN project (visian.org) which is developing the annotation tool for the platform and this is being integrated in the platform. All annotations are tracked in the backend to maximize transparency.
* Evaluation (audit) package (based on eval.ai) – Luis Oala (Fraunhofer HHI, Germany) presented. The work reached an important point, a proof point for Docker-based evaluation one month earlier. An achievement is community building: <https://aiaudit.org/contributors/>. Collaboration with Google health team. Another achievement is integration of ML flow tool in the AWS environment, including shared storage buckets and *jupyter* notebooks for code and documentation. 1 full time software developed joins from October.
Docker-based evaluation for reproducibility, control over s/w dependencies, easy scaling, future-proof and versatile, secure and isolated test environment. Challenges are seen: need to increase the AWS environment capacity; modified legacy platform code; added feature enhancements to EvalAI CLI. Next steps: where/how to make test data available to Docker container?; Develop example benchmark; Push code and write documentation. Stefan showed a demo on the evaluation package via the Platform.
* Reporting package – Pradeep Balachandran (Technical e-health consultant, India) presented. Reporting package provides a customizable interface for the reporting of the ML model evaluation results. Two types of reports will be created: Basic Report and Custom Report. The Basic report has the format split into three sections: Data Specification Sheet; ML Model specification Sheet; and ML Model Summary. The regulatory guidelines will be integrated into the platform, as Regulatory Checklist Manager to implement “Custom Reporting” functionality.

The meeting acknowledged the excellent progress of the FG-AI4H Open Code Initiative and thanked Marc Lecoultre leading efficiently the work. The FG-AI4H looks forward to the next planned steps and reporting at the next FG-AI4H meeting.

Thomas: What would be necessary if a company having data but different modalities

Marc: project guidelines and best practice document can be used

Simao: Missing component of documentation can be a standard.

Marc: standard on process can be considered.

Thomas: suggest considering to start standardization

Shan: Any conflicts in DEL5.3?

Marc: no conflicts, as the OCI describes process of the annotation itself.

# FG-AI4H deliverables

## Process for assessing quality of draft FG-AI4H deliverables

To ensure that the WHO/ITU FG-AI4H deliverables – a key contribution of our activities – achieve the maximum level of quality and offer value for stakeholders, a draft description of the peer review process for FG-AI4H deliverables was prepared and presented during Meeting K (see [K-029](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-029.docx%22%20%5Ct%20%22_blank)). At this meeting, no updates were provided. The FG-AI4H management will continue to review the matter and report in a future meeting.

## List of deliverables

[P-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-005.docx): Updated list of FG-AI4H deliverables (as of 2022-9-20) [TSB]

**Abstract**: This document summarizes the current status of the planned deliverables for the ITU-T Focus Group on AI for health (FG-AI4H), based on the output list from the meeting in Berlin, 31 May – 2 June 2022 and subsequent updates by the secretariat, as found in [O-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-200.docx) / DEL00S.

The document was noted, and it would be updated after the meeting according to the discussions affecting deliverables as shown in Table 1 hereinafter, also issued as [P-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-200.docx) out of this meeting.

The meeting reviewed progress for the various deliverables and highlights are provided in the next sub-sections of this report.

A progress report was presented for the following deliverables, but an updated deliverable document was not provided:

* DEL2.2: Good practices for health applications of machine learning: Considerations for manufacturers and regulators
* DEL4: AI software life cycle specification
* DEL5.3: Data annotation specification
* DEL7.2: AI technical test specification
* DEL7.5: Assessment Platform
* DEL8: AI4H scale-up and adoption (no initial draft)

No updates nor progress reports were provided during the meeting for the following documents:

* DEL2.1: Mapping of IMDRF essential principles to AI for health software
* DEL3: AI4H requirements specifications
* DEL5: Data specification
* DEL5.1: Data requirements
* DEL5.2: Data acquisition
* DEL5.4: Training and test data specification
* DEL5.5: Data handling
* DEL5.6: Data sharing practices
* DEL6: AI Training best practices specification
* DEL7.1: AI4H evaluation process description
* DEL9: AI4H applications and platforms
* DEL9.1: Mobile Applications
* DEL9.2: Cloud-based AI applications

The latest version of the deliverables can always be found in the FG-AI4H collaboration site at <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx>.

Table 1 – Updated list of deliverables (P-005 plus updates)

| No. | Deliverable | Updated initial draft editor | Availability\* |
| --- | --- | --- | --- |
| 0 | Overview of the FG-AI4H deliverables | Shan Xu (CAICT, China) | [P-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-044.docx) |
| 0.1 | Common unified terms in artificial intelligence for health | Markus Wenzel (Fraunhofer HHI, Germany) | [P-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038.docx)(agreed) |
| 1 | AI4H ethics considerations | Andreas Reis (WHO) | [O-201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-201.docx)(agreed at O) |
| 2 | Overview of regulatory considerations on artificial intelligence for health | Shada Alsalamah (WHO) | [O-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049.docx)(agreed at P) |
| 2.1 | Mapping of IMDRF essential principles to AI for health software | Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (Technical Consultant eHealth, India), Pat Baird (Philips, USA), Thomas Wiegand (Fraunhofer HHI, Germany) | [G-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-038.docx), [G-038-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-038-A01.xlsx) |
| 2.2 | Good practices for health applications of machine learning: Considerations for manufacturers and regulators | Pradeep Balachandran (India) and Christian Johner (Johner Institut, Germany) | [O-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031.docx)(agreed at P) |
| 3 | AI4H requirement specifications | Pradeep Balachandran (India) | [O-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032.docx) |
| 4 | AI software life cycle specification | Pat Baird (Philips, USA) | [J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx)([L-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-046.pptx)) |
| 5 | Data specification | Marc Lecoultre (MLlab.AI, Switzerland) | [G-205](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205.docx%22%20%5Ct%20%22_blank) |
| 5.1 | Data requirements | [Marc Lecoultre (MLlab.AI, Switzerland)]\*\* | [I-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-044.docx) |
| 5.2 | Data acquisition  | Rajaraman (Giri) Subramanian (Calligo Tech, India), Vishnu Ram (India) | [G-205-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205-A02.docx) |
| 5.3 | Data annotation specification | Shan Xu (CAICT, China), Harpreet Singh (ICMR, India), Sebastian Bosse (Fraunhofer HHI, Germany) | [M-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-045.docx) |
| 5.4 | Training and test data specification  | Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (India) | [I-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-034.docx)([L-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-045.pptx)) |
| 5.5 | Data handling  | Marc Lecoultre (MLlab.AI, Switzerland) | [I-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-045.docx) |
| 5.6 | Data sharing practices | Ferath Kherif (CHUV, Switzerland), Banusri Velpandian (ICMR, India), WHO Data Team | [L-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-044.pptx) |
| 6 | AI training best practices specification | Xin Ming Sim and Stefan Winkler (AI Singapore) | [K-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-037.docx%22%20%5Ct%20%22_blank) |
| 7 | AI for health evaluation considerations | Markus Wenzel (Fraunhofer HHI, Germany) | [P-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-037.docx) |
| 7.1 | AI4H evaluation process description | Vacant | [G-207-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-207-A01.docx) |
| 7.2 | AI technical test specification | Auss Abbood (Robert Koch Institute, Germany) | [I-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-027.docx%22%20%5Ct%20%22_blank)([L-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-051.pptx)) |
| 7.3 | Data and artificial intelligence assessment methods (DAISAM) reference | Luis Oala (Fraunhofer HHI, Germany) | [P-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032.docx)([L-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-052.pptx)) |
| 7.4 | Clinical evaluation of AI for health | Naomi Lee (Lancet, UK), Eva Weicken (Fraunhofer HHI, Germany), Shubhanan Upadhyay (ADA Health, Germany) | [P-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040.docx) ([A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040-A01.pptx)) |
| 7.5 | Assessment platform | Luis Oala (Fraunhofer HHI), Marc Lecoultre and Steffen Vogler (Bayer AG, Germany) | [I-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-037.docx) |
| 8 | AI4H scale-up and adoption | Sameer Pujari (WHO), Yu ZHAO and Javier Elkin [Previously: Robyn Whittaker (New Zealand)] | –([O-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-056.pptx)) |
| 9 | AI4H applications and platforms | Manjeet Chalga (ICMR, India) | [L-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-050.docx)([P-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-055.pptx)) |
| 9.1 | Mobile applications | Khondaker Mamun (UIU, Bangladesh), Manjeet Chalga (ICMR, India) | [N-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043.docx) |
| 9.2 | Cloud-based AI applications | Khondaker Mamun (UIU, Bangladesh) | [I-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-049.docx) |
| 10 | AI4H use cases: Topic description documents | Eva Weicken (Fraunhofer HHI, Germany) | [P-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042.docx)([A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042-A01.pptx)) |
| 10.1 | Cardiovascular disease management (TG-Cardio) | Benjamin Muthambi (Watif Health, South Africa) | [P-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A01.docx) |
| 10.2 | Dermatology (TG-Derma) | Harsha Jayakody (Flash Health, Sri Lanka) | [P-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A01.docx) |
| 10.3 | Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | Nada Malou (MSF, France) | [P-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A01.docx) |
| 10.4 | Falls among the elderly (TG-Falls) | Pierpaolo Palumbo (University of Bologna, Italy) | [P-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A01.docx) |
| 10.5 | Histopathology (TG-Histo) | Frederick Klauschen (LMU Munich & Charité Berlin, Germany) | [P-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A01.docx) |
| 10.6 | Malaria detection (TG-Malaria) | Rose Nakasi (Makerere University, Uganda) | [P-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A01.docx) |
| 10.7 | Maternal and child health (TG-MCH) | Raghu Dharmaraju (Wadhwani AI, India) and Alexandre Chiavegatto Filho (University of São Paulo, Brazil) | [P-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A01.docx) |
| 10.8 | Neurological disorders (TG-Neuro) | Marc Lecoultre (MLlab.AI, Switzerland) and Ferath Kherif (CHUV, Switzerland) | [P-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A01.docx) |
| 10.9 | Ophthalmology (TG-Ophthalmo) | Arun Shroff (MedIndia) | [P-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A01.docx) |
| 10.10 | Outbreak detection (TG-Outbreaks) | Auss Abbood and Alexander Ullrich (Robert Koch Institute, Germany); Khahlil Louisy and Alexander Radunsky (Institute for Technology & Global Health, ITGH, US) | [P-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A01.docx) |
| 10.11 | Psychiatry (TG-Psy) | Nicolas Langer (ETH Zurich, Switzerland) | [P-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A01.docx) |
| 10.12 | AI for radiology (TG-Radiology) | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [P-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A01.docx) |
| 10.13 | Snakebite and snake identification (TG-Snake) | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [P-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A01.docx) |
| 10.14 | Symptom assessment (TG-Symptom) | Henry Hoffmann (Ada Health, Germany) and Martin Cansdale (Healthily, UK) | [P-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A01.docx) |
| 10.15 | Tuberculosis (TG-TB) | Manjula Singh (ICMR, India) | [P-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-022-A01.docx) |
| 10.16 | Volumetric chest CT (TG-DiagnosticCT) | Kuan Chen (Infervision, China) | [P-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A01.docx) |
| 10.17 | Dental diagnostics and digital dentistry (TG-Dental) | Falk Schwendicke (Charité Berlin, Germany); Joachim Krois (Dental XR AI, Germany); Tarry Singh (deepkapha.ai, Netherlands) | [P-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A01.docx) |
| 10.18 | Falsified Medicine (TG-FakeMed) | Franck Verzefé (TrueSpec-Africa, DRC) | [P-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A01.docx) |
| 10.19 | Primary and secondary diabetes prediction (TG-Diabetes) | Andrés Valdivieso (Anastasia.ai, Chile) | [P-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A01.docx) |
| 10.20 | AI for endoscopy (TG-Endoscopy) | Jianrong Wu (Tencent Healthcare, China) | [P-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A01.docx) |
| 10.21 | AI for musculoskeletal medicine (TG-MSK) | Peter Grinbergs (EQL, UK), Yura Perov (UK) | [P-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A01.docx) |
| 10.22 | AI for human reproduction and fertility (TG-Fertility) | Susanna Brandi, Eleonora Lippolis, (Merck KGaA, Darmstadt, Germany) | [P-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A01.docx) |
| 10.23 | AI for point-of care diagnostics (TG-POC) | Nina Linder, University of Helsinki, Finland | [P-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028-A01.docx) |

NOTES

\* The document numbers indicated reflect the status as of the end of Meeting P. Some links provided are to slide sets; these slide sets are not meant to be the deliverable documents, but rather a status update concerning progress of the respective deliverable. Documents in parenthesis are status updates, not a deliverable text. The draft deliverables for TG-Outbreaks and TG-Sanitation will be combined into a new TG-Outbreaks deliverable, following the decision to merge both TGs at Meeting O.

\*\* Acting editor

## New deliverable proposals

There were no new deliverable proposals at this meeting.

## DEL00: Overview of the FG-AI4H deliverables

This deliverable provides a summary of all planned deliverables in FG-AI4H, including nine generalized specifications on ethics, regulatory, requirement, data, training, evaluation, application, etc., and 23 topic description documents on specific use cases with corresponding AI/ML tasks. This document is to give a comprehensive overview on the structure, progress, corresponding scopes and relationship on those deliverables, to avoid conflict and facilitate collaborations.

[P-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-044.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-044-A01.pptx): DEL00 Update: Overview of the FG-AI4H deliverables

Shan presented. The updated document contains Version 5 of the DEL00.

Chan suggested to add a tracking table to see maturity level of each TG work to facilitate the publication and a smooth transition of work into the global initiative.

Simao commented that [O-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-o-004.docx) on *Publication of Focus Group Deliverables – follow-up* was presented at Meeting O and provides a similar type of information thus the table can be reused.

The update to [DEL00](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL00.docx) as found in was uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL0.1: Common unified terms

The editor of this deliverable is Markus Wenzel, with contributions from Eva Weiken, Pat Baird, Shada Alsalamah, Stephanie Kuku, Rohit Malpani and Andreas Reis.

[P-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038.docx): DEL0.1 Update: Common unified terms in artificial intelligence for health

Markus presented the updates to DEL0.1. The terms in this document are aligned with the other existing sources. Markus invited to contact the editors if there are any additional terms of definitions relevant to AI for health. The updated version shown in [P-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038.docx) has been uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/). It was suggested to move to the review process for the publication of the 1st edition.

1. The meeting agreed to move DEL 0.1 "Common unified terms in artificial intelligence for health" for approval at this meeting after a two-week consultation period, as found in document [P-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038.docx). The approved version will be issued as [P-201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-201.docx).

## DEL01: AI4H ethics considerations

The editor of this deliverable is Andreas Reis (WHO).

[DEL01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL01.docx) was agreed at the meeting O as an identical publication of the 2021 WHO Ethics and governance of artificial intelligence for health guidance document, as in [O-201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-201.docx).

See 10.4 on WG-Ethics for further activities.

## DEL02: AI4H regulatory best practices

The current editor of [DEL2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02.docx) is Shada Alsalamah (WHO).

[P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047-A01.pptx): DEL02 Update: Overview of Regulatory Considerations on Artificial Intelligence for Health

Shada briefed the meeting on the purposes and contents of DEL2 in [P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx) using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047-A01.pptx). The document was submitted to FG and approved as a new deliverable. The update to DEL2 as found in [P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

1. The meeting agreed to approve DEL 2 "Overview of regulatory considerations on artificial intelligence for health" as found in [P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx). The document will be available as [P-202](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-202.docx).

### DEL02.1: Mapping of IMDRF essential principles to AI for health software

The editors of [DEL2.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02_1.docx) are Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (Technical e-health consultant, India), Pat Baird (Philips, USA), Thomas Wiegand (Fraunhofer HHI, Germany)

Also at this meeting, there was no update to DEL2.1 and the most recent version (G-038 at Meeting G) is found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL02.2: Good practices for health applications of machine learning: Considerations for manufacturers and regulators

The editors of [DEL2.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02_2.docx) are Pradeep Balachandran (Technical e-health consultant, India) and Christian Johner (Johner Institut, Germany)

DEL2.2: Good practices for health applications of machine learning: Considerations for manufacturers and regulators [Editors]

Luis presented DEL2.2 based on [O-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-036.docx) that has been submitted to Meeting O as no substantive updates have been done since Meeting O. It defines a set of guidelines intended to serve the AI solution developers/manufacturers on how to do conduct a comprehensive requirements analysis and to streamline the conformity assessment procedures to ensure regulatory compliance for the AI based Medical Devices (AI/ML-MD).

After discussions, the meeting agreed to approve DEL2.2 "Good practices for health applications of machine learning: Considerations for manufacturers and regulators" as found on [O-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-036.docx).

1. The meeting agreed to approve DEL 2.2 " Good practices for health applications of machine learning: Considerations for manufacturers and regulators " as found in [O-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-036.docx). The document will be available as [P-203](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-203.docx).

## DEL03: AI4H requirements specifications

The editor of [DEL3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL03.docx) is Pradeep Balachandran (Technical e-health consultant, India).

No updates were made to DEL3 at this meeting. The most recent version (N-032 at Meeting N) is found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

This Deliverable is very mature and planned for approval in the March 2023 timeframe.

## DEL04: AI software life cycle specification

The editor of [DEL4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL04.docx) is Pat Baird (Philips, USA).

[FGAI4H-P-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-051.pptx): Cybersecurity and AI/ML Data Lifecycles Follow up [Editor]

**Abstract:** A presentation at the Meeting O gave an overview of cybersecurity concepts; this presentation is a more detailed discussion about threat management.

Pat and Catherine Lowe (medSec LLC) gave a talk about cybersecurity and risk management in the context of AI software life cycle.

Pat encouraged to provide feedback to advance DEL04 with related resources that can be included in the draft. Sameer suggested to provide a checklist for developers on what needs to be done.

There was no update to DEL04 at this Meeting, whose latest update was prepared for meeting J, as found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/). However, the following document was introduced.

## DEL05: Data specification

The editor of [DEL05](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05.docx) is Marc Lecoultre (MLlab.AI, Switzerland). The latest update was reviewed at Meeting G, as found in [G-205](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205.docx). Discussions at this meeting focused on progressing the various sub-deliverables, as described next.

There was no update to DEL5 and the most recent version is found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

[P-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-039.docx): + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-039-A01.pptx) :(contribution) Privacy-preserving AI for synthetic and anonymous health data (Univ. of Turku, Finland)

**Abstract:** Data-driven technology solutions offer new opportunities in healthcare, for example in sectors such as disease diagnosis, monitoring and follow-up, and self-care. However, data availability is challenging due in part to privacy restrictions. One proposed solution has been to generate synthetic data via differential privacy techniques that provide a guaranteed level of privacy and advanced privacy protection. New machine learning assisted ways of generating synthetic data have shown promising results to the previous problems with the synthetic data in terms of data accuracy and usability.

Joho Vaiste presented the overview of his research project described in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-039-A01.pptx). He introduced PRIVASA 2021 – 2023 ([www.privasa.eu](http://www.privasa.eu) ) a co-innovation project focused on privacy-preserving AI and synthetic data.

## DEL05.1: Data requirements

The acting editor for [DEL5.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_1.docx) deliverable is Marc Lecoultre (MLlab.AI, Switzerland).

There was no update to DEL5.1. The most recent draft was prepared by Marc Lecoultre (who oversees the parent Deliverable 5), as found in [I-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-044.docx) (Meeting I). We are still looking for new editors to take over this Deliverable.

### DEL05.2: Data acquisition

Rajaraman (Giri) Subramanian (Calligo Tech, India) and Vishnu Ram (India) are the editors.

No updates were provided at this meeting and the editors did not join the meeting. The latest draft of [DEL05.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_2.docx) found in the deliverables folder was developed at meeting G ([G-205-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205-A02.docx), New Delhi), which tries to address the lack of widely-accepted, standardized ways to acquire medical data.

### DEL05.3: Data annotation specification

The editors of [DEL5.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_3.docx) are Shan Xu (CAICT, China), Harpreet Singh (ICMR, India), Sebastian Bosse (Fraunhofer HHI, Germany).

[P-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-056.pptx): DEL5.3: Data annotation specification - Presentation

Shan presented the updates using slides in [P-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-056.pptx). The deliverable is expected to be finalized at the next FG meeting, and contribution on medical image quality control to Q28/16 is planned. It is also considered to profile standardization on data annotation for different use cases or diseases. Key findings to be submitted to journal papers.

Further consideration on the structure of document may be made, with possible collaboration with the OCI project to complement the Deliverable with different use cases in addition to the current generic framework document.

The latest version of DEL5.3 as found in [M-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-045.docx) (Meeting M) is available in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL05.4: Training and test data specification

The editors of [DEL5.4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_4.docx) are Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (Technical e-health consultant, India).

No updates were done in DEL5.4.

The latest version is available from the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL05.5: Data handling

The editor of [DEL05.5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_5.docx) is Marc Lecoultre (MLlab.AI, Switzerland). DEL5.5 describes the objectives and proposes an initial outline of the planned deliverable "Data Handling" to help seed future content. It was noted that DEL5.5 is very stable, as it is matches F-103 on the main page.

There was no update to DEL05.5 at this meeting. The last update to [DEL05.5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_5.docx) was in meeting I ([I-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-045.docx)).

This Deliverable is very mature and planned for approval in the March 2023 timeframe.

### DEL05.6: Data sharing practices

The editors of [DEL5.6](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_6.docx) are Ferath Kherif (CHUV, Switzerland) and Banusri Velpandian (ICMR, India), assisted by the WHO Data Team.

There was no update to DEL5.6 at this meeting, the latest update having being made at Meeting L ([L-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-044.pptx)), as found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL06: AI Training best practices specification

The editors of [DEL6](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL06.docx) are Xin Ming Sim and Stefan Winkler (AI Singapore).

There was no update to DEL6 at this meeting, the latest update having being made at Meeting K ([K-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-037.docx)), as found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL07: AI for health evaluation considerations

The editor of [DEL7](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07.docx) is Markus Wenzel (Fraunhofer HHI, Germany).

[P-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-037.docx): DEL07 Update: AI for health evaluation considerations [Editors]

**Abstract:** This introduction with considerations on the evaluation of AI for health sets the scene for the five related documents DEL07.1-5 that describe the evaluation process (DEL07.1), the technical tests (DEL07.2), the test metrics (DEL07.3), the clinical evaluation (DEL07.4), and an assessment platform (DEL07.5) in detail. In this document, an overview of the deliverables DEL7.1-5 is given, considerations on the evaluation process are being made, characteristics of health AI validation and evaluation that are novel are identified, and the concept of standardized model benchmarking is introduced. Moreover, requirements for a benchmarking platform are considered in detail and best practices for the health AI model assessment are collected from selected sources.

Markus introduced [P-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-037.docx). He noted that DEL7 could be ready for review by next spring. Markus encouraged colleagues to point him to additional documentation and published work on best evaluation practices in AI4H.

The update to DEL7 as found in [P-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-037.docx) was uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL07.1: AI4H evaluation process description

The editor of [DEL7.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_1.docx) is Sheng Wu (WHO).

No updates were provided to DEL7.1 at this meeting; the latest update was provided in meeting G ([G-207-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-207-A01.docx)).

### DEL07.2: AI technical test specification

The editor of [DEL7.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_2.docx) is Auss Abbood (Robert Koch Institute, Germany).

[FGAI4H-P-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-053.docx): DEL7.2 AI technical test specification - Progress Report [Editor]

Auss presented the slides in *P-0XX*. The deliverable contains a background on software testing that is relevant for the context of AI/ML and AI4H. It two-fold: What are best practice in AI testing that TGs can adapt? And which tests are specifically important for an assessment platform?

Auss thinks some effort would be needed in documenting leaderboard probing. Some experts will be suggested by the FG management to help finalize the Deliverable by March 2023.

The last update of the text of DEL7.2 was prepared for meeting I ([I-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-027.docx)), as found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL07.3: Data and artificial intelligence assessment methods (DAISAM) reference

The editor of [DEL 7.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_3.docx) is Luis Oala (Fraunhofer HHI, Germany), with Pradeep Balachandran (Technical e-health consultant, India).

[P-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032-A01.pptx): DEL7.3: ML4H trial audits–Iteration 2.0 Playbook (Version 3.0)

Pradeep presented the updates to DEL7.3 using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032-A01.pptx). The discussion is reported in §10.1 WG-DAISAM.

The updated version of DEL7.3 as shown in [P-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032.docx) was uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL07.4: Clinical evaluation of AI for health

The editors of [DEL7.4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_4.docx) are Naomi Lee, Rupa Sarkar (Lancet, UK), together with Eva Weicken (Fraunhofer HHI, Germany) and Shubs Upadhyay (ADA Health, Germany).

[P-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040-A01.pptx): Updated DEL7.4: Clinical evaluation of AI for health [Editors DEL7.4]

**Summary**: This document provides an overview of the current challenges of "Clinical Evaluation of AI for Health". It is part of the deliverable-series 7.1-7.4 that are outlined by deliverable No.7 "AI for Health Evaluation considerations". The purpose of the deliverable No.7.4 is to outline the current best practices, the principles and outstanding issues for further considerations related to clinical evaluation of AI health technologies. It serves as the output document of the WHO/ITU Focus Group on AI for Health (FG-AI4H) Working group on Clinical Evaluation of AI for Health (WG-CE). More background information is provided in the Terms of reference ([https://itu.int/en/‌ITU-T/focusgroups/ai4h/Pages/wg.aspx](https://itu.int/en/ITU-T/focusgroups/ai4h/Pages/wg.aspx)) and the WG-CE collaboration site ([https://extranet.itu.int/‌sites/itu-t/focusgroups/ai4h/wg/SitePages/WG-CE.aspx](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/wg/SitePages/WG-CE.aspx)).

Eva presented the updates to DEL7.4 using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040-A01.pptx)A01, and followed by Naomi and Shubs with comments.

The draft is the collaborative work of about 65 expert members. The draft is at the final stage and was submitted to WHO for publication alongside WG-RC document. Additional journal publication(s) is also being considered. For further steps towards helping close the implementation gap, case study round tables, WHO course and checklist could be included. The group is considering the next priorities in the context of the evolution of the FG.

Discussions:

* How to promote it? Publish; apply to advanced TGs; series of roundtables targeted at potential users, like hospitals.
* What are the next steps for the group. What are the ongoing challenges?
* Migrate to the next step in the work. Look into real implementations. TG that is advanced and could use the clinical eval guidance in DEL7.4 to assess their work, and then provide feedback to WG-CE. E.g.TG-PoC.

Thomas suggested that all topic drivers have a look at the draft and consider implementing the guidance found in it. It is the time to start thinking of real implementation for the next step in the FG work.

The FG appreciated the good progress on this deliverable.

This Deliverable is very mature and planned for approval in the next meeting planned in December 2022.

The update to DEL7.4 as found in [P-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL07.5: Assessment Platform

The editors of DEL7.5 are Luis Oala (Fraunhofer HHI), Marc Lecoultre and Steffen Vogler (Bayer AG, Germany).

[P-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-041.pptx): Status update

Luis and Steffen provided updates on related activities as part of the OCI status update (see §‎11 and [P-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-041.pptx)).

No update to DEL7.5 was provided at this meeting. The latest update was made available in Meeting I ([I-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-037.docx)), which can be found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL08: AI4H scale-up and adoption

The editor of [DEL8](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL08.docx) is Sameer Pujari (WHO) with Yu (Ursula) Zhao and Javier Elkin.

There is currently no draft of DEL8, and no updates were provided at this meeting.

[O-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-056.pptx): Dynamic digital health maturity model [WHO]

Ursula presented the slides in [P-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-054.pptx) where a dynamic digital health maturity model was described for AI4H assessing AI4H scale-up and adoption. The DDHMM is a digital health implementation initiative that dynamically monitors the status of development and implementation progress of digital health at the country level. For adoption and implementation, regional workshops are held in the region of the Americas, Europe and Eastern Mediterranean.

## DEL09: AI4H applications and platforms

The editors of [DEL9](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09.docx) are Manjeet Chalga (ICMR, India), Aveek De (CMS, India).

[P-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-055.pptx): DEL09: AI4H applications and platforms – Progress report

While the presentation slides on the DEL9 progress report was provided, there were no presentation nor updates at this meeting. The latest update was made available in Meeting L ([L-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-050.docx)), which can be found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL09.1: Mobile Applications

The editor of [DEL09.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09_1.docx) are Khondaker Mamun (UIU, Bangladesh) and Manjeet Chalga (ICMR, India).

There were no updates at this meeting. The latest update ([N-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043.docx)) was made available in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### DEL09.2: Cloud-based AI applications

The editor of [DEL 9.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09_2.docx) is Khondaker Mamun (UIU, Bangladesh).

No updates to the draft of DEL9.2 were provided at this meeting. The last update was made available in Meeting I ([I-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-049.docx)), which can be found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL10: AI4H use cases: Topic Description Documents

The editor of [DEL10](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL10.docx) is Eva Weicken (Fraunhofer HHI, Germany).

[P-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042-A01.pptx): Updated DEL10: AI4H use cases: Topic Description Documents [Editor]

**Abstract:** 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 constitutes deliverable No. 10 (DEL.10\_0) and serves as an introduction to the topic groups and their topic description documents.

Eva introduced the deliverable using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042-A01.pptx%22%20%5Ct%20%22_blank). This Deliverable provides a summary of all TDDs, which are part of the documentation of each of the Topic Groups (see §‎13). The current version updates information as a result of the progress in the various TGs.

The update to DEL10 as found in [P-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

# Topic Group updates

Table 2 shows the status of the current TGs for FG-AI4H.

The meeting format grouped the TGs in thematic groups for presentation and discussion, as shown in Table 3.

## Template updates: TDD, CfTGP

No template updates were made at this meeting. Drivers for the new topic groups are requested to submit at the next meeting a topic description document and call for topic group participation using the current templates:

* [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx) (TDD)
* [J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-103.docx) (CfTGP)

The TG drivers have been reminded / requested on various occasions to update their TDDs and CfTGP based on the new templates, and a few have already done that.

Table 2 – Summary status update for the various topic groups

| Cover page | Group | Title | Driver(s) | Organization | Meeting created | TDD | CfTGP | PPT used? |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [P-006](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006.docx) | TG-Cardio | Cardiovascular disease risk prediction | Benjamin Muthambi | WatIF Health, South Africa | C | N | H | – |
| [P-007](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007.docx) | TG-Derma | Dermatology | Harsha Jayakody | Flash Health, Sri Lanka | B | E | P | – |
| [P-008](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008.docx) | TG-Bacteria | Diagnosis of bacterial infection and anti-microbial resistance | Nada Malou | Médecins Sans Frontières, France | F | L | – | – |
| [P-009](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009.docx) | TG-DiagnosticCT | Volumetric chest CT | Kuan Chen | InferVision, China | D | P | H | Yes |
| [P-010](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010.docx) | TG-Dental | Dental diagnostics and digital dentistry | Falk Schwendicke, Joachim Krois | Charité Berlin, Germany | G | P | P | Yes |
| [P-011](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011.docx) | TG-FakeMed | AI-based detection of falsified medicine | Frank Verzefé | TrueSpec-Africa, DRC | F | J | H | – |
| [P-012](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012.docx) | TG-Falls | Falls among the elderly | Pierpaolo Palumbo | University of Bologna, Italy; Fraunhofer Portugal | B | P | H | Yes |
| [P-013](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013.docx) | TG-Histo | Histopathology | Frederick Klauschen | LMU Munich & Charite Berlin, Germany | B | I | E | – |
| [P-014](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014.docx) | TG-Malaria | Malaria detection | Rose Nakasi | Makerere University, Uganda | F | N | L | Yes |
| [P-015](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015.docx) | TG-MCH | Maternal and child health | Raghu Dharmaraju, Alexandre Chiavegatto Filho | Wadhwani AI, India; University of Sao Paulo, Brazil | D; rescoped in Meeting G | P | H | Yes |
| [P-016](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016.docx) | TG-Neuro | Neurological disorders | Marc Lecoultre, Ferath Kherif | ML Labs, Switzerland; CHUV, Switzerland | B | L | E | Yes |
| [P-017](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017.docx) | TG-Ophthalmo | Ophthalmology | Arun Shroff | MedIndia, India | B | P | M | – |
| [P-018](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018.docx) | TG-Outbreaks | Outbreak detection | Auss Abbood and Alexander Ullrich; Alexander Radunsky and Khahlil Louisy | Robert Koch Institute, Germany; Institute for Technology & Global Health, ITGH, US | E | K | I | Yes |
| [P-019](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019.docx) | TG-Psy | Psychiatry | Nicolas Langer | ETH Zurich, Switzerland | C | K | H | – |
| [P-020](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020.docx) | TG-Snake | Snakebite and snake identification | Rafael Ruiz de Castaneda | UniGe, Switzerland | B | I | G | – |
| [P-021](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021.docx) | TG-Symptom | Symptom assessment | Henry Hoffmann | Ada Health, Germany | B | P | N | Yes |
| [P-022](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-022.docx) | TG-TB | Tuberculosis | Manjula Singh | ICMR, India | C | M | E | – |
| [P-023](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023.docx) | TG-Radiology | AI for radiology | Darlington Akogo | minoHealth AI Labs, Ghana | D; H (rescoped) | P | H | Yes |
| [P-024](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024.docx) | TG-Diabetes | primary and secondary diabetes prediction | Andrés Valdivieso | Anastasia.ai, Chile | H | K | L | – |
| [P-025](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025.docx) | TG-Endoscopy | AI for endoscopy | Jianrong Wu | Tencent Healthcare, China | I | P | J | Yes |
| [P-026](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026.docx) | TG-MSK | AI for Musculoskeletal medicine | Peter Grinbergs, Yura Perov | EQL, UK; UK | J | P | P | Yes |
| [P-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027.docx) | TG-Fertility | AI for human reproduction and fertility | Susanna Brandi, Eleonora Lippolis | Merck KGaA, Darmstadt, Germany | L | N | M | – |
| [P-028](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028.docx) | TG-POC | Topic Group on AI for point-of care diagnostics | Nina Linder | University of Helsinki, Finland | L | N | M | Yes |

Table 3 – Presentation of TGs in Meeting P

| Thematic group | Topic Group | Presenter | Update |
| --- | --- | --- | --- |
| Brain & muscle | TG-Falls | Pierpaolo Palumbo | [P-012-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A03.pptx) |
| TG-MSK | Yura Perov | [P-026-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A03.pptx) |
| TG-Neuro | Ferath Kherif | [P-016-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A03.pptx) |
| Non-communicable diseases – cancer | TG-Radiology | Darlington Agogo | [P-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A03.pptx) |
| TG-Endoscopy | Jianrong Wu | [P-025-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A03.pptx) |
| TG-DiagnostricCT | Kuan Chen | [P-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A03.pptx) |
| TG-MCH | Alexandre Chiavegatto | [P-015-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A03.pptx) |
| TG-Dental | Joachim Krois | [P-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A03.pptx) |
| Communicable diseases | TG-Outbreaks | Auss Abood | [P-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A03.pptx) |
| TG-Malaria | Rose Nakasi | [P-014-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A03.pptx) |
| TG-POC | Nina Linder | [P-028-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029-A03.pptx) |

## TG-Cardio (Use of AI in Cardiovascular Disease Management)

Benjamin Muthambi is the driver for the main topic as well as for sub-topic 1 (CVD Risk Prediction using AI). The latest documentation available is as follows:

TDD: [P-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A01.docx) (Same as Meeting N)
CfTGP: [P-006-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A02.docx) (Same as Meeting H)
Contributions: N/A

No updates were provided at this meeting.

## TG-Derma (Dermatology)

Sharad Kumar (Nurithm Labs Private Limited, India) who took over the role of the Topic Driver since Meeting M cannot continue.

Following Sharad's resignation, Mr Harsha Jayakody (Flash Health, Sri Lanka) agreed to take over the role.

TDD: [P-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A01.docx) (Same as Meeting E)
CfTGP: [P-007-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A02.docx)

No updates to the TGG were made at this meeting. The new TG Driver prepared an CfTGP shortly after the meeting, to better promote the activities of the TG.

## TG-Bacteria (Diagnoses of bacterial infection and anti-microbial resistance, AMR)

The Topic Driver is Nada Malou. The latest documentation available is as follows:

TDD: [P-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A01.docx) (Same as Meeting L)
CfTGP: N/A
Contributions: N/A

No progress report was presented.

## TG-Diagnostic CT (Volumetric chest computed tomography)

The Topic Driver is Kuan Chen. The latest documentation available is as follows:

TDD: [P-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A01.docx) – [P-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A03.pptx)
CfTGP: [P-009-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A02.docx) (Same as Meeting H)
Contributions: N/A

Chen Bingshu presented the overview and updates of the Topic Group in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A03.pptx). A new pulmonary nodule dataset called PN9 contains 8,798 CT scans obtained by a series of CT manufacturers and 40,439 annotated nodules of 9 different classes. Plans to participate in the Trial Audit 2.0, finalize the TDD, and close the topic group within next several months.

The updated TDD in [P-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A01.docx) was uploaded to the Deliverables repository.

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

The Topic Drivers are Falk Schwendicke (Charité Berlin, DE), Joachim Krois (Dental XR AI, Germany); and Tarry Singh (deepkapha.ai, Netherlands). The latest available documentation is as follows:

TDD: [P-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A01.docx) – [P-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A03.pptx)
CfTGP: [P-010-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A02.docx)
Contributions: N/A

NOTE – **TG-Dental** co-driver Joachim Krois changed affiliation (Dental XR AI, Germany).

Falk started the presentation followed by Joachim and Tarry on progress report in [P-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A03.pptx). The TDD document was updated for this meeting, see [P-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A01.docx). Contributors to this group increase rapidly and six new members joined the TG since Meeting O, and now the group has 48 members from 20 countries of 5 continents. TG Dental Symposium was held on 19 September 2022 as part of the FGAI4H workshop.

Its own website (<https://www.autodontics.com/>) promotes to reach out more dentists to establish standardized benchmarking of Endodontic AI systems.

The TG completed the tasks for the Audit Trial 2.0. Now waiting for the finalization of the docker-based system, and working on Github repositories. The group focuses on submiting a paper to a peer reviewed journal first.

The Deliverables folder was updated with the updated TDD in [O-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-010-A01.docx).

## TG-FakeMed: AI-based detection of falsified medicine

The Topic Driver is Franck Verzefé. The latest documentation available is as follows:

TDD: [P-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A01.docx) (Same as meeting J)
CfTGP: [P-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A02.docx) (Same as Meeting H)
Contributions: N/A

No progress report was presented.

## TG-Falls (Falls amongst the elderly)

The Topic Driver is Pierpaolo Palumbo (University of Bologna, Italy). The latest documentation available is as follows:

TDD: [P-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A01.docx) – [P-012-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A03.pptx)
CfTGP: [P-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A02.docx) (Same as Meeting H)
Contributions: N/A

Pierpaolo presented an overview and update of the TG-Falls work using the slides in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-012-A03.pptx).

He asked whether their study is appropriate for the FG focus, and how to collaborate with WGs. Marc suggested to join the OCI project and details will be discussed further.

The Deliverables folder was updated with the updated TDD in [P-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A01.docx).

## TG-Histo (Histopathology)

The Topic Driver is Frederick Klauschen. The latest documentation available is as follows:

TDD: [P-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A01.docx) (Same as Meeting I)
CfTGP: [P-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A02.docx) (Same as Meeting E)
Contributions: N/A

No progress report was provided at this meeting.

## TG-Malaria: Malaria detection

The Topic Driver is Rose Nakasi. The latest documentation available is as follows:

TDD: [P-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A01.docx) (Same as meeting N) – [P-014-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A03.pptx)
CfTGP: [P-014-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A02.docx) (Same as meeting L)
Contributions: N/A

Rose Nakasi presented the updates using slides in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A03.pptx). The group is preparing a new challenge based on *codabench* to a wider community and gather more datasets for training and testing. Work on data formats will be needed.

No updates were made to the TDD, which was last updated for Meeting N, nor to the CfTGP (Meeting L).

## TG-MCH: Maternal and child health

The Topic Drivers are Raghu Dharmaraju (Wadhwani AI, India) and Alexandre Chiavegatto (University of São Paulo, Brazil).The latest documentation available is as follows:

TDD: [P-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A01.docx) – [P-015-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A03.pptx)
CfTGP: [P-015-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A02.docx) (Same as Meeting H)
Contributions: N/A

Alexandre briefed the meeting on the updates with the slides in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A03.pptx). He noted that machine learning has a role in helping reduce rates of death and complication at birth, which in many cases can greatly benefit from simple, low-cost interventions, if early enough warnings are provided. Algorithms need to use routinely available variables. If algorithms use expensive exams, it will be difficult to significantly improve the current situation.

The goal is to predict the risk of neonatal mortality using only data routinely available from birth records in the largest city of the Americas. Last year their lab published their research on algorithms developed to predict neonatal mortality using birth records in Sao Paulo.

For TDD, the group will concentrate on one use case among large areas of work in this field.

The updated TDD in [P-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A01.docx) was uploaded to the Deliverables repository.

## TG-Neuro: Neurological disorders

The Topic Driver is Marc Lecoultre (ML Labs, Switzerland), with Ferath Kherif (CHUV, Switzerland). The latest documentation available is as follows:

TDD: [P-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A01.docx) (Same as Meeting L) – [[P-016-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-016-A03.pptx)CfTGP: [P-016-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A02.docx) (Same as Meeting E)
Contributions: N/A

Ferath presented the overview of the work of the TG using the slides in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A03.pptx). Focusing now on the Trial audit project. The group also working on the integration of new subtopic on scalable digital platform for proactive brain health.

No updates were made to the TDD, which was last updated for Meeting L, nor to the CfTGP (Meeting E).

## TG-Ophthalmo (Ophthalmology)

The Topic Driver is Arun Shroff. The latest documentation available is as follows:

TDD: [P-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A01.docx)
CfTGP: [[P-017-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-017-A02.docx%EF%B7%9FHYPERLINK%20%22https%3A/extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-017-A02.docx%22) (Same as Meeting M)
Contributions: N/A

An updated TDD was submitted, but no presentations were provided at this meeting.

## TG-Outbreaks (AI for Outbreak Detection)

The Topic Drivers are Auss Abbood and Alexander Ullrich (Robert Koch Institute, Germany), Alexander Radunsky (ITGH, US) and Khahlil Louisy (Institute for Technology & Global Health, ITGH, US). At the last Meeting, it was agreed to merge the TG-Sanitation topics into TG-Outbreaks, however the documentation is still to be updated. At this meeting, only a sub-topic update was provided. The latest documentation available is as follows:

TDD: [P-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A01.docx) (Same as Meeting K) – [P-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A03.pptx)
CfTGP: [P-018-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A02.docx) (Same as Meeting I)
Contributions: N/A

Helmi Zakariah, sub-topic driver on tropical / neglected diseases, provided updates on the progress of TG-Outbreaks using the slides in [O-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-018-A03.pptx).

The objectives of the TG are 1) to prepare dataset that can be used by the epi-quark framework, and 2) to apply the epi-quark package (<https://github.com/aauss/epi-quark> on real world dengue outbreak dataset.

The group works on ethics and regulation will be added in the TDD.

After the merge of two groups of TG-Outbreak and TG-Sanitation at the last meeting, the collaboration is being done efficiently, having a meeting per month to combine each effort on various implications.

There will be an event on trustworthy AI-based wastewater surveillance technology at Harvard on 17 Nov 2022. Experts interested on the topic should contact Alex for details.

No updates were made to the TDD, which was last updated for Meeting K, nor to the CfTGP (Meeting I).

## TG-Psy (Psychiatry)

The Topic Driver is Nicholas Langer. The latest documentation available is as follows:

TDD: [P-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A01.docx) (Same as Meeting K) CfTGP: [P-019-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A02.docx) (Same as Meeting H)
Contributions: N/A

No updates were provided at this meeting.

## TG-Snake (Snakebite and snake identification)

The Topic Driver is Rafael Ruiz. The latest documentation available is as follows:

TDD: [P-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A01.docx) (Same as Meeting I)
CfTGP: [P-020-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A02.docx) (Same as Meeting G)
Contributions: N/A

No updates were provided at this meeting.

## TG-Symptom (Symptom assessment)

The Topic Drivers are Henry Hoffmann (ADA Health) and Martin Cansdale (Healthily, UK). The latest documentation available is as follows:

TDD: [P-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A01.docx) – [[P-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-021-A03.pptx)CfTGP:  [[P-021-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A02.docx) (Same as Meeting N)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-021-A02.docx)Contributions: N/A

Martin Cansdale presented the progress report (including a general overview of the activity) in [O-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-021-A03.pptx).

Work with the Audit Trial 2.0 project continues, which started reviewing the AI benchmarking interface. For test case storage and communication formats, FHIR compliant format was developed. The FHIR interface for communication with the symptom checker AIs is to be finalised. To integrate the TG-Symptom annotation tool with the OCI, the annotation tool to provide cases is to be converted in FHIR JSON format.

The updated TDD in [P-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A01.docx) was uploaded to the Deliverables repository.

## TG-TB (Tuberculosis)

The Topic Driver is Manjula Singh (ICMR, India). The latest documentation available is as follows:

TDD: [P-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-022-A01.docx) (Same as Meeting M)
CfTGP: [P-022-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-022-A02.docx) (Same as Meeting E)
Contributions:

No updates were provided at this meeting.

## TG-Radiology (Radiology)

The Topic Driver is Darlington Ahiale Akogo (minoHealth AI Labs, Ghana). The latest documentation available is as follows:

TDD: [P-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A01.docx) - [P-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A03.pptx)CfTGP: [P-023-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A02.docx) (Same as Meeting H)
Contributions: N/A

The TG driver presented the slides on the progress report in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A03.pptx) with an overview and update for the TG-Radiology. The group works on TG-Radiology Audit challenge on health.aiaudit.org

It was commented that negative prediction value is crucial, as it may cause false negatives. Hopefully such situation with false negatives can be solved with time, but it will be an issue when the beginning of implementation.

The updated TDD in [P-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A01.docx) is uploaded to the Deliverables repository.

## TG-Diabetes (Primary and secondary diabetes prediction)

The Topic Driver is Andrés Valdivieso (Anastasia.ai, Chile) The latest documentation available is as follows:

TDD: [P-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A01.docx) (same as Meeting K)
CfTGP: [P-024-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A02.docx) (same as Meeting L, draft by the secretariat)
Contributions: N/A

No progress report was presented.

## TG-Endoscopy (AI for endoscopy)

The Topic Driver is Jianrong Wu (Tencent Healthcare, China). The latest documentation available is as follows:

TDD: [P-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A01.docx) – [P-025-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A03.pptx)CfTGP: [P-025-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A02.docx) (Same as Meeting J)
Contributions: N/A

Jianrong presented the updates of the TG work. The TG will implement TDD with the latest version template. Participating in the Trial Audit 2.0 would be an option to improve the quality of TDD.

The updated TDD in [P-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A01.docx) is uploaded to the Deliverables repository.

## TG-MSK (AI for musculoskeletal medicine)

The co-Topic Drivers are Peter Grinbergs (EQL, UK) and Yura Perov (Consultant, UK), both can be reached through a common e-mail address, tgmskorg@googlegroups.com. The latest documentation available is as follows:

TDD: [P-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A01.docx) – [P-026-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A03.pptx)
CfTGP: [[P-026-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-026-A02.docx)Contributions: N/A

Peter and Yura delivered a progress report on the activities of the TG using the slides in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A03.pptx). The updated version of the TDD is available in [P-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A01.docx).

Two members joined and in total 11 members,

The current focus of the Group is prediction for and prevention of MSK conditions, including risk identification and risk reduction. Since Meeting O, two new members joined (total 11 members in total), updates to the document with synthetic cases.

Peter and Yura think that it would be too early for the TG to work with the Audit.

The updated TDD in [P-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A01.docx) is uploaded to the Deliverables repository.

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

The co-Topic Drivers are Susanna Brandi and Eleonora Lippolis (Merck KGaA, Darmstadt, Germany). The latest documentation available is as follows:

TDD: [P-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A01.docx) (same as Meeting N)CfTGP: [[P-027-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A02.docx) (same as Meeting M)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-027-A02.docx)Contributions: N/A

No updates were provided at this meeting.

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

The Topic Driver is Nina Linder (University of Helsinki, Finland). The latest documentation available is as follows:

TDD: [P-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028-A01.docx) (Same as meeting N) – [P-028-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029-A03.pptx)
CfTGP: [P-028-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-026-A02.docx) (Same as meeting M)
Contributions: N/A

The Topic Driver presented updates to the TDD using the slides in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029-A03.pptx). The group conducted proof of concept studies of a novel method that combines artificial intelligence (AI) and mobile digital microscopy for example for cell-based cervical cancer screening in resource-limited settings, in rural area in Kenya, with 700 women with HIV. The group will conduct validation studies for POC diagnostics for helminth infections and malaria in Tanzania and Kenya. The group would discuss with TG malaria, TG outbreaks and Stephanie Kuku on possible collaboration.

The group utilize portable low-cost scanners and cheaper device may be used if technical requirements meet.

The group has already developed its own annotation tool and will see how it can work with the tool developed by the OCI.

No update was made to the TDD or CfTGP at this meeting.

# Proposals for new topic areas

## Proposed new TG on traditional medicine

[P-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-033.pptx): New TG Proposal on AI for traditional medicine: Role of Artificial Intelligence and Digital Initiatives of the Ministry of Ayush

**Abstract:** This document contains a concept note describing the role of artificial intelligence and digital initiatives of the Ministry of Ayush.

[P-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-049.docx): Proposal to create a new Topic Group on AI for traditional medicine research and implementation (Ministry of Ayush, Govt of India)

**Abstract:** In recent years, the Traditional Medicine sector has grown in various dimensions and invited considerable amount of global attraction. To cater to new developments and demands, there is an increase in modern technologies like Artificial Intelligence (AI), Decision Support Systems (DSS), Ayurgenomics etc. in the traditional medicine sector.

Vaidya Rajesh Kotecha presented slides in [FGAI4H-P-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-033.pdf).

Sameer commented that this initiative would be aligned with [WHO Global Centre for Traditional Medicine](https://www.who.int/initiatives/who-global-centre-for-traditional-medicine) that was approved by WHO Membership, thus supported to move forward.

How exactly the use cases would look like? Which data would be included in the use cases? Use cases and solutions are available, and algorithms based on clinical evidence already exist.

Due to the wide area that Ayush covers, it was discussed whether the work can fit within a Topic Group structure. Some suggested to develop a skeleton of the structure of the group for the next FG meeting, but in order to speed up and to get a momentum to create a group rather waiting for two months, [P-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-049.docx) was developed and presented, and approved by the FG. The Topic Driver of the new group will be Rajesh Kotecha (Ministry of Ayush, Government of India). Ref: secy-ayush@nic.in; drleenachhatre@gmail.com; drleena.chhatre@gov.in; dr.saketram@gmail.com drji@ayu.in.

1. The creation of a new topic group on AI for traditional medicine (TG-TM) was agreed, with Rajesh Kotecha (Ministry of Ayush, Government of India) as topic driver.

# Review / reconfirmation of previous output documents

The following documents are reconfirmed without any updates:

* [F-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-103.docx): Updated FG-AI4H data acceptance and handling policy
* [C-104](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-C-104.docx): Thematic classification scheme
* [F-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-105.docx): ToRs for the WG-Experts and call for experts
* [F-106](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-106.docx): Guidelines on FG-AI4H online collaboration tools
* [M-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-107.docx): Updated FG-AI4H Onboarding document
* [FG-AI4H Whitepaper](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FG-AI4H_Whitepaper.pdf) ([K-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-002.docx))
* [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx): TDD Template
* [J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-103.docx): CfTGP template

The call for proposals in O-102 will be updated and uploaded to the repository as [P-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-102.docx), for proposals at Meeting P.

# Working methods

No changes were agreed to the working methods.

NOTE – [Annex D](file:///C%3A%5CUsers%5Cbanno%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5C5C9RKHVL%5CFGAI4H-O-101-Draft-v3.docx#AnnexD) hereinafter contains the agreed procedures for online approval of document as well as for organizing e-meetings.

# Outcomes of this meeting

## WG updates

There were no changes to the FG-AI4H leadership.

## TG updates

New TG/sub-TG:

* TG on traditional medicine was created at this meeting. The Topic Driver of the new group will be Rajesh Kotecha (Ministry of Ayush, Government of India).
* TG-Derma: New TG driver will be Harsha Jayakody (MyDoctor, Sri Lanka).
* **TG-Dental** co-driver Joachim Krois changed affiliation (Dental XR AI, Germany).

Updates to leadership / scope of existing TGs:

* There were no changes in leadership / scope of existing TGs.

## Output liaison statements

No OLSs were prepared at this meeting.

## Output documents

The following updated **output documents** were agreed:

* [P-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-102.docx): Updated call for proposals: use cases, benchmarking, and data
* [P-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-200.docx): Updated list of FG-AI4H deliverables

## Deliverables and parent group reporting

The following deliverables were approved at the meeting:

* [P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx): (to be published as P-201): DEL2 - Overview of regulatory considerations on artificial intelligence for health
* [O-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-036.docx) (to be published as P-202): DEL2.2 - Good practices for health applications of machine learning: Considerations for manufacturers and regulators

The following Deliverable will undergo a two-week consultation period and will be published:

* [P-038-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038-R01.docx) (to be published as P-203): DEL 0.1 - Common unified terms in artificial intelligence for health
NOTE – Consider *renumbering* this Deliverable at time of publication.

All other available deliverables were reviewed, their latest version is found in the [FG-AI4H collaboration site](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx).

A progress report will be prepared for the period January – October 2022 for presentation to ITU-T SG16 at its next meeting (Geneva, 17-28 October 2022).

# Future work

## Schedule of future FG meetings and workshops

The schedule of meetings in [P-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-003.docx) was reviewed; Table 2 has the updated information.

In view of the COVID-19 pandemic, physical meetings after Brasilia were transformed into virtual meetings, until the last Meeting O in Berlin. Future meetings are expected to be physical meetings with remote participation. In addition to meetings, **topic-specific webinars** should be organized around horizontal deliverables (DEL01 to DEL09). The Focus Group will continue to organize online webinars under the umbrella of AI for Good to highlight promises and perils around the use of AI-based methods in healthcare.

Table 2 – Schedule of future FG meetings (as of 2022-09-22)

| Meeting | Date | Venue | Notes |
| --- | --- | --- | --- |
| P | 19-22 September 2022 | University of Helsinki | This meeting |
| Q | 6-9 December 2022 | Douala, Cameroon | Details to be provided |
| R | 21-24 March 2022 | Cambridge, MA, USA | MIT, Harvard & Mass General |

The following is a list of potential future meeting locations:

|  |  |  |
| --- | --- | --- |
| Asia:1. Bangladesh
2. Philippines
3. Singapore
4. South Korea
5. Thailand

Middle-East1. Oman
2. UAE
 | Africa1. South Africa
2. Uganda
3. Kenya
4. Ghana
5. Rwanda
6. Nigeria

Europe1. Sweden
 | Americas1. Canada
2. US
3. Chile
 |

## Work plan and timeline

Update drafts of the deliverables in Table 1 (see §‎11) are expected to be available by two weeks before the next FG-AI4H plenary meeting (to be announced).

## Interim activities (online)

TGs and WGs will continue their activities between this and the next FG meeting. Communications on planned e-meetings will be announced in the TG-specific and/or general mailing lists (see [Annex D](file:///C%3A%5CUsers%5Cbanno%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5C5C9RKHVL%5CFGAI4H-O-101-Draft-v3.docx#AnnexD)) with at least one-week notice.

# Promotion and outreach

The meeting was reminded that a series of webinars took place. The idea is that the webinars on horizontal and vertical themes of the Deliverables take place every two weeks and are organized within the context of the AI for Good online events. The whole series of the Discovery series on AI and health can be seen here: <https://aiforgood.itu.int/search-result-programme/?keyword=&category=346&event-venue=&enddate=&startdate=Select+year>.

# A.O.B.

None.

# Closing

The FG-AI4H chairman thanked the hosts, in particular Nina Linder and Johan Lundin, for the excellent facilities and arrangements that made the meeting very enjoyable and productive. He also thanked all participants for having joined the meeting, in particular those coming from far to join the meeting, as well as those who submitted contributions and engaged in the discussions. He noted the time and effort put in by Markus Wenzel and Eva Weicken for structuring the meeting. The chairman also thanked the vice-chairs, WG chairs/co-/vice-chairs, and topic drivers who joined the discussions. Finally, he expressed his appreciation for the essential work performed by the secretariat, in particular Simão Campos, Hiba Tahawi, Kaoru Mizuno and Bastiaan Quast. He concluded noting that the participants have been the core of something that will grow much bigger and encouraged all to work towards that goal.

The meeting was closed on Thu 22 September 2022 around 1300 hours (Helsinki time).

Annex A:
Agenda

|  |  |  |
| --- | --- | --- |
|  |  | Related Documents |
| 1 | Opening | [P-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-002.pptx) (FG-AI4H Introduction) |
| 2 | Approval of agenda | [P-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-001.docx) (Agenda); Initial timing: [link](https://docs.google.com/spreadsheets/d/1WY2x3m5ToAGvvfMKogKqI9HFIPjN8QLKDkw0D4kNJ9A/edit#gid=0) |
| 3 | Documentation and allocation | [P-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-001.docx) (Allocation); Annex B (Documentation)  |
| 4 | IPR | Annex A |
| 5 | Management updates |  |
|  | Vice-chairs | * No updates
 |
|  | WGs | * No updates
 |
|  | TGs | * [P-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-004.docx): Update of drivers for TG-Dental, TG-Dermatology, TG-Outbreaks, TG-Symptoms
 |
| 6 | Approval of Meeting N outcomes and updates | [O-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-101.docx): Meeting Report[O-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-102.docx): Updated call for proposals: use cases, benchmarking, and data[O-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-200.docx): Updated list of deliverables[O-201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-201.docx): DEL01 – Ethics and governance of artificial intelligence for health |
|  | Interim activities:  | [P-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-045.pptx): Presentations – Workshop on AI for Health[P-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-046.pptx): Presentations – Dental Symposium |
| 7 | Review of incoming LSs |  |
|  | LS on highlights from the first meeting of the Joint Coordination Activity on Digital COVID-19 Certificates [from JCA-DCC] | [P-029](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029.docx): JCA-DCC to various groupsà *to Note* |
|  | LS on highlights from the second meeting of the Joint Coordination Activity on Digital COVID-19 Certificates [from JCA-DCC] | [P-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-030.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-030-A01.docx): JCA-DCC to various groupsà *to Note* |
|  | LS on call for use cases on testbeds federation [from FG-TBFxG]  | [P-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-031.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-031-A01.docx): FG-TBFxG to various groupsà *to consider?* |
|  | LS on Current Activities of FG-AI4A [from FG-AI4A] | [P-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-034.docx): FG-AI4A to various groupsà *to Note* |
|  | LS on one approved deliverable of ITU-T FG-AI4EE [from FG-AI4EE] | [P-035](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-035.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-035-A01.docx): FG-AI4EE to various groupsà *to Note* |
|  |  |  |
| 8 | Information on AI-related activities |  |
| 9 | Horizontal and strategic topics | [P-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-050.pptx): Initial considerations on a Global Initiative on AI for health (GI-AI4H)[P-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-052.pptx): Generating Evidence for Artificial Intelligence Based Medical Devices (WHO) |
| 10 | Working Group updates |  |
| a | Data and AI solution assessment methods (WG-DAISAM) [Pat Baird; Luis Oala] | [P-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032-A01.pptx): DEL7.3: ML4H trial audits–Iteration 2.0 Playbook (Version 3.0) |
| b | Data and AI solution handling (WG-DASH) [Marc Lecoultre; Ferath Kherif]  |  |
|  | Ethics (WG-Ethics) [Andreas Reis] | [P-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-043.pptx): WG-Ethics progress reportContribution: [P-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-036.docx): Ethical concept of prudence in artificial intelligence – The current standing (Miroslav Radenkovic, Univ. of Belgrade, Serbia)  |
|  | Operations (WG-O) [Markus Wenzel; Eva Weicken] |  |
|  | Regulatory considerations (WG-RC) [Shada Alsalamah] | (See agenda item 12.e) |
| f | Clinical Evaluation (WG-CE) [Naomi Lee; Shubhanan Upadhyay; Eva Weicken] |  |
|  | Collaborations and Outreach (WG-CO) [Andrew Farlow] | [P-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-048.pptx): WG-CO update |
|  | AI and other digital technologies for COVID-19 health emergency (AHG-DT4HE) [Shan Xu, Ana Rivière-Cinnamond] |  |
|  |  |  |
| 11 | Open Code Project [Marc Lecoultre] | [P-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-041.pptx): Update on OCI-related activities |
| 12 | FG-AI4H deliverables | [P-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-005.docx): Updated list of planned deliverables |
| a | New deliverables | – |
| b | [DEL0](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL00.docx): Overview of deliverables | [P-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-044.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-044-A01.pptx): DEL00 Update: Overview of the FG-AI4H deliverables  |
|  | [DEL0.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL00_1.docx): FGAI4H terms and definitions | [P-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038.docx): DEL0.1 Update: Common unified terms in artificial intelligence for health |
|  | [DEL1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL01.docx): AI4H ethics considerations | [O-201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-201.docx): (already approved & published) |
|  | [DEL2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02.docx): AI4H regulatory best practices | [P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047-A01.pptx): DEL02 Update: Overview of Regulatory Considerations on Artificial Intelligence for Health |
|  | [DEL2.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02_1.docx): Mapping of IMDRF essential principles to AI for health software |  |
|  | [DEL2.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02_2.docx): Good practices for health applications of machine learning: Considerations for manufacturers and regulators |  |
|  | [DEL3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL03.docx): AI4H requirements specifications |  |
|  | [DEL4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL04.docx): AI software life cycle specification |  |
|  | [DEL5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05.docx): Data specification | Contribution: [P-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-039.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-039-A01.pptx): Privacy-preserving AI for Synthetic and Anonymous Health Data (Univ. of Turku, Finland) |
|  | [DEL5.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_1.docx): Data requirements |  |
|  | [DEL5.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_2.docx): Data acquisition |  |
|  | [DEL5.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_3.docx): Data annotation specification | [P-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-056.pptx): DEL5.3: Data annotation specification - Presentation |
|  | [DEL5.4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_4.docx): Training and test data specification |  |
|  | [DEL5.5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_5.docx): Data handling |  |
|  | [DEL5.6](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_6.docx): Data sharing practices |  |
|  | [DEL6](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL06.docx): AI training best practices specification |  |
|  | [DEL7](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07.docx): AI for health evaluation considerations | [P-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-037.docx): DEL07 Update: AI for health evaluation considerations |
|  | [DEL7.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_1.docx): AI4H evaluation process description |  |
|  | [DEL7.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_2.docx): AI technical test specification | [P-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-053.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-053-A01.pptx): DEL7.2 Update: AI technical test specification |
|  | [DEL7.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_3.docx): Data and artificial intelligence assessment methods (DAISAM) reference | [P-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032-A01.pptx): DEL7.3: ML4H trial audits–Iteration 2.0 Playbook (Version 3.0) |
|  | [DEL7.4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_4.docx): Clinical evaluation of AI for health | [P-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040-A01.pptx): Updated DEL7.4 [Editors] |
|  | [DEL7.5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_5.docx): Assessment platform | [P-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-041.pptx): Update on OCI-related activities |
|  | DEL8: AI4H scale-up and adoption | [P-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-054.pptx): DEL08: AI4H scale-up and adoption - Progress Report |
|  | [DEL9](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09.docx): AI4H applications and platforms |  |
|  | [DEL9.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09_1.docx): Mobile applications (Manjeet), [DEL9.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09_2.docx): Cloud-based AI applications | [P-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-055.pptx): DEL09 Progress report (not presented) |
|  | [DEL10.0](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL10_0.docx): AI4H use cases: Topic Description Documents | [P-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042-A01.pptx): Updated DEL10 [Editors] |
| 13 | Updates to TGs and new proposals |  |
|  | Template updates: TDD, CfTGP | [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx): TDD template (to note)[J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-103.docx): CfTGP template (to note) |
| b | TG-Cardio (Cardiovascular Risk Prediction) [Benjamin Muthambi] | TDD: [P-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A01.docx) - [[P-006-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-006-A03.pptx) CfTGP: [[P-006-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-006-A02.docx)Contributions:  |
| c | TG-Derma (Dermatology) ~~[~~~~Sharad Kumar~~~~]~~ 🡪 [Harsha Jayakody] | TDD: [P-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A01.docx) - [P-007-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A03.pptx)CfTGP: [P-007-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A02.docx)Contributions:  |
|  | TG-Bacteria (Diagnoses of bacterial infection and anti-microbial resistance - AMR)[Nada Malou] | TDD: [P-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A01.docx) - [P-008-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A03.pptx)CfTGP: [P-008-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A02.docx) Contributions:  |
|  | TG-DiagnosticCT (Volumetric chest computed tomography) [Kuan Chen] | TDD: [P-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A01.docx) - [[P-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-009-A03.pptx)CfTGP: [P-009-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A02.docx) Contributions:  |
|  | TG-Dental (Dental diagnostics and digital dentistry)[Falk Schwendicke, Joachim Krois] | TDD: [P-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A01.docx) - [[P-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-010-A03.pptx)CfTGP: [[P-010-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-010-A02.docx) Contributions: [P-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-046.pptx) Presentations - Dental Symposium  |
|  | TG-FakeMed: AI-based detection of falsified medicine[Franck Verzefé] | TDD: [P-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A01.docx) - [[P-011-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-011-A03.pptx) CfTGP: [[P-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-011-A02.docx)Contributions:  |
|  | TG-Falls (Falls among the elderly) [Pierpaolo Palumbo for Inês Sousa] | TDD: [P-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A01.docx)- [[P-012-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-012-A03.pptx)CfTGP: [[P-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-012-A02.docx)Contributions: |
|  | TG-Histo (Histopathology) [Frederick Klauschen] | TDD: [P-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A01.docx) - [P-013-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A03.pptx) CfTGP: [P-013-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A02.docx) Contributions: |
|  | TG-Malaria: Malaria detection [Rose Nakasi] | TDD: [P-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A01.docx) - [[P-014-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-014-A03.pptx) CfTGP: [[P-014-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-014-A02.docx)Contributions:  |
|  | TG-MCH: Maternal and child health [Raghu Dharmaraju, Alexandre Chiavegatto Filho] | TDD: [P-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A01.docx) - [P-015-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A03.pptx) CfTGP: [P-015-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
|  | TG-Neuro: Neurological disorders [Marc Lecoultre] | TDD: [P-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A01.docx) - [[P-016-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-016-A03.pptx)CfTGP: [[P-016-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-016-A02.docx)Contributions: |
|  | TG-Ophthalmo (Ophthalmology) [Arun Shroff] | TDD: [P-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A01.docx) - [P-017-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A03.pptx) CfTGP: [[P-017-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-017-A02.docx)Contributions:  |
|  | TG-Outbreaks (AI for Outbreak Detection) [Auss Abbood, Alexander Ullrich,Alexander Radunsky, Khahlil Louisy] | TDD: [P-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A01.docx) - [P-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A03.pptx)CfTGP: [P-018-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A02.docx)Contributions: |
|  | TG-Psy (Psychiatry) [Nicholas Langer] | TDD: [P-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A01.docx) - [[P-019-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-019-A03.pptx)CfTGP: [P-019-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A02.docx) Contributions:  |
|  | TG-Snake (Snakebite and snake identification) [Rafael Ruiz] | TDD: [P-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A01.docx) - [[P-020-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-020-A03.pptx)CfTGP: [P-020-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A02.docx)Contributions: |
|  | TG-Symptom (Symptom assessment) [Henry Hoffmann, Martin Cansdale] | TDD: [P-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A01.docx) - [[P-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-021-A03.pptx) CfTGP: [[P-021-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-021-A02.docx) Contributions: |
|  | TG-TB (Tuberculosis) [Manjula Singh] | TDD: [P-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-022-A01.docx) - [[P-022-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-022-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-022-A03.pptx)CfTGP: [P-022-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-022-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
|  | TG-Radiology (Radiology) [Darlington Ahiale Akogo] | TDD: [P-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A01.docx) - [P-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A03.pptx) CfTGP: [P-023-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A02.docx) Contributions: |
|  | TG-Diabetes[Andrés Valdivieso] | TDD: [P-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A01.docx) - [P-024-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A03.pptx)CfTGP: [[P-024-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-024-A02.docx)Contributions: |
|  | TG-Endoscopy[Jianrong Wu] | TDD: [P-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A01.docx) - [[P-025-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-025-A03.pptx)CfTGP: [[P-025-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-025-A02.docx)Contributions: |
|  | TG-MSK (AI for Musculoskeletal medicine)[Peter Grinbergs, Yura Perov] | TDD: [P-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A01.docx) - [[P-026-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-026-A03.pptx)CfTGP: [P-026-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A02.docx) Contributions: |
|  | TG-Fertility (AI for human reproduction and fertility)[Susanna Brandi, Eleonora Lippolis]  | TDD: [P-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A01.docx) - [[P-027-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-026-A03.pptx)CfTGP: [P-027-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A02.docx) Contributions: |
|  | TG-POC (Topic Group on AI for point-of care diagnostics)[Nina Linder] | TDD: [P-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028-A01.docx) - [[P-028-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-026-A03.pptx)CfTGP: [P-028-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028-A02.docx) Contributions: |
| 14 | Proposals for new topic areas |  |
|  | New TG on AI for traditional medicine | [P-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-033.pptx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-033-A01.pdf): Role of Artificial Intelligence and Digital Initiatives of the Ministry of Ayush[P-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-049.docx): Proposal to create a new Topic Group on AI for traditional medicine research and implementation (Ministry of Ayush, Govt of India) |
|  |  |  |
| 15 | Review / reconfirmation of previous output documents | [F-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-103.docx): Updated FG-AI4H data acceptance and handling policy[C-104](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-C-104.docx): Thematic classification scheme[F-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-105.docx): ToRs for the WG-Experts and call for experts[F-106](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-106.docx): Guidelines on FG-AI4H online collaboration tools[M-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-107.docx): Updated FG-AI4H Onboarding document[FG-AI4H Whitepaper](https://staging.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FG-AI4H_Whitepaper.pdf) [[K-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-002.docx)][J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx): TDD Template[J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-103.docx): CfTGP template |
| 16 | Outcomes of this meeting | a) Outgoing liaison statementsNoneb) Structure updates- New Driver TG Derma: Harsha Jayakody (Flash Health, Sri Lanka) harsha@flash.health- New TG-TM Traditional Medicine: Driver Rajesh Kotecha (Ministry of Ayush, Government of India) secy-ayush@nic.inc) Call for proposals - P-102 (Updated CfP)d) Output documents- DEL0.1. (renumber): [P-038-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038-R01.docx)- DEL2: [FGAI4H-P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx)- DEL2.2: [FGAI4H-O-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-036.docx)- …e) Updated list of planned deliverables[[P-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-005.docx)à P-200] |
| 17 | Future work |  |
|  | Schedule of future FG meetings and workshops | [P-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-003.docx) |
|  | Format of next meeting |  |
|  | Work plan and timeline- Deliverables |  |
|  | Interim activities (online) | Webinars within AI4G platformPre-FG meeting TG-specific workshops |
| 18 | Promotion and outreach | ITU [AI4G Health Track Webinars](https://aiforgood.itu.int/search-result-programme/?keyword=&category=346&event-venue=&enddate=&startdate=Select+year) |
|  | Promotional activities |  |
|  | Press communication |  |
|  | Funding and partnerships |  |
| 19 | A.O.B. |  |
| 20 | Closing |  |

Annex B:
Documentation

| Name | Title | Source |
| --- | --- | --- |
| [FGAI4H-P-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-001.docx) | Agenda of the 16th meeting (Meeting P) of the Focus Group on Artificial Intelligence for Health (FG-AI4H) | Chairman FG-AI4H |
| [FGAI4H-P-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-002.pptx) | Introduction to ITU/WHO Focus Group on AI for Health (FG-AI4H)  | Chairman FG-AI4H |
| [FGAI4H-P-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-003.docx) | Schedule of future FG meetings (as of 2022-09-20) | Chairman FG-AI4H |
| [FGAI4H-P-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-004.docx) | Update of drivers for TG-Dental, TG-Dermatology, TG-Outbreaks, TG-Symptoms | TSB |
| [FGAI4H-P-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-005.docx) | Updated list of FG-AI4H deliverables (as of 2022-09-20) | TSB |
| [FGAI4H-P-006](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006.docx) | Updates for Cardiovascular disease risk prediction (TG-Cardio) | TG-Cardio Topic Driver |
| [FGAI4H-P-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A01.docx) | Att.1 – TDD update (TG-Cardio) |  |
| [FGAI4H-P-006-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A02.docx) | Att.2 – CfTGP (TG-Cardio) |  |
| [FGAI4H-P-006-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A03.pptx) | Att.3 – Presentation (TG-Cardio) |  |
| [FGAI4H-P-007](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007.docx) | Updates for Dermatology (TG-Derma) | TG-Derma Topic Driver |
| [FGAI4H-P-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A01.docx) | Att.1 – TDD update (TG-Derma) |  |
| [FGAI4H-P-007-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A02.docx) | Att.2 – CfTGP (TG-Derma) |  |
| [FGAI4H-P-007-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A03.pptx) | Att.3 – Presentation (TG-Derma) |  |
| [FGAI4H-P-008](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008.docx) | Updates for Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | TG-Bacteria Topic Driver |
| [FGAI4H-P-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A01.docx) | Att.1 – TDD update (TG-Bacteria) |  |
| [FGAI4H-P-008-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A02.docx) | Att.2 – CfTGP (TG-Bacteria) |  |
| [FGAI4H-P-008-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A03.pptx) | Att.3 – Presentation (TG- Bacteria) |  |
| [FGAI4H-P-009](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009.docx) | Updates for Volumetric chest CT (TG-DiagnosticCT) | TG-DiagnosticCT Topic Driver |
| [FGAI4H-P-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A01.docx) | Att.1 – TDD update (TG-DiagnosticCT) |  |
| [FGAI4H-P-009-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A02.docx) | Att.2 – CfTGP (TG-DiagnosticCT) |  |
| [FGAI4H-P-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A03.pptx) | Att.3 – Presentation (TG-DiagnosticCT) |  |
| [FGAI4H-P-010](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010.docx) | Updates for Dental diagnostics and digital dentistry (TG-Dental) | TG-Dental Topic Driver |
| [FGAI4H-P-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A01.docx) | Att.1 – TDD update (TG-Dental) |  |
| [FGAI4H-P-010-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A02.docx) | Att.2 – CfTGP (TG-Dental) |  |
| [FGAI4H-P-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A03.pptx) | Att.3 – Presentation (TG-Dental) |  |
| [FGAI4H-P-011](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011.docx) | Updates for falsified medicine (TG-FakeMed) | TG-FakeMed Topic Driver |
| [FGAI4H-P-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A01.docx) | Att.1 – TDD update (TG-FakeMed) |  |
| [FGAI4H-P-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A02.docx) | Att.2 – CfTGP (TG-FakeMed) |  |
| [FGAI4H-P-011-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A03.pptx) | Att.3 – Presentation (TG- FakeMed) |  |
| [FGAI4H-P-012](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012.docx) | Updates for Falls among the elderly (TG-Falls) | TG-Falls Topic Driver |
| [FGAI4H-P-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A01.docx) | Att.1 – TDD update (TG-Falls) |  |
| [FGAI4H-P-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A02.docx) | Att.2 – CfTGP (TG-Falls) |  |
| [FGAI4H-P-012-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A03.pptx) | Att.3 – Presentation (TG-Falls) |  |
| [FGAI4H-P-013](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013.docx) | Updates for Histopathology (TG-Histo) | TG-Histo Topic Driver |
| [FGAI4H-P-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A01.docx) | Att.1 – TDD update (TG-Histo) |  |
| [FGAI4H-P-013-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A02.docx) | Att.2 – CfTGP (TG-Histo) |  |
| [FGAI4H-P-013-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A03.pptx) | Att.3 – Presentation (TG-Histo) |  |
| [FGAI4H-P-014](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014.docx) | Updates for Malaria detection (TG-Malaria) | TG-Malaria Topic Driver |
| [FGAI4H-P-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A01.docx) | Att.1 – TDD update (TG-Malaria) |  |
| [FGAI4H-P-014-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A02.docx) | Att.2 – CfTGP (TG-Malaria) |  |
| [FGAI4H-P-014-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A03.pptx) | Att.3 – Presentation (TG-Malaria) |  |
| [FGAI4H-P-015](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015.docx) | Updates for Maternal and child health (TG-MCH) | TG-MCH Topic Driver |
| [FGAI4H-P-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A01.docx) | Att.1 – TDD update (TG-MCH) |  |
| [FGAI4H-P-015-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A02.docx) | Att.2 – CfTGP (TG-MCH) |  |
| [FGAI4H-P-015-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A03.pptx) | Att.3 – Presentation (TG-MCH) |  |
| [FGAI4H-P-016](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016.docx) | Updates for Neurological disorders (TG-Neuro) | TG-Neuro Topic Driver |
| [FGAI4H-P-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A01.docx) | Att.1 – TDD update (TG-Neuro) |  |
| [FGAI4H-P-016-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A02.docx) | Att.2 – CfTGP (TG-Neuro) |  |
| [FGAI4H-P-016-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A03.pptx) | Att.3 – Presentation (TG-Neuro) |  |
| [FGAI4H-P-017](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017.docx) | Updates for Ophthalmology (TG-Ophthalmo) | TG-Ophthalmo Topic Driver |
| [FGAI4H-P-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A01.docx) | Att.1 – TDD update (TG-Ophthalmo) |  |
| [FGAI4H-P-017-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A02.docx) | Att.2 – CfTGP (TG-Ophthalmo) |  |
| [FGAI4H-P-017-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A03.pptx) | Att.3 – Presentation (TG-Ophthalmo) |  |
| [FGAI4H-P-018](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018.docx) | Updates for Outbreak detection (TG-Outbreaks) | TG-Outbreaks Topic Driver |
| [FGAI4H-P-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A01.docx) | Att.1 – TDD update (TG-Outbreaks) |  |
| [FGAI4H-P-018-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A02.docx) | Att.2 – CfTGP (TG-Outbreaks) |  |
| [FGAI4H-P-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A03.pptx) | Att.3 – Presentation (TG-Outbreaks) |  |
| [FGAI4H-P-019](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019.docx) | Updates for Psychiatry (TG-Psy) | TG-Psy Topic Driver |
| [FGAI4H-P-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A01.docx) | Att.1 – TDD update (TG-Psy) |  |
| [FGAI4H-P-019-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A02.docx) | Att.2 – CfTGP (TG-Psy) |  |
| [FGAI4H-P-019-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A03.pptx) | Att.3 – Presentation (TG-Psy) |  |
| [FGAI4H-P-020](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020.docx) | Updates for Snakebite and snake identification (TG-Snake) | TG-Snake Topic Driver |
| [FGAI4H-P-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A01.docx) | Att.1 – TDD update (TG-Snake) |  |
| [FGAI4H-P-020-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A02.docx) | Att.2 – CfTGP (TG-Snake) |  |
| [FGAI4H-P-020-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A03.pptx) | Att.3 – Presentation (TG- Snake) |  |
| [FGAI4H-P-021](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021.docx) | Updates for Symptom assessment (TG-Symptom) | TG-Symptom Topic Driver |
| [FGAI4H-P-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A01.docx) | Att.1 – TDD update (TG-Symptom) |  |
| [FGAI4H-P-021-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A02.docx) | Att.2 – CfTGP (TG-Symptom) |  |
| [FGAI4H-P-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A03.pptx) | Att.3 – Presentation (TG-Symptom) |  |
| [FGAI4H-P-022](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-022.docx) | Updates for Tuberculosis (TG-TB) | TG-TB Topic Driver |
| [FGAI4H-P-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-022-A01.docx) | Att.1 – TDD update (TG-TB) |  |
| [FGAI4H-P-022-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-022-A02.docx) | Att.2 – CfTGP (TG-TB) |  |
| [FGAI4H-P-022-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-022-A03.pptx) | Att.3 – Presentation (TG-TB) |  |
| [FGAI4H-P-023](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023.docx) | Updates for Radiology (TG-Radiology) | TG-Radiology Topic Driver |
| [FGAI4H-P-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A01.docx) | Att.1 – TDD update (TG-Radiotherapy) |  |
| [FGAI4H-P-023-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A02.docx) | Att.2 – CfTGP (TG-Radiotherapy) |  |
| [FGAI4H-P-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A03.pptx) | Att.3 – Presentation (TG-Radiotherapy) |  |
| [FGAI4H-P-024](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024.docx) | Updates for Primary and secondary diabetes prediction (TG-Diabetes) | TG-Diabetes Topic Driver |
| [FGAI4H-P-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A01.docx) | Att.1 – TDD update (TG-Diabetes) |  |
| [FGAI4H-P-024-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A02.docx) | Att.2 – CfTGP (TG-Diabetes) |  |
| [FGAI4H-P-024-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A03.pptx) | Att.3 – Presentation (TG-Diabetes) |  |
| [FGAI4H-P-025](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025.docx) | Updates for Endoscopy (TG-Endoscopy) | TG-Endoscopy Topic Driver |
| [FGAI4H-P-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A01.docx) | Att.1 – TDD update (TG-Endoscopy) |  |
| [FGAI4H-P-025-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A02.docx) | Att.2 – CfTGP (TG-Endoscopy) |  |
| [FGAI4H-P-025-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A03.pptx) | Att.3 – Presentation (TG-Endoscopy) |  |
| [FGAI4H-P-026](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026.docx) | Initial documents for AI for Musculoskeletal medicine (TG-MSK) | TG-MSK Topic Driver |
| [FGAI4H-P-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A01.docx)  | Att.1 – TDD update (TG-MSK) |  |
| [FGAI4H-P-026-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A02.docx) | Att.2 – CfTGP (TG-MSK) |  |
| [FGAI4H-P-026-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-026-A03.pptx) | Att.3 – Presentation (TG-MSK) |  |
| [FGAI4H-P-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027.docx) | Initial docs: AI for human reproduction and fertility (TG-Fertility) | TG-Fertility Topic Driver |
| [FGAI4H-P-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A01.docx) | Att.1 – TDD update (TG-Fertility) |  |
| [FGAI4H-P-027-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A02.docx) | Att.2 – CfTGP (TG-Fertility) |  |
| [FGAI4H-P-027-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A03.pptx) | Att.3 – Presentation (TG-Fertility) |  |
| [FGAI4H-P-028](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028.docx) | Initial docs: Topic Group on AI for point-of care diagnostics (TG-POC) | TG-POC Topic Driver |
| [FGAI4H-P-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028-A01.docx) | Att.1 – TDD update (TG-POC) |  |
| [FGAI4H-P-028-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028-A02.docx) | Att.2 – CfTGP (TG-POC) |  |
| [FGAI4H-P-028-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029-A03.pptx) | Att.3 – Presentation (TG-POC) |  |
| [FGAI4H-P-029](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-029-A01.pptx) | LS on highlights from the first meeting of the Joint Coordination Activity on Digital COVID-19 Certificates (JCA-DCC) |  |
| [FGAI4H-P-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-030.doctx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-030-A01.docx) | LS on highlights from the second meeting of the Joint Coordination Activity on Digital COVID-19 Certificates (JCA-DCC) | JCA-DCC |
| [FGAI4H-P-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-031.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-031-A01.docx) | LS on call for use cases on testbeds federation  | FG-TBFxG |
| [FGAI4H-P-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032-A01.pptx) | DEL7.3: ML4H trial audits–Iteration 2.0 Playbook (Version 3.0) | Editors |
| [FGAI4H-P-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-033.pptx%22%20%5Ct%20%22_blank)+ [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-033-A01.pdf) | Role of Artificial Intelligence and Digital Initiatives of the Ministry of Ayush | Ministry of Ayush (India) |
| [FGAI4H-P-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-034.docx) | LS on Current Activities of FG-AI4A [from FG-AI4A] | FG-AI4A |
| [FGAI4H-P-035](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-035.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-035-A01.docx) | LS on one approved deliverable of ITU-T FG-AI4EE [from FG-AI4EE] | FG-AI4EE |
| [FGAI4H-P-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-036.docx) | Ethical concept of prudence in artificial intelligence – The current standing | Univ. of Belgrade |
| [FGAI4H-P-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-037.docx) | DEL07 Update: AI for health evaluation considerations | Editors |
| [FGAI4H-P-038-R1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-038-R01.docx)  | DEL0.1 Update: Common unified terms in artificial intelligence for health | Editors |
| [FGAI4H-P-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-039.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-039-A01.pptx) | Privacy-preserving AI for synthetic and anonymous health data | Univ. of Turku |
| [FGAI4H-P-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-040-A01.pptx) | DEL7.4 Update: Clinical evaluation of AI for health | Editors DEL7.4 |
| [FGAI4H-P-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-041.pptx) | Open Code Initiative – Status update |  |
| [FGAI4H-P-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-042.pptx) | DEL10 Update: AI4H use cases: Topic Description Documents | Editors DEL10 |
| [FGAI4H-P-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-043.pptx) | WG-Ethics progress report | WG-Ethics chair |
| [FGAI4H-P-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-044.docx) | Updated DEL00: Overview of the FG-AI4H deliverables | Editors DEL00 |
| [FGAI4H-P-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-045.pptx) | Presentations - Workshop on AI for Health |  |
| [FGAI4H-P-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-046.pptx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-046-A01.pptx) | Presentations - Dental Symposium |  |
| [FGAI4H-P-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-047-A01.pptx) | DEL02 Update: Overview of Regulatory Considerations on Artificial Intelligence for Health | Editors DEL02 |
| [FGAI4H-P-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-048.pptx) | WG-CO update | WG-CO |
| [FGAI4H-P-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-049.docx) | Proposal to create a new Topic Group on AI for traditional medicine research and implementation | Ministry of Ayush, India |
| [FGAI4H-P-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-050.pptx) | Initial considerations on a Global Initiative on AI for health (GI-AI4H) | FG-AI4H Management |
| [FGAI4H-P-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-051.pptx) | Cybersecurity and AI/ML Data Lifecycles Follow up |  |
| [FGAI4H-P-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-052.pptx) | Generating Evidence for Artificial Intelligence Based Medical Devices | WHO |
| [FGAI4H-P-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-053.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-053-A01.pptx) | DEL7.2 Update: AI technical test specification | Editors |
| [FGAI4H-P-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-054.pptx) | DEL08: AI4H scale-up and adoption - Progress Report | Editor DEL08 |
| [FGAI4H-P-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-055.pptx) | DEL09: AI4H applications and platforms – Progress report | Editor DEL09 |
| [FGAI4H-P-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-056.pptx) | DEL5.3: Data annotation specification - Presentation | Editor DEL5.3 |

Annex C:
List of participants

Overall:

* Workshop: 138 (Physical 37, Remote 101)
* Meeting: 137 (Physical 40, Remote 97)

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Annex D:
Summary of FG-AI4H resources and electronic working methods

Working groups

| Working Group | Leadership |
| --- | --- |
| Clinical evaluation of AI for health (WG-CE) | Co-chairs: Naomi Lee (The Lancet, UK), Upadhyay Shubhanan (ADA Health, Germany), Eva Weicken (Fraunhofer HHI, Germany) |
| Data and AI solution assessment methods (WG-DAISAM) | Chair: Pat Baird (Philips)Vice-chair: Luis Oala (Fraunhofer HHI, DE) |
| Data and AI solution handling (WG-DASH) | Chair: Marc Lecoultre (MLlab.AI, CH)Vice chair: Ferhat Kerif (CHUV, CH) |
| Operations (WG-O) | Co-chairs: Markus Wenzel and Eva Weicken (Fraunhofer HHI, Germany) |
| Regulatory considerations on AI for health (WG-RC) | Chair: Naomi Lee (The Lancet, UK)Vice-chairs:* Paolo Alcini (European Medicines Agency, EU)
* Chandrashekar Ranga (CDSCO, India)
* Khair ElZarrad (FDA, USA)
* Michael Berensmann and Seidel, Robin (Federal Institute for Drugs and Medical Devices, Germany)
* Liang Hong (National Medical Products Administration, China)
 |
| Ethical considerations on AI for health (WG-RC) | Chair: Andreas Reis (WHO) |
| Digital Technologies for COVID Health Emergency (AHG-DT4HE) | Co-chairs: Ana Riviere-Cinnamond (PAHO) and Shan Xu (CAICT, China) |

Topic Groups

| Topic group | Acronym | Leader | References | Created |
| --- | --- | --- | --- | --- |
| 1. Cardiovascular disease risk prediction
 | TG-Cardio | Benjamin Muthambi (Watif Health, South Africa) | [P-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-006-A01.docx) | C |
| 1. Dermatology
 | TG-Derma | Harsha Jayakody (MyDoctor, Sri Lanka) from Meeting QNote: Sharad Kumar (Nurithm Labs Private Limited, India) resigned. | [P-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-007-A01.docx) | B |
| 1. Diagnosis of bacterial infection and anti-microbial resistance
 | TG-Bacteria | Nada Malou (MSF, France) | [P-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-008-A01.docx) | F |
| 1. Falls among the elderly
 | TG-Falls | Pierpaolo Palumbo (University of Bologna, Italy) | [P-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-012-A01.docx) | B |
| 1. Histopathology
 | TG-Histo | Frederick Klauschen (Charité Berlin, Germany) | [P-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-013-A01.docx) | B |
| 1. Malaria detection
 | TG-Malaria | Rose Nakasi (Makerere University, Uganda) | [P-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-014-A01.docx) | F |
| 1. Maternal and child health
 | TG-MCH | Raghu Dharmaraju (Wadhwani AI, India) and Alexandre Chiavegatto Filho (University of São Paulo, Brazil) | [P-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-015-A01.docx) | D; G |
| 1. Neurological disorders
 | TG-Neuro | Marc Lecoultre (ML Labs, Switzerland) and Ferath Kherif (CHUV, Switzerland) | [P-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-016-A01.docx) | B |
| 1. Ophthalmology
 | TG-Ophthalmo | Arun Shroff (MedIndia) | [P-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-017-A01.docx) | B |
| 1. Outbreak detection
 | TG-Outbreaks | Auss Abbood and Alexander Ullrich (Robert Koch Institute, Germany) ; Khahlil Louisy and Alexander Radunsky (Institute for Technology & Global Health, ITGH, US) | [P-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-018-A01.docx)  | E; merged with TG-Sanitation at meeting O |
| 1. Psychiatry
 | TG-Psy | Nicolas Langer (ETH Zurich, Switzerland) | [P-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-019-A01.docx) | C |
| 1. Radiology
 | TG-Radiology | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [P-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-023-A01.docx) | D; H |
| 1. Snakebite and snake identification
 | TG-Snake | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [P-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-020-A01.docx) | B |
| 1. Symptom assessment
 | TG-Symptom | Henry Hoffmann (Ada Health, Germany) and Martin Cansdale (Healthily, UK) | [P-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-021-A01.docx) | B |
| 1. Tuberculosis
 | TG-TB | Manjula Singh (ICMR, India) | [P-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-022-A01.docx) | C |
| 1. Volumetric chest CT
 | TG-DiagnosticCT | Kuan Chen (Infervision, China) | [P-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-009-A01.docx) | D |
| 1. Dental diagnostics and digital dentistry
 | TG-Dental | Falk Schwendicke (Charité Berlin, Germany); Joachim Krois (Dental XR AI, Germany); Tarry Singh (deepkapha.ai, Netherlands) | [P-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-010-A01.docx) | G |
| 1. AI-based detection of falsified medicine
 | TG-FakeMed | Franck Verzefé (TrueSpec-Africa, DRC) | [P-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-011-A01.docx) | F |
| 1. Primary and secondary diabetes prediction
 | TG-Diabetes | Andrés Valdivieso (Anastasia.ai & Tecnigen, Chile) | [P-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-024-A01.docx) | H |
| 1. AI for endoscopy
 | TG-Endoscopy | Jianrong Wu (Tencent Healthcare, China) | [P-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-025-A01.docx) | I |
| 1. AI for musculoskeletal medicine
 | TG-MSK | Peter Grinbergs (EQL, UK), Yura Perov (UK) | [O-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-026-A01.docx) | J |
| 1. AI for human reproduction and fertility
 | TG-Fertility | Susanna Brandi, Eleonora Lippolis (Merck KGaA, Darmstadt, Germany) | [P-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-027-A01.docx) | L |
| 1. AI for point-of care diagnostics
 | TG-POC | Nina Linder (University of Helsinki, Finland) | [P-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-028-A01.docx) | L |

Mailing lists

| Description | Mailing list | Archive |
| --- | --- | --- |
| General mailing list | fgai4h@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4h> |
| TG-Cardio), specific discussions for sub-topic on clinical predictions | fgai4htgcardiocp@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgcardiocp> |
| TG-Cardio), specific dis­cussions for sub-topic on cardiac image analyses | fgai4htgcardiocia@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgcardiocia> |
| TG-Derma | fgai4htgderma@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgderma>  |
| TG-Diabetes | fgai4htgdiabetes@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgdiabetes> |
| TG-Falls | fgai4htgfalls@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgfalls> |
| TG-Malaria | fgai4htgmalaria@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgmalaria> |
| TG-Ophthalmo | fgai4htgophthalmo@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgophthalmo> |
| TG-Outbreaks | fgai4htgoutbreaks@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgoutbreaks> |
| TG-Symptoms | fgai4htgsymptom@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgsymptom> |
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| TG-Psy | fgai4htgpsy@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgpsy> |
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| AHG-DT4HE | fgai4hahgdt4he@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4hahgdt4he>  |

Working methods (Ref: [E-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-E-101.docx), report of Meeting E)

Decision making by correspondence

Decisions should preferably be taken in physical meetings of the FG. However, in order to allow the FG to work more efficiently, an online decision-making process would be useful.

The FG agreed to an online approval process for taking decisions (e.g. appointments and documentation). The initial procedure is as follows:

* Decisions are taken by consensus. (Note: consensus is declared by the chairman and it does *not* imply unanimity.)
* The general FG mailing list (fgai4h@lists.itu.int) is used to announce the decision being taken, provide links to relevant documents.
* Specify a commenting period, typically two weeks, for receiving comments with concerns. These comments should be addressed by email to the secretariat, tsbfgai4h@itu.int. Absence of comments imply agreement to the proposed decision.
* If comments are received, they are discussed and resolved by the FG management in coordination with the commenters.
* If the amendment is minor, the chairman declares approval
* If the amendment is substantive, another consultation is started, or decision is postponed till the next meeting of the FG

Organizing interim electronic meetings

The following procedure is to be applied for organizing interim meetings of the FG and its WGs:

* **Announcement** in the general FG email reflector (fgai4h@lists.itu.int) for date/time and objectives **two weeks prior**
* **Documents** uploaded to the appropriate repository

Annex E
Summary of decisions

This is a summary of the decisions taken at Meeting G (Helsinki, 20-22 September 2022):

[Dec-P-1. The report of the meeting in Berlin, 31 May – 2 June 2022 found in O-101 was approved without comments and its three output documents were noted (O-102, O‑200 and O‑201).](#_Toc116554689)

[Dec-P-2. The meeting agreed to move DEL 0.1 "Common unified terms in artificial intelligence for health" for approval at this meeting after a two-week consultation period, as found in document P-038. The approved version will be issued as P-201.](#_Toc116554690)

[Dec-P-3. The meeting agreed to approve DEL 2 "Overview of regulatory considerations on artificial intelligence for health" as found in P-047. The document will be available as P-202.](#_Toc116554691)

[Dec-P-4. The meeting agreed to approve DEL 2.2 " Good practices for health applications of machine learning: Considerations for manufacturers and regulators " as found in O-036. The document will be available as P-203.](#_Toc116554692)

[Dec-P-5. The creation of a new topic group on AI for traditional medicine (TG-TM) was agreed, with Rajesh Kotecha (Ministry of Ayush, Government of India) as topic driver.](#_Toc116554693)

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