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| **ITU-T Focus Group on AI for Health** |
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| **Abstract:** | This document contains the report of the 14th meeting of the ITU-T Focus Group on Artificial Intelligence for Health (FG-AI4H), held as an E-meeting, 15-17 February 2022. |

Executive Summary

The 14th meeting of the FG-AI4H took place online, 15-17 February 2022 to review updates to its ten deliverables and sub-deliverables, and review progress by the existing 24 topic groups.

A minute of silence was observed for Mr Nao Norman Sipula, co-founding team leadership of the TG-Cardio subgroup on Use of AI in Cardiovascular Disease Risk Prediction, who passed away on 5 February 2022.

Concerning the FG-AI4H **leadership**, Mr Andrew Farlow (University of Oxford, UK) was confirmed as chair of the new working group on Collaboration and Outreach (WG-CO) in the interim period prior to meeting N. There were no further changes to the FG-AI4H leadership.

Concerning the topic groups, no new TGs were created at this meeting

**Deliverables** update:

* All 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).

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

* [N-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-102.docx): Updated call for proposals: use cases, benchmarking, and data (to be issued when the dates of the next meeting are defined)
* [N-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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 120 participants over the various days and reviewed 58 documents (not counting attachments).

There were two outgoing LSs prepared.

* Reply LS to SG13: [FG-AI4H-LS8](https://www.itu.int/net/ITU-T/ls/ls.aspx?isn=28266) (ref: [FGAI4H-N-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-056.docx)) *Invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information*
* Reply LS to JCA-DCC, cc TSAG: [FG-AI4H-LS9](https://www.itu.int/net/itu-t/ls/ls.aspx?isn=28309) (ref: [FGAI4H-N-058](https://ituint-my.sharepoint.com/personal/simao_campos_itu_int/Documents/Docs/FG-AI4H/2202-N-Virtual/Report/FGAI4H-N-058)) *Establishment of JCA on digital COVID-19 certificates (JCA-DCC)*

A list of the two decisions taken at the meeting is found in [Annex E](#AnnexE) of the report.

The next meeting of the FG-AI4H will be held in May-June 2022 timeframe 2022. Confirmation will be communicated in the FG-AI4H webpage and mailing list.

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# Opening

The 14th meeting (N) of the FG-AI4H took place online, 15-17 February 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 [N-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-002.pptx).

# Approval of agenda

The agenda in [N-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-001.docx) (Agenda) was approved. Various updates were issued during the meeting, the final version being found in [N-001-R02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-001-R03.docx) (cf. [Annex A](#AnnexA)).

The time allocation for the presentation of meeting documents was maintained live though the link: <https://docs.google.com/spreadsheets/d/1EgmHqHxIMzzaaXJxqkXBaONOJQHkL_hxUhcf6_8TknE/edit?usp=sharing>

# Documentation and allocation

The initial list of documents and allocation in [N-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-001.docx) were adopted. The final list is found in [Annex B](#AnnexB).

# IPR

The text in [N-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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. The meeting was informed that a working group WG-CO "Collaboration and Outreach" chaired by Andrew Farlow was established in the interim period (following the FG-AI4H online approval procedure in [E-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-E-101.docx)).

# Approval of Meeting M outcomes and updates

The report of virtual Meeting M (online, 28 – 30 September 2022) in [M-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-101.docx) was **approved** without comments.

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

* [M-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-102.docx): Updated call for proposals: use cases, benchmarking, and data
* [M-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-107.docx): Updated FG-AI4H Onboarding document
* [M-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-200.docx): Updated list of FG-AI4H deliverables

No comments were made.

N-052: Outgoing LS on discussion of potential for future collaboration [to IEC TC62]

This outgoing LS sent by the FG-AI4H management to IEC TC62 "*Electrical equipment in medical practice*" in January 2022 was presented by the FG-AI4H Chairman. This LS informs IEC TC62 on the FG-AI4H scope of work and encourages future cooperation of the area of medical devices for topics of mutual interest.

Pat Baird informed that he has been involved in standardization activities in IEC TC62, and he suggested to discuss it further offline to better coordinate with them.

1. The report of the virtual meeting held 28 – 30 September 2022 found in [M-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-101.docx) was approved without comments and its three output documents were noted ([M-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-102.docx), [M-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-107.docx), and [M-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-200.docx)).

# Review of incoming liaison statements

## ISO/IEC JTC 1/SC42

[N-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-034.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-034-A01.xlsx) –LS on Call for updating use cases for the revision of TR 24030:2021 [from ISO/IEC JTC 1/SC 42 to various groups]

**Abstract:** In order to update use cases for the ISO/IEC TR 24030:2021 - Information technology – Artificial Intelligence (AI) – Use cases, JTC 1/SC 42 requests that your organization provide us with your relevant in-operation AI use cases by 30th April 2022, using the Word template revised from ISO/IEC TR 24030:2021 contained in the attached SC 42 N 981.

The LS was noted. FGAI4H already provided its use cases to JTC 1/SC 42, so no further submission would be necessary.

## FG-AI4EE

[N-035](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-035.docx%22%20%5Ct%20%22_blank) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-035-A01.zip)– LS on five deliverables of ITU-T FG-AI4EE [from FG-AI4EE to various ITU-T groups]

**Abstract:** This liaison statement aims to inform ITU-T SG5, and all other ITU-T study groups and focus groups about the second set of deliverables which were completed and agreed by FG-AI4EE at its fourth virtual meeting on 21 October 2021.

The LS was noted. It was suggested to have a look and study the deliverables of FG-AI4EE.

## FG-QIT4N

[N-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-036.docx) – LS on final deliverables of ITU-T FG-QIT4N [from FG-QIT4N to various groups]

**Abstract**: This liaison statement informs recipients about the final deliverables of ITU-T FG QIT4N.

The LS was noted. It was suggested to have a look and study the deliverables of FG-QIT4N, and to share with us if there are any areas of interest for FG-AI4H.

## ITU-T SG11

[N-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-037.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-037-A01.docx) –LS on establishment of a new ITU-T Focus Group on Testbeds Federations for IMT-2020 and beyond (FG-TBFxG) and first meeting (virtual, 4-7 April 2022) [from SG11 to various groups]groups]

**Abstract**: This liaison statement announces of the establishment by ITU-T SG11 of a new ITU T Focus Group on Testbeds Federations for IMT-2020 and beyond (FG-TBFxG), and invites collaboration with experts working in complementary fields. Its first meeting, which will be a virtual meeting, will be held from 4 to 7 April 2022.

The LS was noted. Experts who have interest in the topic are invited to join.

## ITU-T SG13

[N-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-038.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-038-A01.docx) – LS on invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information [from SG13 to various groups]

**Abstract:** Document invites to review the latest version of Supplement on Artificial Intelligence standardization roadmap and to provide missing/updated information to the ITU-T SG13.

FGAI4H already submitted its inputs to SG13 ([FGAI4H-L-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-049.docx), [FG-AI4H-LS5](https://www.itu.int/net/itu-t/ls/ls.aspx?isn=26618)) at its Meeting L in May 2021. FGAI4H noted that its planned Deliverables were included in the Appendix of [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-038-A01.docx).

After discussions offline, a draft reply LS titled "LS/r on invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information (SG13-LS234) [to ITU-T SG13]" was prepared as found in [N-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-056.pptx). This will be approved by the online approval process and then dispatched to SG13.

## ITU-T TSAG

[N-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-039.docx) – LS on the establishment of JCA on digital COVID-19 certificates (JCA-DCC) [from TSAG to various groups]

**Abstract:** TSAG informs that it has established a Joint Coordination Activity on Digital COVID 19 Certificates (JCA-DCC) and invites participation in this JCA.

It was suggested to nominate a representative from FG-AI4H to participate in JCA-DCC, as AHG-DT4HE is related in terms of the COVID-19. Further discussion will be made offline.

# Information on AI-related activities

The meeting was reminded that a series of webinars took place and ITU AI4H challenge is in preparation. The idea is that the webinars on horizontal and vertical themes would happen every two weeks and be organized within the context of the AI for Good online events, <https://aiforgood.itu.int/eventcat/discovery-ai-and-health/>.

# Horizontal and strategic topics

No topics were discussed at this meeting.

# 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).

There were no further specific updates on DAISAM. All the focus of the work has been in the 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.

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

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

[N-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-051.pptx): Update on DEL01: AI4H ethics considerations – Presentation

Andreas presented the updates on the recent activities on Ethics and Governance of Artificial Intelligence for Health using the slides in [N-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-051.pptx). Sameer provided complementary comments. The WHO Guidance document was launched in June 2021 and it is currently in implementation and dissemination phase. Various activities are conducted, such as briefings to Member States, collaboration with other organizations, workshops, subgroup on ethics at FG AI4H. Online training course is being developed, planned to be published in June 2022.

There were no updates to the Deliverable 1 at this meeting, as reported in §‎12.6.

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

The chair of the WG-RC, Naomi Lee (Lancet, UK).

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**

No specific report was made for the WG-CE, as the focus of the work has been in the preparation of DEL7.4. See §‎12.13.4.

## Collaborations and Outreach (WG-CO)

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

[***N-044***](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-044.docx)***: WG-CO: Catalysing Innovation in Global Health***

Andrew Farlow (Nuffield Department of Medicine, Oxford) and Matthias Groeschel (International Telecommunications Union, Department of Biomedical Informatics, Harvard Medical School, and TU Berlin) introduced [N-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-044.docx) using the presentation in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-044-A01.pptx) about the new ITU/WHO Working Group: Collaborations and Outreach, the recent and future seminar series, and proposed activities including Digital/AI for Health Challenges.

[FGAI4H-N-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055.docx) - WG-CO: Catalysing digital and AI innovations for health: sharing experiences from Africa and Asia - WG-CO

This document if a cover page describing a series of presentations on collaboration and outreach delivered at this meeting, including the recording.

[FGAI4H-N-055-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A01.pdf) - Att.1 - Scoping of the current state of digital tools in Africa - WG-CO

Tafadzwa Matika and MaryJane Ijeoma Nweje, Oxford Global Health Scholars present their work on a scoping review of the Current State of Digital Tools in Africa.

[FGAI4H-N-055-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A02.pdf) - Att.2 - Harnessing the power of AI for Africa's development - WG-CO

Next, Rob Beyer, Co-founder & Exec. Chairman, Villgro Africa talks about Growth, Strategy, Business Development, and Investing For Impact in the East African context he is working in.

[FGAI4H-N-055-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A03.pdf) - Att.3 - Data-driven insight extraction in MNCH using automated stratification - WG-CO

Girmaw Abebe Tadesse, an AI Research Scientist and Challenge Lead @ IBM Research Africa, presented some of the data-driven techniques they have been using in their collaboration with the Bill and Melinda Gates Foundation with a focus on maternal, newborn, and child health in Sub-Saharan Africa and Asia.

[FGAI4H-N-055-A04](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A04.pdf) - Att.4 - The Africa Oxford Health Innovation Platform: Is there a case for collaboration? - WG-CO

Watu Wamae, Research Engagement Manager, Africa Oxford Initiative (AfOx), and lead of the AfOx Health Innovation Platform takes the floor and discusses their work on connecting research to industry to solve intractable societal challenges through innovation and entrepreneurship.

[FGAI4H-N-055-A05](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A05.pdf) - Att.5 - Electronic medical records platform made in Africa for Africa - WG-CO

Samuel Mugisha, Social Tech entrepreneur and Co-Founder of Tatu nurse as well as Co-founder and Product Manager Stre@mline Health Tech discusses a novel Electronic Medical Records platform made in Africa for Africa and shares what he and colleagues are doing deploying AI-based technology alongside hybrid bricks and mortar clinic access.

[FGAI4H-N-055-A06](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A06.pdf) - Att.6 - Lessons learned from building AI models to address public health issues in India - WG-CO

Alpan Raval, Chief Scientist on AI/ML at Wadhwani AI, a not-for-profit based in India talks about "The experiences of Wadhwani AI building models to address public health issues in India" .

Andrew leads the discussion on a consultation on the draft Working Paper on the AI for Health Challenges that will be organized by the ITU-WHO Focus Group on Artificial Intelligence for Health.

## 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).

[N-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-047.pptx): Updated FG AI4H DT4HE Output "Guidance on AI and digital technologies for COVID health emergency" – Presentation

While no presentation was made at this Meeting, the presentation slides were shared as found in [N-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-047.pptx).

The group home page is <https://www.itu.int/en/ITU-T/focusgroups/ai4h/Pages/dt4he.aspx>.

# FG-AI4H Open Code Initiative

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

[M-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-048.pptx): Open Code Project Status Update [Chair]

Marc Lecoultre introduced the slides in [M-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-048.pptx) with overview.

* Develop software tools (e.g., data acquisition, data storage, annotation, prediction, evaluation, and reporting packages)
* Involve 40+ developers, regulators, and medical professionals from five continents
* 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. It 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.
* DAS (Data Acquisition and Storage) package – Ferath Kherif presented. This package is responsible for data ingestion, storage and management. Details minimum metadata and context requirements. Next steps include data sourcing across different locations, and federated model implementation.
* 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 currently working with VISION project which is developing the annotation tool for the platform. Clara Uktar made a demo on the VISION tool, and this will be 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. An achievement is community building: <https://aiaudit.org/contributors/>. Another achievement is integration of ML flow tool in the AWS environment, including shared storage buckets and jupyter notebooks for code and documentation
The evaluation using the diabetic retinopathy use case was successfully conducted, and nearly ten other topic groups are working towards establishing the audit teams.
* Reporting package – Pradeep Balachandran (Technical e-health consultant, India) presented the creation of the qualitative (I.e., a questionnaire) and quantitative (I.e. submit the model) reports during the auditing process. Next steps: RESTful Web Services to be implemented for inter-package communication of Reporting Package; proposed set of reporting attributes will be adopted to the reporting framework; and to add enhanced visualization utilities in the reporting format for illustration of performance and quality metrics.
* Current phase is at the test platform prototype with data provided by the TG-Ophthalmo and other TGs.

The group 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.

# 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 last meeting (see [K-029](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-029.docx)). At this meeting, no updates were provided. The FG-AI4H management will continue to review the matter and report in a future meeting.

[***N-046***](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-046.pptx)***: Publication of Focus Group Deliverables***

Matthias, Eva, Simao presented [N-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-046.pptx). In light of September 2023 as the Focus Group transition point, it was decided that the first set of Deliverables will be published in July 2022, and the second set in July 2023. The result of the survey conducted in November 2021 was presented. It was discussed how to conduct a peer-review process. In addition to the internal peer-review within the FG community, possibilities will be further discussed.

## List of deliverables

[N-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-005.docx): Updated list of FG-AI4H deliverables (as of 2022-02-15) [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 virtual meeting held 28-30 September 2022 and subsequent updates by the secretariat, based on feedback from editors. This summary is also available as DEL00S in the FG-AI4H Deliverables page, although it is not itself a deliverable. This document is based on [M-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-200.docx).

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 [N-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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:

* DEL00
* DEL1
* DEL4
* DEL5.3, DEL5.4, DEL5.6
* DEL7.2, DEL7.3, DEL7.5

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

* DEL2.1
* DEL5, DEL5.1, DEL5.2, DEL5.5
* DEL6
* DEL7.1
* DEL8 (no initial draft)
* DEL9, DEL9.2

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 (N-005 plus updates)

| No. | Deliverable | Updated initial draft editor | Availability\* |
| --- | --- | --- | --- |
| 0 | Overview of the FG-AI4H deliverables | Shan Xu (CAICT, China) | [M-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-044.docx)([N-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-050.pptx)) |
| 0.1 | Common unified terms in artificial intelligence for health | Markus Wenzel (Fraunhofer HHI, Germany) | [N-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040.docx) |
| 1 | AI4H ethics considerations | Andreas Reis (WHO) | [K-028](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-028.docx)([K-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-028-A01.pptx)) |
| 2 | Overview of regulatory considerations on artificial intelligence for health | Shada Alsalamah (WHO) | [N-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049.docx) |
| 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) | [N-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031.docx) |
| 3 | AI4H requirement specifications | Pradeep Balachandran (India) | [N-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) | [N-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042.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) | [N-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-033.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) | [N-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-048.docx) |
| 8 | AI4H scale-up and adoption | Sameer Pujari (WHO), Yu ZHAO and Javier Elkin [Previously: Robyn Whittaker (New Zealand)] | –([K-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-052.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) |
| 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) | [N-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-041.docx) |
| 10.1 | Cardiovascular disease management (TG-Cardio) | Benjamin Muthambi (Watif Health, South Africa) | [N-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A01.docx) |
| 10.2 | Dermatology (TG-Derma) | Weihong Huang (Xiangya Hospital Central South University, China)NOTE – Maria Vasconcelos (Fraunhofer, Portugal) resigned from the role. | [N-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A01.docx) |
| 10.3 | Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | Nada Malou (MSF, France) | [N-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-008-A01.docx) |
| 10.4 | Falls among the elderly (TG-Falls) | Pierpaolo Palumbo (University of Bologna, Italy); Inês Sousa (Fraunhofer Portugal) | [N-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A01.docx) |
| 10.5 | Histopathology (TG-Histo) | Frederick Klauschen (LMU Munich & Charité Berlin, Germany) | [N-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A01.docx) |
| 10.6 | Malaria detection (TG-Malaria) | Rose Nakasi (Makerere University, Uganda) | [N-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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) | [N-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A01.docx) |
| 10.8 | Neurological disorders (TG-Neuro) | Marc Lecoultre (MLlab.AI, Switzerland) | [N-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A01.docx) |
| 10.9 | Ophthalmology (TG-Ophthalmo) | Arun Shroff (MedIndia) | [N-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A01.docx) |
| 10.10 | Outbreak detection (TG-Outbreaks) | Auss Abbood (Robert Koch Institute, Germany) and Stéphane Ghozzi (HZI, Germany) | [N-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A01.docx) |
| 10.11 | Psychiatry (TG-Psy) | Nicolas Langer (ETH Zurich, Switzerland) | [N-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A01.docx) |
| 10.12 | AI for radiology (TG-Radiology) | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [N-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A01.docx) |
| 10.13 | Snakebite and snake identification (TG-Snake) | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [N-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A01.docx) |
| 10.14 | Symptom assessment (TG-Symptom) | Henry Hoffmann (Ada Health, Germany) | [N-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A01.docx) |
| 10.15 | Tuberculosis (TG-TB) | Manjula Singh (ICMR, India) | [N-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A01.docx) |
| 10.16 | Volumetric chest CT (TG-DiagnosticCT) | Kuan Chen (Infervision, China) | [N-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A01.docx) |
| 10.17 | Dental diagnostics and digital dentistry (TG-Dental) | Falk Schwendicke and Joachim Krois (Charité Berlin, Germany); Tarry Singh (deepkapha.ai, Netherlands) | [N-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A01.docx) |
| 10.18 | Falsified Medicine (TG-FakeMed) | Franck Verzefé (TrueSpec-Africa, DRC) | [N-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A01.docx) |
| 10.19 | Primary and secondary diabetes prediction (TG-Diabetes) | Andrés Valdivieso (Anastasia.ai, Chile) | [N-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A01.docx) |
| 10.20 | AI for endoscopy (TG-Endoscopy) | Jianrong Wu (Tencent Healthcare, China) | [N-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A01.docx) |
| 10.21 | AI for musculoskeletal medicine (TG-MSK) | Peter Grinbergs (EQL, UK), Yura Perov (UK) | [N-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A01.docx) |
| 10.22 | AI for human reproduction and fertility (TG-Fertility) | Susanna Brandi, Eleonora Lippolis, (Merck KGaA, Darmstadt, Germany) | [N-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A01.docx) |
| 10.23 | AI in sanitation for public health (TG-Sanitation) | Khahlil Louisy (Institute for Technology & Global Health, ITGH, US), Alexander Radunsky (ITGH, US) | [N-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028-A01.docx) |
| 10.24 | AI for point-of care diagnostics (TG-POC) | Nina Linder, University of Helsinki, Finland | [N-029-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A01.docx) |

NOTES

\* The document numbers indicated reflect the status as of the end of the e-meeting N. 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.

\*\* Acting editor

## New deliverable proposals

There was no new deliverable proposals at this meeting.

## DEL00: Overview of the FG-AI4H deliverables

[N-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-050.pptx): DEL00: Overview of the FG-AI4H deliverables – Presentation

The editor of DEL00, Ms Shan Xu (CAICT, China), delivered the presentation in [N-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-050.pptx) on DEL00. 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 24 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.

It was noted that all TG Drivers are invited to provide information on their activities (deliverables) on the [questionnaire](https://forms.gle/3fYrm3SZSrNQu3eeA) , so that the summary table of all TDD can be developed accordingly and reflected in the DEL00.

No update was made to [DEL00](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL00.docx) at this meeting, the latest version was found in M-044 and also available in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL0.1: Common unified terms

The editors of this deliverable are Markus Wenzel, Pat Baird, Shada Alsalamah, stephanie Kuku, Rohit Malpani and Andreas Reis.

[***N-40***](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040.docx) ***+*** [***A01***](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040-A01.pptx)***: DEL0.1 Update: FG-AI4H Thanks terms and definitions***

Markus presented the updates to DEL0.1 using the slides in [N-40](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040.docx). The version 2 of the document contained in [N-40](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040.docx) is uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/). 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 title of deliverable was changed to Common unified terms in artificial intelligence for health.

## DEL01: AI4H ethics considerations

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

No update was made to [DEL01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL01.docx) at this meeting.

Refer also to the complementary discussion in §‎10.4.

## DEL02: AI4H regulatory best practices

The editors of [DEL2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02.docx) is Shada Alsalamah (WHO), from Jackie Ma (Fraunhofer HHI, Germany), Khair ElZarrad and Rose Purcell (FDA, USA).

[N-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049-A01.pptx): DEL02: Updated DEL2 [Editor]

Shada Alsalamah (WHO) introduced the purposes and contents of DEL2 in [N-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049.docx) using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049-A01.pptx). Version 5 has been produced based on feedback received from the WG-RC members as well as other FG-AI4H participants, is going through WHO editorial review and it will be provided to the FG-AI4H for approval according to the following updated time frame:

Timelines:

| Timeline | Planned Milestones/ Deliverables |
| --- | --- |
| Feb | * Receive reviewers' comments on DEL02 draft v3.3
* Present at FG AI4H Meeting N
 |
| Mar | * WHO Clearance
* FG Clearance
 |
| Apr | * Submit DEL02 draft v4.x to WHO editors with final recommendations
* Receive final approval from WG-RC contributors after an internal check with their organizations
 |

Target audience of this document is regulatory agencies and bodies, but many parts of this document should be considered by other stakeholders, such as solution developers. Such other stakeholders who reviewed the document are listed. The deliverable addresses high level overview of key regulatory considerations for the use of AI in health, covering:

1. Documentation and transparency
2. Risk management and lifecycle approach
	1. Medical devices developing and deployment process
	2. AI medical device product lifecycle
	3. Holistic risk management
3. Data quality – key challenges
	1. Data set management
	2. Data inconsistency
	3. Dataset selection and curation
	4. Data set management
	5. Data inconsistency
	6. Dataset selection and curation
	7. Data usability
	8. Data integrity & data labelling
	9. Model training
	10. Documentation and transparency
	11. Human factors
4. Analytical and clinical validation
5. Engagement and collaboration
6. Privacy and data protection

It is noted that the deliverable is not intended as guidance policy or regulations, but rather a resource that can be considered by *regulators*, *developers*, and other stakeholders.

The update to DEL2 as found in [N-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

### 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)

[N-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031-A01.pdf): Updated DEL2.2: Good practices for health applications of machine learning: Considerations for manufacturers and regulators [Editors]

**Abstract:** This document contains the latest draft of the FG-AI4H deliverable DEL02.2 "Good practices for health applications of machine learning: Considerations for manufacturers and regulators". This deliverable 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).

Christian Johner introduced the document using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031-A01.pdf). The document and related activities are well on track and informed the meeting that this would be one of the final presentations as it is expected that the Deliverable to be completed soon. Next step is to start the iterations to update the checklists. Three processes:

1. Compile checklist for regulatory compliance of AI-based health systems

2. Define the processes to maintain improve and use the checklist

3. Develop a SW application to support these processes

The update to DEL2.2 as found in [N-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## 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).

[N-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032-A01.pptx): Updated DEL03: AI4H requirement specifications [Editors]

**Abstract:** This document represents the latest version of the project deliverable FG-AI4H DEL03 "AI4H requirement specification" and supersedes the previous version of the document.

The purpose of DEL3 is to define the System Requirement Specifications (SyRS) that explains the informational, functional, behavioural and operational aspects of a generic AI for health (AI4H) system. SyRS serves as the basis and helps to create system design, system verification and validation plans and procedures; while system requirements analysis methodology follows a collaborative team-oriented approach, involving all the working groups and topic groups of FG-AI4H, to help the project team identify, control and track various requirements and changes to those requirements during the AI4H system development lifecycle.

Pradeep presented the document using the slides in [[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032-A01.pptx).](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-037-A01.pptx) He reported this deliverable is nearing completion and is ready to be reviewed by colleagues and collaborators.

The update to DEL3 as found in [N-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## 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).

[***N-030***](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-030.pptx)***:(presentation) Cybersecurity and AI/ML Data Lifecycles Follow up [Editor]***

**Abstract:** Information: This presentation contains a follow-up from the summary of Cybersecurity and AI/ML Risk Management for members at the "M"-Meeting.

Pat and Catherine Lowe (medSec LLC) gave a talk about Cybersecurity and Risk Management in the context of AI software life cycle. Introduced the National Institute Standards and Technology (NIST) Cybersecurity Framework 1.1. Cybersecurity should include security and privacy requirements within the architecture and design of clinical trials and healthcare AI/ML innovations. Security and privacy are a joint task. Lifecycle monitoring is critical to risk management and cybersecurity.

There was no update to DEL04 at this Meeting. The last update of the text of DEL4 was prepared for meeting J, as found in the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## 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/).

## 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.

It had been noted at the previous meeting that DEL5.2 needs to be focused on data acquisition, while the more general considerations should be added in DEL5 itself. Some of the aspects in G‑205-A02 are already addressed in other deliverables; removing these repetition elements would simplify the task of preparing this deliverable.

### 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).

[N-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-053.pptx): Updated DEL 5.3 – Presentation [Editor]

Shan presented the slides contained in [N-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-053.pptx).

One of the important areas in annotation is consistency judgement, and two factors should be considered for this: input data type and output requirement. The team developed a criteria matrix for both factors.

DEL5.3 includes a questionnaire to seek input and collaboration with Topic Groups regarding data annotation, and it also includes examples of endoscopic image metadata, which are next focuses for the group.

It was suggested to collaborate with the Open Code Initiative, especially as the annotation tool is being integrated so that all groups can benefit from the collaboration.

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).

Luis provided an update on his work on understanding dataset drifts in processing raw image data. No updates were done in DEL5.4 and DEL7.3. Luis also pointed out the ongoing collaboration with quarep.org, a group on quality assessment and reproducibility for instruments & Images in light microscopy. A formal liaison statement could be formed with the Focus Group or a workshop could be co-organized together.

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)).

### 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), Banusri Velpandian (ICMR, India), assisted by the WHO Data Team.

[N-54](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-054.pdf): DEL5.6: Data sharing practices – Progress Review Presentation [Editor]

Ferath used the slides in [N-54](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-054.pdf) to introduce the progress in the deliverable concerning data sharing and data sourcing, and the respective implementation aspects in the OCI. A roadmap for a federated data catalogue is being developed. The objectives of this work are finding best practices of sharing data and dedicating special attention to centralized and federated data environments.

Would an overview of the standards for data formats exist out there? And what are the common elements, etc? Who specified them? Various mechanisms are used such as heat maps and LOINC, and they are very specific. The group is looking into metadata at a high level, i.e., what standard is used to represent the data. Currently, investigations are focused on neuro related specifications.

Ferath presented their data dashboard that will soon be implemented in the Open Code Initiative.

The following resource as noted, the WHO guidelines for standard implementation in digital health, see [https://www.thelancet.com/journals/landig/article/PIIS2589-7500(21)00038-8/fulltext](https://www.thelancet.com/journals/landig/article/PIIS2589-7500%2821%2900038-8/fulltext)

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).

[N-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042-A01.pptx): Updated DEL07: 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, preliminary 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. This document was submitted as N-042 at the FG-AI4H meeting N (online, 15-17 February 2022).

Markus introduced the document using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042-A01.pptx).

A key issue on the use of AI4H is whether models being developed are effective, safe, accurate (on new data), robust, plausible, and fair. The deliverables in the DEL7 AI4H Evaluation Considerations series aim to address these issues, by covering: AI4H evaluation process description, AI technical test specification, data and AI assessment methods reference, clinical evaluation, and assessment platform. Three testing environments are discussed: closed environment, via interfaces, and federated. For this meeting, text was improved, included new references. A key activity has been turning the vision for the AI4H benchmarking platform into practice via the OCI for the next steps, to update this intro DEL7.0 based on progress of DEL7.1-5 and collect feedback from deliverable editors, WGs, TGs, and OCI users. Markus encouraged colleagues to point him to additional documentation and published work on best practices in AI4H. Review of this deliverable was requested by other WG and TG drivers.

The update to DEL7 as found in [N-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042.docx) was adopted to be 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 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).

[N-057](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-057.pptx): DEL7.2 AI technical test specification - Progress Report [Editor]

Auss presented the slides in N-057. The deliverable contains a background on software testing that is relevant for the context of AI/ML and AI4H. Auss voiced his concern of overlap with several other deliverables (5 and 7.3). He will be in touch with other deliverable editors. Auss also requested feedback on his deliverable and is looking for a co-driver.

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).

[N-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-033.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-033-A01.pptx): DEL7.3 update - ML4H trial audits–Iteration 2.0 Playbook (Version 2.0)

**Abstract:** This document is related to Deliverable 7.3 and provides a short playbook with important information for the ML4H trial audits–iteration 2.0 in terms of its scope, objectives, process flow and deliverables.

Luis and Pradeep presented information about the AI auditing activity in using [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-033-A01.pptx).

The update to DEL7.3 as found in [N-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-033.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).

[N-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-048.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-048-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". Although the performance of AI models in health is often measured by their accuracy, establishing confidence among clinicians, patients, researchers and policy makers in the safety, efficacy, and cost-effectiveness of AI solutions in health requires a more comprehensive evaluation. 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) and the Working group on Clinical Evaluation of AI for Health (WG-CE).

Eva presented the updates to DEL7.4 using the slides in A01. Regular calls with the editing group were held since last FG meeting and the document is now in its final version. Eva asked the Focus Group members to take a critical look at the document and provide feedback. The document will soon be shared with WHO for review.

The update to DEL7.4 as found in [N-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-048.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).

Luis provided updates on related activities as part of the OCI status update (see §‎11 and [N-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-045.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 Zhao and Javier Elkin.

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

## 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).

There were no 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).

[N-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043.docx) +[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043-A01.pptx): DEL09.1 Update: Mobile Applications

**Abstract:** Usage of AI in analysis of health-related problems is a game changer and inevitable. On the other hand, with privacy preservation of personal data and security of communication being major design concerns, any AI tool in the health domain needs to be carefully designed and commissioned. This document proposes a draft of set of provisions an AI tool with the Security concerns, should ensure. These requirements pertain not only to the capabilities of the tool, but also to its testing and benchmarking. Globally, privacy regulations have become stringent. Hence, there is a need for enhanced privacy and security in health-related mobile applications as well.

Prashant Chugh presented [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043-A01.pptx) on behalf of Manjeet. The group works on the implementation of the model and plans to present some results at the next Meeting.

The updated DEL09.1 [N-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043.docx) is uploaded 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/).

## Deliverable 10: 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).

[N-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-041.docx) +[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-041-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-N-041-A01.pptx). 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. She highlighted that several TGs updated their TDDs using the updated template in [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx) approved at the October 2020 FG-AI4H Meeting J. All TGs are requested to update their TDDs to this TDD template.

The update to DEL10 as found in [N-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-041.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

# Updates and new proposals for existing TGs

The following TGs received no updates at this meeting:

* TG-Derma (Dermatology)
Last updates: TDD: Meeting E; CfTGP: Meeting E. Proposed at Meeting B.
* TG-Bacteria (Diagnosis of bacterial infection and anti-microbial resistance)
Last updates: TDD: Meeting L; CfTGP: not available . Proposed at Meeting F.
* TG-Histo (Histopathology)
Last updates: TDD: Meeting I; CfTGP: Meeting E. Proposed at Meeting B.
* TG-MCH (Maternal and child health)
Last updates: TDD: Meeting L; CfTGP: Meeting H. Proposed at Meeting D; rescoped in Meeting G.
* TG-Snake (Snakebite and snake identification)
Last updates: TDD: Meeting I; CfTGP: Meeting G. Proposed at Meeting B.
* TG-Diabetes (primary and secondary diabetes prediction)
Last updates: TDD: Meeting K; CfTGP: Meeting L. Proposed at Meeting H.
* TG-TB (Tuberculosis)
Last updates: TDD: Meeting M; CfTGP: Meeting E. Proposed at Meeting C.

Topic drivers presented at this meeting, but no updated TDD or CfTGP were provided:

* TG-FakeMed (AI-based detection of falsified medicine)
Last updates: TDD: Meeting J; CfTGP: Meeting H. Proposed at Meeting F.
* TG-Neuro (Neurological disorders)
Last updates: TDD: Meeting L; CfTGP: Meeting E. Proposed at Meeting B.
* TG-Outbreaks (Outbreak detection)
Last updates: TDD: Meeting K; CfTGP: Meeting I. Proposed at Meeting E.
* TG-Psy (Psychiatry)
Last updates: TDD: Meeting K; CfTGP: Meeting H. Proposed at Meeting C.
* TG-Radiology (AI for radiology)
Last updates: TDD: Meeting M; CfTGP: Meeting H. Proposed at Meeting D; rescoped in Meeting H.

Various groups have not shown or reported progress and that is counter-productive towards the FG-AI4H meeting its deadlines.

1. It was agreed to remind TG Drivers that an update of their activities is expected at each FG meeting.

Further observations concerning TGs with subtopics:

* TG-Cardio: Needs TDD content for subtopic on cardiac image analysis. Current version only covers the cardiovascular risk prevention.
* TG-Neuro: Needs update for subtopic Parkinson's Disease
* TG-Outbreaks: Needs update for subtopic Dengue Surveillance

## 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.

## 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: [N-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A01.docx) - [[N-006-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-006-A03.pptx)
CfTGP: [N-006-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A02.docx) (Same as Meeting H)
Contributions: N/A

Benjamin presented status updates of the Topic Group using the slides in A03. TDD was updated at this Meeting. Among potential four sub-topics, only the sub-topic 1 CVD Risk Prediction using AI is active. He provided expected schedule of the completion of each section of TDD.

The Deliverables folder was updated with the updated TDD in [N-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A01.docx).

## TG-Derma (Dermatology)

The Topic Driver is Sharad Kumar (Nurithm Labs Private Limited, India) who replaced Weihong Huang (Xiangya Hosp. Central S. University, China; whuangcn@qq.com) since Meeting M.

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

No progress report was presented.

## 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: [N-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-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: [N-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A01.docx) – [N-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A03.pptx)
CfTGP: [N-009-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A02.docx) (Same as Meeting H)
Contributions: N/A

The presentation in [N-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A03.pptx) was introduced by Qui Ji on behalf of the TG Driver and provided an overview of the TG and their research.

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

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

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

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

Joachim presented the progress report in [N-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A03.pptx). The TDD document was updated for this meeting, see [N-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A01.docx). Various sub-topics were documented in the TDD for different aspects that are being worked in the TG, and the Endodontics subtopic group was added. A team was established to contribute to the ethics item. Observing more experts interested in the dual track of data sciences and dentistry. Contributors to this group increase rapidly and 19 new members joined the TG since Meeting M. Established a benchmark dataset for tooth classification, detection and segmentation. Evaluation is ongoing on annotation accuracy of dental expert for caries detection on bitewing radiographs. Participating in FG-AI4H Trial Audits 2.0 project for prediction of angle's classification.

The Deliverables folder was updated with the updated TDD in [N-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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: [N-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A01.docx) (Same as meeting J)
CfTGP: [N-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A02.docx) (Same as Meeting H)
Contributions: N/A

Franck provided an overview of the topic and updates using slides (not submitted to the secretariat). No updates were made to the TDD or CfTGP.

## TG-Falls (Falls amongst the elderly)

Pierpaolo Palumbo (University of Bologna, Italy) replaces Inês Sousa (Fraunhofer Portugal) as interim Topic Driver until September 2021. The latest documentation available is as follows:

TDD: [N-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A01.docx) – [N-012-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A03.pptx)
CfTGP: [N-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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 [N-012-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A03.pptx). The TDD document was updated for this meeting.

The current goal is to show the risks through the TG work, as there are different interventions related to multiple risk factors to avoid the fall.

Since Meeting M, the group participated in the ML4H Trial Audit project 2.0. The group will review datasets for sensor-based fall prediction.

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

## TG-Histo (Histopathology)

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

TDD: [N-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A01.docx) (Same as Meeting I)
CfTGP: [N-013-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-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: [N-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A01.docx)
CfTGP: [N-014-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A02.docx) (Same as meeting L)
Contributions: N/A

Rose provided updates using the slides (not submitted to the secretariat for uploading). Since Meeting M, the group had meetings with the Trial Audit 2.0 team.

The updated TDD in [N-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A01.docx) is uploaded to the Deliverables repository.

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

No updates were provided at this meeting.

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

A progress report was presented by Ferath using the slides in [M-016-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-016-A03.pptx) progress is well on track. The group will work on increasing the diversity of representativeness of the data, along the multiple dimensions such as, psychiatric health; gender; and geographic locations.

No updates were made to the TDD or CfTGP.

## TG-Ophthalmo (Ophthalmology)

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

TDD: [N-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A01.docx) – [N-017-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A03.pptx)CfTGP: [N-017-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A02.docx)Contributions:

Arun Shroff presented an overview and update of the activities in the TG-Ophthalmo using the slides in [N-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A01.docx). The TDD document was updated for this meeting.

Quantitative assessment and benchmarking setup was done, and further work will be done for the Audit Trial 2.0. Will Complete application with UK based INSIGHT Data Hub (NHS-led Partner) to obtain test data set for DR and AMD. The group has 24 members from 17 orgs. and 8 countries.

The updated TDD in [N-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A01.docx) was uploaded to the Deliverables repository.

## TG-Outbreaks (AI for Outbreak Detection)

The Topic Driver are Auss Abbood (Robert Koch Institute, Germany) and Stéphane Ghozzi (HZI, Germany). The latest documentation available is as follows:

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

The TG Driver Auss Abbood provided a live presentation on the progress of TG-Outbreaks, and a rendering of the presentation is available in [N-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A03.pptx). The TG has been working on a large scoping review including 90 experts from >15 countries. Auss outlined the modelling challenge to detect outbreaks. Works on a Salmonella dataset, later to be extended to Dengue and Ebola. The first benchmark was submitted to the Trial Audits platform. Interim findings will be generated soon.

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: [N-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A01.docx) (Same as Meeting K) – [[N-019-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-019-A03.pptx)CfTGP: [N-019-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A02.docx) (Same as Meeting H)
Contributions: N/A

Nicholas Langer presented the overview of the TG work focusing on recent updates using the slides in [N-019-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A03.pptx).

In general, lack of public data, and few databases have been created so far. Social and cultural factors play a role, so a variety of datasets is necessary.

Participated at a Kaggle competition at Datathon 2021, <https://www.kaggle.com/c/datathon21-eeg/overview>, as initially reported at two previous FG meetings. Continues to participate in the meeting of FG-AI4H Trial Audits 2.0 project. A manuscript of this project is currently in revision at a peer reviewed journal.

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

## TG-Snake (Snakebite and snake identification)

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

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

No progress report was presented.

## TG-Symptom (Symptom assessment)

The Topic Driver is Henry Hoffmann. The latest documentation available is as follows:

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

Henry presented the progress report (including a general overview of the activity) in [N-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A03.pptx). The group has 20 member companies and seven independent contributors. Since Meeting M, 20 TG meetings have been held. Works with the Audit Trial 2.0 project. Explored the feasibility of integrating the TG-Symptom annotation tool with the OCI.

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

## TG-TB (Tuberculosis)

The Topic Driver is Manjula Singh. The latest documentation available is as follows:

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

No progress report was presented.

## TG-Radiology (Radiology)

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

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

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

No updates were made to the TDD, which was last updated for Meeting M, nor to the CfTGP (meeting H).

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

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

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

No progress report was presented.

## TG-Endoscopy

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

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

Jianrong presented updates to the TDD using the slides in [N-025-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A03.pptx). He informed that Shan Xu has joined the TG. Shan informed of interest from TikTok to join the TG, and the TG Driver agreed to follow up with them.

It was agreed to upload the updated TDD in [N-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A01.docx) to the Deliverables repository.

## TG-MSK

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: [N-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A01.docx) – [N-026-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A03.pptx)
CfTGP: [[N-026-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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-N-026-A03.pptx). The updated version of the TDD is available in [N-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A01.docx). Progress is well on track. The current focus of the Group is prediction for and prevention of MSK conditions, including risk identification and risk reduction. The TG plans to work on the first benchmark prototype and to start the audit process.

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

## TG-Fertility

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

TDD: [N-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A01.docx) – [N-027-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A03.pptx)
CfTGP: [[N-027-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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

Eleonora Lippolis and Susanna Brandi from Merck presented. Three new team members joined the team. TDD has been completed.

The co-Topic Drivers introduced the continued efforts to organize the new TG using the presentation in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A03.pptx). The initial TDD and CfTGP were prepared and presented. The meeting welcomed the quick progress and invited experts to join the new TG activities. Next steps: TG drivers will work to define their TDD hypothesis given they are now getting a better hand at what data their group is able to gather.

It was agreed to upload the updated TDD in [N-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A01.docx) to the Deliverables repository.

## TG-Sanitation

The co-Topic Drivers are Khahlil Louisy (Institute for Technology & Global Health, ITGH, US), Alexander Radunsky (ITGH, US). The latest documentation available is as follows:

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

Alexander presented updates to TG activities using the presentation in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A03.pptx). Since Meeting M, the group is on engagement with the community in eThakwini by UKZN, successful in-vitro testing of sensors and data systems, and preparation for in-vivo testing in the Spring. Planned for May 2022, in partnership with UKZN and local community leadership, the project will advance to in-situ setup and testing.

The updated TDD in [N-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028-A01.docx) is uploaded to the Deliverables repository.

## TG-POC

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

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

It was agreed to upload the updated TDD in [N-029-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A01.docx) to the Deliverables repository.

# Proposals for new topic areas

There were no new topic areas proposed at this meeting.

# 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))

# Working methods

No changes were agreed to the working methods.

NOTE – [Annex D](#AnnexD) hereinafter contains the agreed procedures for online approval of document as well as for organizing e-meetings.

# Outcomes of this meeting

## WG updates

Mr Andrew Farlow (University of Oxford, UK) was confirmed as chair of the new working group on Collaboration and Outreach (WG-CO). There were no further changes to the FG-AI4H leadership.

## TG updates

New TG/sub-TG:

* No new TGs were proposed at this meeting.

Updates to leadership / scope of existing TGs:

* No updates to leadership / scope of existing TGs at this meeting.

## Output liaison statements

Two outgoing liaison statements were prepared as outcome of discussions at this meeting and submitted for the online approval procedure:

* [N-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-056.docx) – LS/r on invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information (SG13-LS234/[N-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-038.docx)) [to ITU-T SG13]. Dispatched as [FGAI4H-LS8](https://www.itu.int/net/ITU-T/ls/ls.aspx?isn=28266).
* [N-058](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-058.docx) – LS on the establishment of JCA on digital COVID-19 certificates (JCA-DCC) (TSAG-LS47/[N-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-039.docx)). Dispatched as [FGAI4H-LS9](https://www.itu.int/net/itu-t/ls/ls.aspx?isn=28309).

## Output documents

No new output documents were agreed. The following updated **output documents** were agreed:

* [N-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-102.docx): Updated call for proposals: use cases, benchmarking, and data (to be issued when the dates of the next meeting are defined)
* [N-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-200.docx): Updated list of FG-AI4H deliverables

## Deliverables and parent group reporting

No new deliverables were agreed at this meeting. All 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).

The next report to SG16 will be needed for its meeting planned October/November 2022.

# Future work

## Schedule of future FG meetings and workshops

The schedule of meetings in [N-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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.

It is expected that at least for all of the 1st quarter of 2022, the meetings will continue to be virtual; for the remainder of 2022, it will depend on the evolution of travel restrictions related to the COVID-19 pandemic. 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. The past 12 webinars have a total of 4,435 views, and for the current year (up to July 2022) there are 10 webinars scheduled.

Table 2 – Schedule of future FG meetings (as of 2022-02-17)

| Meeting | Date | Venue | Notes |
| --- | --- | --- | --- |
| N | 15-17 February 2022 | Online | This meeting |
| O | 31 May – 2 June 2022 | Online or physical | Confirmed after Meeting N |
| P | September-October 2022 | Online or physical | TBC |

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. Berlin
 | 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](#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 all participants for having joined the meeting, in particular those submitting contributions and engaged in the discussions. 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, Ayda Dabiri, Matthias Groeschel, Kaoru Mizuno and Bastiaan Quast.

The meeting was closed on Thu 17 February 2022 around 1500 hours (Geneva time).

Annex A:
Agenda

|  |  |  |
| --- | --- | --- |
|  |  | Related Documents |
| 1 | OpeningMinute of silence ([Dr Nao Norman Sipula](https://drive.google.com/file/d/1YsG1_DlTNMLN7UJPEE9-0dH7jL95n620/view)) | [N-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-002.pptx) (Introduction) |
| 2 | Approval of agenda | [N-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-001.docx) (Agenda); Initial timing: [link](https://docs.google.com/spreadsheets/d/1EgmHqHxIMzzaaXJxqkXBaONOJQHkL_hxUhcf6_8TknE/edit?usp=sharing) |
| 3 | Documentation and allocation | [N-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-001.docx) (Allocation); Annex B (Documentation)  |
| 4 | IPR | Annex A |
| 5 | Management updates |  |
| a | Vice-chairs | * No updates
 |
| b | WGs | * New WG-CO Collaboration and outreach created by correspondence.
 |
| c | TGs | * No updates
 |
| 6 | Approval of Meeting M outcomes and updates | [M-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-101.docx): Meeting Report[M-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-102.docx): Updated call for proposals: use cases, benchmarking, and data[M-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-107.docx): Updated FG-AI4H Onboarding document[M-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-200.docx): Updated list of FG-AI4H deliverables[N-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-004.docx): Progress report to SG16 |
|  | Interim activities: Communication with IEC TC62 | [N-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-052.docx) [FG-AI4H management] |
| 7 | Review of incoming LSs |  |
| a | LS on Call for updating use cases for the revision of TR 24030:2021 [from ISO/IEC JTC 1/SC 42 to various groups] | ISO/IEC JTC 1/SC 42 to various groups: [N-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-034.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-034-A01.xlsx) à *Noted* |
| b | LS on five deliverables of ITU-T FG-AI4EE [from FG-AI4EE to various ITU-T groups] | FG-AI4EE to various ITU-T groups: [N-035](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-035.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-035-A01.zip)à *Noted* |
| c | LS on final deliverables of ITU-T FG-QIT4N [from FG-QIT4N to various groups] | FG-QIT4N to various groups: [N-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-036.docx)à *Noted* |
| d | LS on establishment of a new ITU-T Focus Group on Testbeds Federations for IMT-2020 and beyond (FG-TBFxG) and first meeting (virtual, 4-7 April 2022) [from SG11 to various groups] | SG11 to various groups: [N-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-037.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-037-A01.docx)à *Noted* |
| e | LS on invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information [from SG13 to various groups] | SG13 to various groups: [N-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-038.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-038-A01.docx)à *Note? Check with WG-O for a reply, if not,*  |
| f | LS on the establishment of JCA on digital COVID-19 certificates (JCA-DCC) [from TSAG to various groups] | TSAG to various groups: [N-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-039.docx)à *Check with AHG-DT4HE if interest in being a representative* |
| 8 | Information on AI-related activities | Webinars; ITU AI4H challenge |
| 9 | Horizontal and strategic topics |  |
| 10 | Working Group updates |  |
| a | Data and AI solution assessment methods (WG-DAISAM) [Pat Baird; Luis Oala] |  |
| b | Data and AI solution handling (WG-DASH) [Marc Lecoultre; Ferath Kherif]  |  |
| c | Ethics (WG-Ethics) [Andreas Reis] | [N-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-051.docx) [Chair WG-Ethics] |
| d | Operations (WG-O) [Markus Wenzel; Eva Weicken] |  |
| e | Regulatory considerations (WG-RC) [Shada Alsalamah] | (See agenda item 12.e) |
| f | Clinical Evaluation (WG-CE) [Naomi Lee; Shubhanan Upadhyay; Eva Weicken ] |  |
| g | Collaborations and Outreach (WG-CO) [Andrew Farlow] | [N-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-044.docx): WG-CO: Catalysing Innovation in Global Health |
| h | AI and other digital technologies for COVID-19 health emergency (AHG-DT4HE) [Shan Xu, Ana Rivière-Cinnamond] | [N-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-047.pptx): Updated FG AI4H DT4HE Output "Guidance on AI and digital technologies for COVID health emergency" – Presentation [co-chairs] |
|  |  |  |
| 11 | Open Code Project [Marc Lecoultre] | [N-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-045.pptx): Status update |
| 12 | FG-AI4H deliverables | Overview: [N-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-005.docx) (to note)Publication: [N-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-046.pptx) (Matthias, Eva, Simao) |
| a | New deliverables | – |
| b | [DEL00](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL00.docx): Overview of deliverables | [N-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-050.pptx) [Editor] |
| c | [DEL0.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL00_1.docx): FGAI4H terms and definitions | [N-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040-A01.pptxf) [Editors] |
| d | [DEL01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL01.docx): AI4H ethics considerations | (see agenda item 10.c) |
| e | [DEL02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02.docx): AI4H regulatory best practices | [N-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049-A01.pptx): Updated DEL02 [Editors] |
| f | [DEL02.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02_1.docx): Mapping of IMDRF essential principles to AI for health software |  |
| g | [DEL02.2](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 | [N-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031.docx): Updated DEL02.2 [Editor] |
| h | [DEL03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL03.docx): AI4H requirements specifications | [N-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032.docx%22%20%5Ct%20%22_blank): Updated DEL03 [Editor] |
| i | [DEL04](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL04.docx): AI software life cycle specification | [N-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-030.pptx%22%20%5Ct%20%22_blank): Cybersecurity and AI/ML Data Lifecycles Follow up [Editor] |
| j | [DEL05](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05.docx): Data specification |  |
| k | [DEL05.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_1.docx): Data requirements |  |
| l | [DEL05.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_2.docx): Data acquisition |  |
| m | [DEL05.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_3.docx): Data annotation specification |  |
| n | [DEL05.4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_4.docx): Training and test data specification |  |
| o | [DEL05.5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_5.docx): Data handling |  |
| p | [DEL05.6](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_6.docx): Data sharing practices |  |
| q | [DEL06](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL06.docx): AI training best practices specification |  |
| r | [DEL07](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07.docx): AI for health evaluation considerations | [N-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042.docx%22%20%5Ct%20%22_blank): Updated DEL07 [Editors] |
| s | [DEL07.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_1.docx): AI4H evaluation process description |  |
| t | [DEL07.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_2.docx): AI technical test specification |  |
| u | [DEL07.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_3.docx): Data and artificial intelligence assessment methods (DAISAM) reference | [N-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-033.docx%22%20%5Ct%20%22_blank): DEL7.3 update - ML4H trial audits – Iteration 2.0 Playbook (Version 2.0) [Editor] |
| v | [DEL07.4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_4.docx): Clinical evaluation of AI for health | [N-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-048.docx): DEL7.4 update |
| w | [DEL07.5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_5.docx): Assessment platform |  |
| x | DEL08: AI4H scale-up and adoption |  |
| y | [DEL09](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09.docx): AI4H applications and platforms |  |
| z | [DEL09.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09_1.docx): Mobile applications (Manjeet), [DEL09.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09_2.docx): Cloud-based AI applications | [N-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043.docx%22%20%5Ct%20%22_blank): Updated DEL09.1 [Editors] |
| aa | [DEL10.0](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL10_0.docx): AI4H use cases: Topic Description Documents | [N-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-041.docx%22%20%5Ct%20%22_blank): Updated DEL10 [Editors] |
| 13 | Updates to TGs and new proposals |  |
| a | 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: [N-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A01.docx) - [[N-006-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-006-A03.pptx) CfTGP: [[N-006-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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] | TDD: [N-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A01.docx%22%20%5Ct%20%22_blank) - [[N-007-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-007-A03.pptx)CfTGP: [N-007-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
| d | TG-Bacteria (Diagnoses of bacterial infection and anti-microbial resistance - AMR)[Nada Malou] | TDD: [N-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-008-A01.docx%22%20%5Ct%20%22_blank) - [N-008-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-008-A03.pptx) CfTGP: [N-008-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-008-A02.docx) Contributions:  |
| e | TG-DiagnosticCT (Volumetric chest computed tomography) [Kuan Chen] | TDD: [N-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A01.docx%22%20%5Ct%20%22_blank) - [[N-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-009-A03.pptx)CfTGP: [N-009-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A02.docx%22%20%5Ct%20%22_blank) Contributions:  |
| f | TG-Dental (Dental diagnostics and digital dentistry)[Falk Schwendicke, Joachim Krois] | TDD: [N-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A01.docx%22%20%5Ct%20%22_blank) - [[N-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-010-A03.pptx)CfTGP: [[N-010-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-010-A02.docx) Contributions: |
| g | TG-FakeMed: AI-based detection of falsified medicine[Franck Verzefé] | TDD: [N-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A01.docx%22%20%5Ct%20%22_blank) - [[N-011-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-011-A03.pptx) CfTGP: [[N-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-011-A02.docx)Contributions:  |
| h | TG-Falls (Falls among the elderly) [Pierpaolo Palumbo for Inês Sousa] | TDD: [N-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A01.docx%22%20%5Ct%20%22_blank)- [[N-012-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-012-A03.pptx)CfTGP: [[N-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-012-A02.docx)Contributions: |
| i | TG-Histo (Histopathology) [Frederick Klauschen] | TDD: [N-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A01.docx%22%20%5Ct%20%22_blank) - [N-013-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A03.pptx%22%20%5Ct%20%22_blank) CfTGP: [N-013-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
| j | TG-Malaria: Malaria detection [Rose Nakasi] | TDD: [N-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A01.docx%22%20%5Ct%20%22_blank) - [[N-014-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-014-A03.pptx) CfTGP: [[N-014-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-014-A02.docx)Contributions:  |
| k | TG-MCH: Maternal and child health [Raghu Dharmaraju,Alexandre Chiavegatto Filho] | TDD: [N-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A01.docx%22%20%5Ct%20%22_blank) - [N-015-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A03.pptx) CfTGP: [N-015-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
| l | TG-Neuro: Neurological disorders [Marc Lecoultre] | TDD: [N-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A01.docx%22%20%5Ct%20%22_blank) - [[N-016-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-016-A03.pptx)CfTGP: [[N-016-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-016-A02.docx)Contributions: |
| m | TG-Ophthalmo (Ophthalmology) [Arun Shroff] | TDD: [N-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A01.docx%22%20%5Ct%20%22_blank) - [N-017-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A03.pptx%22%20%5Ct%20%22_blank) CfTGP: [[N-017-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-017-A02.docx)Contributions:  |
| n | TG-Outbreaks (AI for Outbreak Detection) [Stéphane Ghozzi] | TDD: [N-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A01.docx%22%20%5Ct%20%22_blank) - [N-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A03.pptx%22%20%5Ct%20%22_blank)CfTGP: [N-018-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A02.docx%22%20%5Ct%20%22_blank)Contributions: |
| o | TG-Psy (Psychiatry) [Nicholas Langer] | TDD: [N-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A01.docx%22%20%5Ct%20%22_blank) - [[N-019-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-019-A03.pptx)CfTGP: [N-019-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A02.docx%22%20%5Ct%20%22_blank) Contributions:  |
| p | TG-Snake (Snakebite and snake identification) [Rafael Ruiz] | TDD: [N-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A01.docx%22%20%5Ct%20%22_blank) - [[N-020-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-020-A03.pptx)CfTGP: [N-020-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A02.docx%22%20%5Ct%20%22_blank)Contributions: |
| q | TG-Symptom (Symptom assessment) [Henry Hoffmann] | TDD: [N-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A01.docx%22%20%5Ct%20%22_blank) - [[N-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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: [[N-021-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-021-A02.docx) Contributions: |
| r | TG-TB (Tuberculosis) [Manjula Singh] | TDD: [N-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A01.docx%22%20%5Ct%20%22_blank) - [[N-022-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-022-A03.pptx)CfTGP: [N-022-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
| s | TG-Radiology (Radiology) [Darlington Ahiale Akogo] | TDD: [N-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A01.docx%22%20%5Ct%20%22_blank) - [N-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A03.pptx%22%20%5Ct%20%22_blank) CfTGP: [N-023-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
| t | TG-Diabetes[Andrés Valdivieso] | TDD: [N-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A01.docx%22%20%5Ct%20%22_blank) - [N-024-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A03.pptx) CfTGP: [[N-024-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-024-A02.docx)Contributions: |
| u | TG-Endoscopy[Jianrong Wu] | TDD: [N-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A01.docx%22%20%5Ct%20%22_blank) - [[N-025-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-025-A03.pptx)CfTGP: [[N-025-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A02.docx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-025-A02.docx)Contributions: |
| v | TG-MSK (AI for Musculoskeletal medicine)[Peter Grinbergs, Yura Perov] | TDD: [N-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A01.docx%22%20%5Ct%20%22_blank) - [[N-026-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-026-A03.pptx)CfTGP: [N-026-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
| w | TG-Fertility (AI for human reproduction and fertility)[Susanna Brandi, Eleonora Lippolis]  | TDD: [N-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A01.docx) - [[N-027-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-026-A03.pptx)CfTGP: [N-027-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A02.docx) Contributions: |
| x | TG-Sanitation (AI in sanitation for public health)[Khahlil Louisy, Alexander Radunsky] | TDD: [N-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028-A01.docx%22%20%5Ct%20%22_blank) - [[N-028-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-026-A03.pptx)CfTGP: [N-028-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
| y | TG-POC (Topic Group on AI for point-of care diagnostics)[Nina Linder] | TDD: [N-029-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A01.docx%22%20%5Ct%20%22_blank) - [[N-029-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A03.pptx%22%20%5Ct%20%22_blank)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-026-A03.pptx)CfTGP: [N-029-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A02.docx%22%20%5Ct%20%22_blank) Contributions: |
| 14 | Proposals for new topic areas | None |
| 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 statementsb) Structure updatesc) Call for proposalsd) Output documents- …e) Updated list of planned deliverables[[N-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-005.docx)à [N-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-200.docx)] |
| 17 | Future work |  |
| a | Schedule of future FG meetings and workshops | [N-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-003.docx) |
| b | Format of next meeting |  |
| c | Work plan and timeline- Deliverables |  |
| d | Interim activities (online) | Webinars within AI4G platformPre-FG meeting TG-specific workshops |
| 18 | Promotion and outreach |  |
| a | Promotional activities |  |
| b | Press communication |  |
| c | Funding and partnerships |  |
| 19 | A.O.B. |  |
| 20 | Closing |  |

Annex B:
Documentation

| Name | Title | Source |
| --- | --- | --- |
| [FGAI4H-N-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-001.docx) | Agenda of the 14th meeting (Meeting N) of the Focus Group on Artificial Intelligence for Health (FG-AI4H) | Chairman FG-AI4H |
| [FGAI4H-N-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-002.pptx) | Introduction to ITU/WHO Focus Group on AI for Health (FG-AI4H) | Chairman FG-AI4H |
| [FGAI4H-N-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-003.docx) | Schedule of future FG meetings (as of 2022-02-15) | Chairman FG-AI4H |
| [FGAI4H-N-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-004.docx) | Progress report to ITU-T SG16 (17-28 January 2022) and outcomes | Chairman FG-AI4H |
| [FGAI4H-N-004-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-004-A01.docx) | Att.1 – (Meeting J to M Reports) |  |
| [FGAI4H-N-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-005.docx) | Updated list of FG-AI4H deliverables (as of 2021-02-15) | TSB |
| [FGAI4H-N-006](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006.docx) | Updates for Cardiovascular disease risk prediction (TG-Cardio) | TG-Cardio Topic Driver |
| [FGAI4H-N-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A01.docx) | Att.1 – TDD update (TG-Cardio) |  |
| [FGAI4H-N-006-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A02.docx) | Att.2 – CfTGP (TG-Cardio) |  |
| [FGAI4H-N-006-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A03.pptx) | Att.3 – Presentation (TG-Cardio) |  |
| [FGAI4H-N-007](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007.docx) | Updates for Dermatology (TG-Derma) | TG-Derma Topic Driver |
| [FGAI4H-N-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A01.docx) | Att.1 – TDD update (TG-Derma) |  |
| [FGAI4H-N-007-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A02.docx) | Att.2 – CfTGP (TG-Derma) |  |
| [FGAI4H-N-007-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A03.pptx) | Att.3 – Presentation (TG-Derma) |  |
| [FGAI4H-N-008](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-008.docx) | Updates for Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | TG-Bacteria Topic Driver |
| [FGAI4H-N-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-008-A01.docx) | Att.1 – TDD update (TG-Bacteria) |  |
| [FGAI4H-N-008-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-008-A02.docx) | Att.2 – CfTGP (TG-Bacteria) |  |
| [FGAI4H-N-008-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-008-A03.pptx) | Att.3 – Presentation (TG- Bacteria) |  |
| [FGAI4H-N-009](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009.docx) | Updates for Volumetric chest CT (TG-DiagnosticCT) | TG-DiagnosticCT Topic Driver |
| [FGAI4H-N-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A01.docx) | Att.1 – TDD update (TG-DiagnosticCT) |  |
| [FGAI4H-N-009-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A02.docx) | Att.2 – CfTGP (TG-DiagnosticCT) |  |
| [FGAI4H-N-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A03.pptx) | Att.3 – Presentation (TG-DiagnosticCT) |  |
| [FGAI4H-N-010](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010.docx) | Updates for Dental diagnostics and digital dentistry (TG-Dental) | TG-Dental Topic Driver |
| [FGAI4H-N-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A01.docx) | Att.1 – TDD update (TG-Dental) |  |
| [FGAI4H-N-010-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A02.docx) | Att.2 – CfTGP (TG-Dental) |  |
| [FGAI4H-N-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A03.pptx) | Att.3 – Presentation (TG-Dental) |  |
| [FGAI4H-N-011](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011.docx) | Updates for falsified medicine (TG-FakeMed) | TG-FakeMed Topic Driver |
| [FGAI4H-N-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A01.docx) | Att.1 – TDD update (TG-FakeMed) |  |
| [FGAI4H-N-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A02.docx) | Att.2 – CfTGP (TG-FakeMed) |  |
| [FGAI4H-N-011-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A03.pptx) | Att.3 – Presentation (TG- FakeMed) |  |
| [FGAI4H-N-012](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012.docx) | Updates for Falls among the elderly (TG-Falls) | TG-Falls Topic Driver |
| [FGAI4H-N-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A01.docx) | Att.1 – TDD update (TG-Falls) |  |
| [FGAI4H-N-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A02.docx) | Att.2 – CfTGP (TG-Falls) |  |
| [FGAI4H-N-012-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A03.pptx) | Att.3 – Presentation (TG-Falls) |  |
| [FGAI4H-N-013](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013.docx) | Updates for Histopathology (TG-Histo) | TG-Histo Topic Driver |
| [FGAI4H-N-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A01.docx) | Att.1 – TDD update (TG-Histo) |  |
| [FGAI4H-N-013-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A02.docx) | Att.2 – CfTGP (TG-Histo) |  |
| [FGAI4H-N-013-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A03.pptx) | Att.3 – Presentation (TG-Histo) |  |
| [FGAI4H-N-014](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014.docx) | Updates for Malaria detection (TG-Malaria) | TG-Malaria Topic Driver |
| [FGAI4H-N-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A01.docx) | Att.1 – TDD update (TG-Malaria) |  |
| [FGAI4H-N-014-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A02.docx) | Att.2 – CfTGP (TG-Malaria) |  |
| [FGAI4H-N-014-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A03.pptx) | Att.3 – Presentation (TG-Malaria) |  |
| [FGAI4H-N-015](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015.docx) | Updates for Maternal and child health (TG-MCH) | TG-MCH Topic Driver |
| [FGAI4H-N-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A01.docx) | Att.1 – TDD update (TG-MCH) |  |
| [FGAI4H-N-015-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A02.docx) | Att.2 – CfTGP (TG-MCH) |  |
| [FGAI4H-N-015-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A03.pptx) | Att.3 – Presentation (TG-MCH) |  |
| [FGAI4H-N-016](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016.docx) | Updates for Neurological disorders (TG-Neuro) | TG-Neuro Topic Driver |
| [FGAI4H-N-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A01.docx) | Att.1 – TDD update (TG-Neuro) |  |
| [FGAI4H-N-016-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A02.docx) | Att.2 – CfTGP (TG-Neuro) |  |
| [FGAI4H-N-016-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A03.pptx) | Att.3 – Presentation (TG-Neuro) |  |
| [FGAI4H-N-017](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017.docx) | Updates for Ophthalmology (TG-Ophthalmo) | TG-Ophthalmo Topic Driver |
| [FGAI4H-N-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A01.docx) | Att.1 – TDD update (TG-Ophthalmo) |  |
| [FGAI4H-N-017-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A02.docx) | Att.2 – CfTGP (TG-Ophthalmo) |  |
| [FGAI4H-N-017-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A03.pptx) | Att.3 – Presentation (TG-Ophthalmo) |  |
| [FGAI4H-N-018](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018.docx) | Updates for Outbreak detection (TG-Outbreaks) | TG-Outbreaks Topic Driver |
| [FGAI4H-N-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A01.docx) | Att.1 – TDD update (TG-Outbreaks) |  |
| [FGAI4H-N-018-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A02.docx) | Att.2 – CfTGP (TG-Outbreaks) |  |
| [FGAI4H-N-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A03.pptx) | Att.3 – Presentation (TG-Outbreaks) |  |
| [FGAI4H-N-019](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019.docx) | Updates for Psychiatry (TG-Psy) | TG-Psy Topic Driver |
| [FGAI4H-N-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A01.docx) | Att.1 – TDD update (TG-Psy) |  |
| [FGAI4H-N-019-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A02.docx) | Att.2 – CfTGP (TG-Psy) |  |
| [FGAI4H-N-019-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A03.pptx) | Att.3 – Presentation (TG-Psy) |  |
| [FGAI4H-N-020](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020.docx) | Updates for Snakebite and snake identification (TG-Snake) | TG-Snake Topic Driver |
| [FGAI4H-N-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A01.docx) | Att.1 – TDD update (TG-Snake) |  |
| [FGAI4H-N-020-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A02.docx) | Att.2 – CfTGP (TG-Snake) |  |
| [FGAI4H-N-020-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A03.pptx) | Att.3 – Presentation (TG- Snake) |  |
| [FGAI4H-N-021](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021.docx) | Updates for Symptom assessment (TG-Symptom) | TG-Symptom Topic Driver |
| [FGAI4H-N-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A01.docx) | Att.1 – TDD update (TG-Symptom) |  |
| [FGAI4H-N-021-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A02.docx) | Att.2 – CfTGP (TG-Symptom) |  |
| [FGAI4H-N-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A03.pptx) | Att.3 – Presentation (TG-Symptom) |  |
| [FGAI4H-N-022](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022.docx) | Updates for Tuberculosis (TG-TB) | TG-TB Topic Driver |
| [FGAI4H-N-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A01.docx) | Att.1 – TDD update (TG-TB) |  |
| [FGAI4H-N-022-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A02.docx) | Att.2 – CfTGP (TG-TB) |  |
| [FGAI4H-N-022-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A03.pptx) | Att.3 – Presentation (TG-TB) |  |
| [FGAI4H-N-023](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023.docx) | Updates for Radiology (TG-Radiology) | TG-Radiology Topic Driver |
| [FGAI4H-N-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A01.docx) | Att.1 – TDD update (TG-Radiotherapy) |  |
| [FGAI4H-N-023-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A02.docx) | Att.2 – CfTGP (TG-Radiotherapy) |  |
| [FGAI4H-N-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A03.pptx) | Att.3 – Presentation (TG-Radiotherapy) |  |
| [FGAI4H-N-024](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024.docx) | Updates for Primary and secondary diabetes prediction (TG-Diabetes) | TG-Diabetes Topic Driver |
| [FGAI4H-N-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A01.docx) | Att.1 – TDD update (TG-Diabetes) |  |
| [FGAI4H-N-024-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A02.docx) | Att.2 – CfTGP (TG-Diabetes) |  |
| [FGAI4H-N-024-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A03.pptx) | Att.3 – Presentation (TG-Diabetes) |  |
| [FGAI4H-N-025](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025.docx) | Updates for Endoscopy (TG-Endoscopy) | TG-Endoscopy Topic Driver |
| [FGAI4H-N-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A01.docx) | Att.1 – TDD update (TG-Endoscopy) |  |
| [FGAI4H-N-025-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A02.docx) | Att.2 – CfTGP (TG-Endoscopy) |  |
| [FGAI4H-N-025-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A03.pptx) | Att.3 – Presentation (TG-Endoscopy) |  |
| [FGAI4H-N-026](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026.docx) | Initial documents for AI for Musculoskeletal medicine (TG-MSK) | TG-MSK Topic Driver |
| [FGAI4H-N-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A01.docx)  | Att.1 – TDD update (TG-MSK) |  |
| [FGAI4H-N-026-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A02.docx) | Att.2 – CfTGP (TG-MSK) |  |
| [FGAI4H-N-026-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A03.pptx) | Att.3 – Presentation (TG-MSK) |  |
| [FGAI4H-N-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027.docx) | Initial docs: AI for human reproduction and fertility (TG-Fertility) | TG-Fertility Topic Driver |
| [FGAI4H-N-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A01.docx) | Att.1 – TDD update (TG-Fertility) |  |
| [FGAI4H-N-027-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A02.docx) | Att.2 – CfTGP (TG-Fertility) |  |
| [FGAI4H-N-027-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A03.pptx) | Att.3 – Presentation (TG-Fertility) |  |
| [FGAI4H-N-028](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028.docx) | Initial docs: AI in sanitation for public health (TG-Sanitation) | TG-Sanitation Topic Driver |
| [FGAI4H-N-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028-A01.docx) | Att.1 – TDD update (TG-Sanitation) |  |
| [FGAI4H-N-028-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028-A02.docx) | Att.2 – CfTGP (TG-Sanitation) |  |
| [FGAI4H-N-028-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A03.pptx) | Att.3 – Presentation (TG-Sanitation) |  |
| [FGAI4H-N-029](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029.docx) | Initial docs: Topic Group on AI for point-of care diagnostics (TG-POC) | TG-POC Topic Driver |
| [FGAI4H-N-029-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A01.docx) | Att.1 – TDD update (TG-POC) |  |
| [FGAI4H-N-029-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A02.docx) | Att.2 – CfTGP (TG-POC) |  |
| [FGAI4H-N-029-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A03.pptx) | Att.3 – Presentation (TG-POC) |  |
| [FGAI4H-N-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-030.pptx) | Cybersecurity and AI/ML Data Lifecycles Follow up | Editor Del4  |
| [FGAI4H-N-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031.docx)  | DEL02.2 update: Good practices for health applications of machine learning: Considerations for manufacturers and regulators | Editor Del2.2 |
| [FGAI4H-N-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032.docx) | DEL03 update: AI4H requirement specifications | Editor Del3 |
| [FGAI4H-N-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-033.docx) | DEL7.3 update: ML4H trial audits–Iteration 2.0 Playbook (Version 2.0) | Editor Del7.3 |
| [FGAI4H-N-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-034.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-034-A01.xlsx) | LS on Call for updating use cases for the revision of TR 24030:2021 [from ISO/IEC JTC 1/SC 42 to various groups] | ISO/IEC JTC 1/SC 42 |
| [FGAI4H-N-035](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-035.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-035-A01.zip) | LS on five deliverables of ITU-T FG-AI4EE | FG-AI4EE |
| [FGAI4H-N-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-036.docx) | LS on final deliverables of ITU-T FG-QIT4N | FG-QIT4N |
| [FGAI4H-N-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-037.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-037-A01.docx) | LS on establishment of a new ITU-T Focus Group on Testbeds Federations for IMT-2020 and beyond (FG-TBFxG) and first meeting (virtual, 4-7 April 2022) | SG11 |
| [FGAI4H-N-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-038.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-038-A01.docx) | LS on invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information | SG13 |
| [FGAI4H-N-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-039.docx) | LS on the establishment of JCA on digital COVID-19 certificates (JCA-DCC) | TSAG |
| [FGAI4H-N-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040-A01.pptx) | DEL0.1 update: Common unified terms in artificial intelligence for health | Editors DEL0.1 |
| [FGAI4H-N-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-041.docx) | DEL10 Update: AI4H use cases: Topic Description Documents | Editors DEL10 |
| [FGAI4H-N-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042-A01.pdf) | DEL07 Update: AI for health evaluation considerations | Editors DEL7 |
| [FGAI4H-N-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043.docx) | DEL9.1 Update: Mobile Applications | Editors DEL9.1 |
| [FGAI4H-N-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-044.docx) | WG-CO: Catalysing Innovation in Global Health | WG-CO |
| [FGAI4H-N-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-045.pptx) | Open Code Initiative – Status update | OCI |
| [FGAI4H-N-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-046.pptx) | Publication of Focus Group Deliverables | WG-O |
| [FGAI4H-N-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-047.pptx) | Updated FG AI4H DT4HE Output "Guidance on AI and digital technologies for COVID health emergency" – Presentation | Co-chairs AHG-DT4HE |
| [FGAI4H-N-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-048.docx) | DEL7.4 Update: Clinical evaluation of AI for health | Editors DEL7.4 |
| [FGAI4H-N-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049-A01.pptx) | DEL02 Update: Overview of Regulatory Considerations on Artificial Intelligence for Health | Editors DEL2 |
| [FGAI4H-N-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-050.pptx) | DEL00: Overview of the FG-AI4H deliverables – Presentation | Editor DEL0 |
| [FGAI4H-N-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-051.docx) | Update on WG-Ethics activities | Chair WG-Ethics |
| [FGAI4H-N-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-052.pdf) | Info - LS on discussion of potential for future collaboration [to IEC TC62] | Chair FG-AI4H |
| [FGAI4H-N-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-053.pptx) | DEL5.3: Data annotation specification - Presentation | Editors DEL5.3 |
| [FGAI4H-N-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-054.pdf) | DEL5.6: Data sharing practices – Progress Review Presentation | Editors DEL5.6 |
| [FGAI4H-N-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055.docx) | WG-CO: Catalysing digital and AI innovations for health: sharing experiences from Africa and Asia | WG-CO |
| [FGAI4H-N-055-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A01.pdf) | Att.1 - Scoping of the current state of digital tools in Africa | WG-CO |
| [FGAI4H-N-055-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A02.pdf) | Att.2 - Harnessing the power of AI for Africa's development | WG-CO |
| [FGAI4H-N-055-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A03.pdf) | Att.3 - Data-driven insight extraction in MNCH using automated stratification | WG-CO |
| [FGAI4H-N-055-A04](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A04.pdf) | Att.4 - The Africa Oxford Health Innovation Platform: Is there a case for collaboration? | WG-CO |
| [FGAI4H-N-055-A05](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A05.pdf) | Att.5 - Electronic medical records platform made in Africa for Africa | WG-CO |
| [FGAI4H-N-055-A06](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-055-A06.pdf) | Att.6 - Lessons learned from building AI models to address public health issues in India | WG-CO |
| [FGAI4H-N-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-056.docx) | LS/r on the invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information (SG13-LS234) [to ITU-T SG13] | FG-AI4H |
| [FGAI4H-N-057](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-057.pptx) | DEL7.2: AI technical test specification - Presentation | Editor DEL7.2 |
| [FGAI4H-N-058](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-058.docx) | LS/r on the establishment of JCA on digital COVID-19 certificates (JCA-DCC) (TSAG-LS47) [to JCA-DCC, TSAG] | FG-AI4H |
| [FGAI4H-N-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-101.docx) | Report of the 14th meeting (Meeting N) of the Focus Group on Artificial Intelligence for Health (E-meeting, 15-17 February 2022) | FG-AI4H |
| [FGAI4H-N-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-102.docx) | Updated call for proposals: Use cases, benchmarking, and data | FG-AI4H |
| [FGAI4H-N-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-200.docx)  | List of FG-AI4H deliverables (as of 2022-02-17) | TSB |

Annex C:
List of participants

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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) | [N-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A01.docx) | C |
| 1. Dermatology
 | TG-Derma | Sharad Kumar (Nurithm Labs, India) | [N-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A01.docx) | B |
| 1. Diagnosis of bacterial infection and anti-microbial resistance
 | TG-Bacteria | Nada Malou (MSF, France) | [N-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-008-A01.docx) | F |
| 1. Falls among the elderly
 | TG-Falls | Pierpaolo Palumbo (University of Bologna, Italy) a.i. [Inês Sousa (Fraunhofer Portugal) on maternity leave, Sep 2021] | [N-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A01.docx) | B |
| 1. Histopathology
 | TG-Histo | Frederick Klauschen (Charité Berlin, Germany) | [N-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A01.docx) | B |
| 1. Malaria detection
 | TG-Malaria | Rose Nakasi (Makerere University, Uganda) | [N-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-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) | [N-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A01.docx) | D; G |
| 1. Neurological disorders
 | TG-Neuro | Marc Lecoultre (ML Labs, Switzerland) | [N-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A01.docx) | B |
| 1. Ophthalmology
 | TG-Ophthalmo | Arun Shroff (MedIndia) | [N-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A01.docx) | B |
| 1. Outbreak detection
 | TG-Outbreaks | Auss Abbood (Robert Koch Institute, Germany) and Stéphane Ghozzi (HZI, Germany) | [N-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A01.docx) | E |
| 1. Psychiatry
 | TG-Psy | Nicolas Langer (ETH Zurich, Switzerland) | [N-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A01.docx) | C |
| 1. Radiology
 | TG-Radiology | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [N-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A01.docx) | D; H |
| 1. Snakebite and snake identification
 | TG-Snake | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [N-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A01.docx) | B |
| 1. Symptom assessment
 | TG-Symptom | Henry Hoffmann (Ada Health, Germany) | [N-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A01.docx) | B |
| 1. Tuberculosis
 | TG-TB | Manjula Singh (ICMR, India) | [N-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A01.docx) | C |
| 1. Volumetric chest CT
 | TG-DiagnosticCT | Kuan Chen (Infervision, China) | [N-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A01.docx) | D |
| 1. Dental diagnostics and digital dentistry
 | TG-Dental | Falk Schwendicke and Joachim Krois (Charité Berlin, Germany); Tarry Singh (deepkapha.ai, Netherlands) | [N-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A01.docx) | G |
| 1. AI-based detection of falsified medicine
 | TG-FakeMed | Franck Verzefé (TrueSpec-Africa, DRC) | [N-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A01.docx) | F |
| 1. Primary and secondary diabetes prediction
 | TG-Diabetes | Andrés Valdivieso (Anastasia.ai & Tecnigen, Chile) | [N-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A01.docx) | H |
| 1. AI for endoscopy
 | TG-Endoscopy | Jianrong Wu (Tencent Healthcare, China) | [N-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A01.docx) | I |
| 1. AI for musculoskeletal medicine
 | TG-MSK | Peter Grinbergs (EQL, UK), Yura Perov (UK) | [N-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A01.docx) | J |
| 1. AI for human reproduction and fertility
 | TG-Fertility | Susanna Brandi, Eleonora Lippolis (Merck KGaA, Darmstadt, Germany) | [N-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A01.docx) | L |
| 1. AI in sanitation for public health
 | TG-Sanitation | Khahlil Louisy (Institute for Technology & Global Health, ITGH, US), Alexander Radunsky (ITGH, US) | [N-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028-A01.docx) | L |
| 1. AI for point-of care diagnostics
 | TG-POC | Nina Linder (University of Helsinki, Finland) | [N-029-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-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> |
| TG-MSK | fgai4htgmsk@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgmsk> |
| TG-Psy | fgai4htgpsy@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgpsy> |
| TG-Fertility | fgai4htgfertility@lists.itu.int | <https://itu.int/ml/lists/arc/fgai4htgfertility> |
| 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 (E-meeting, 15-17 February 2022):

[Dec-N-1. The report of the virtual meeting held 28 – 30 September 2022 found in M-101 was approved without comments and its three output documents were noted (M-102, M-107, and M-200).](#_Toc100677081)

[Dec-N-2. It was agreed to remind TG Drivers that an update of their activities is expected at each FG meeting.](#_Toc100677082)

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