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| ITU Logo | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2017-2020 | FG-AI4H-J-101 |
| **ITU-T Focus Group on AI for Health** |
| **Original: English** |
| **WG(s):** | N/A | E-meeting, 30 September – 2 October 2020 |
| **DOCUMENT** |
| **Source:** | FG-AI4H |
| **Title:** | Report of the 10th meeting (Meeting J) of the Focus Group on Artificial Intelligence for Health (E-meeting, 30 September – 2 October 2020) |
| **Purpose:** | Admin |
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| **Abstract:** | This document contains the report of the 10th meeting of the ITU-T Focus Group on Artificial Intelligence for Health (FG-AI4H), held as an E-meeting, 30 September – 2 October 2020. |

Executive Summary

The 10th meeting of the FG-AI4H took place online, 30 September – 2 October 2020. Purpose included the reporting and discussion of updates to its deliverables and sub-deliverables and of progress by the existing 20 topic groups as well as the creation of a new topic group.

The meeting noted with satisfaction that ITU-T SG16 extended the life of the FG-AI4H until September 2022.

Working group updates:

* Appointed three co-chairs for the WG on Clinical Evaluation: Naomi Lee (The Lancet, UK), Shubhanan Upadhyay (ADA Health, Germany), and Eva Weicken (Fraunhofer HHI, Germany).

Topic group updates:

* The TG-Derma Driver, Maria Vasconcelos (Fraunhofer Portugal) can no longer continue. The meeting thanked Ms Vasconcelos for her efforts in progressing TG-Derma.
* New TG on AI for Musculoskeletal medicine (TG-MSK) with Yura Perov (EQL, UK) as Topic Driver. The collaboration site for the new TG is <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-MSK.aspx>. Mailing list: fgai4htgmsk@lists.itu.int (archive: <https://itu.int/ml/lists/arc/fgai4htgmsk>)

Deliverables update:

* No new deliverables were agreed at this meeting. Future deliverables under consideration are:
* Reference software implementation (Editor: Marc Lecoultre). Initial elements: [J-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-045.pptx)
* Guidance on digital technologies for COVID health emergency (Editors: Shan Xu, CAICT, China), Ana Riviere-Cinnamond, PAHO). Initial draft from the AHG-DT4HE: [J-035-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-R01.docx).
* All available deliverables were reviewed and will be shared with SG16. The latest version of the deliverables is found in the [FG-AI4H collaboration site](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx).

It was agreed to update the following output documents, after an editing period after the meeting:

* [J-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-102.docx): Updated call for proposals: use cases, benchmarking, and data (to be published once the final dates of the next FG-AI4H meeting are defined)
* [J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx): Updated call for topic group participation (CfTGP) template
* [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004.docx): Updated TDD Template
* [J-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-107.docx): Updated FG-AI4H onboarding document
* [J-200-R1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-200-R01.docx): Updated list of FG-AI4H deliverables
* [FG-AI4H whitepaper](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FG-AI4H_Whitepaper.pdf) ([J-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002.docx))

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

The meeting had 92 participants over the various days and reviewed 55 documents (not counting attachments). There were no outgoing LSs prepared.

A list of the 12 decisions taken at the meeting is found in [Annex E](#AnnexE) of the report.

The next meeting of the FG-AI4H will be in held virtually in 27-29 January 2021.

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# Opening

The meeting was opened by the FG-AI4H chairman, Mr Thomas Wiegand (Fraunhofer HHI, Germany), who welcomed the participants. He presented an overview of the FG-AI4H work, as found in [J-001-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001-A01.pptx).

# Approval of agenda

The agenda in [J-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001.docx) (Agenda) was approved. Updates were made during the meeting with the final version being [J-001-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001-R01.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/10W5W5Vdhe8Cf9_Sgglm0xOIFE0pVsWk5FBDz7p7Fvao/edit#gid=0>.

# Documentation and allocation

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

# IPR

The text in [J-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-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.

1. TG Drivers are asked to read the IPR call as found in [J-001-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001-R01.docx) Annex A and collect any declarations of made in return to the IPR question in their meeting minutes.

# Management updates

After confirmation by correspondence of the ToR for the WG on Clinical Evaluation, the meeting confirmed the appointment of three co-chairs: Naomi Lee (The Lancet, UK), Shubhanan Upadhyay (ADA Health, Germany), and Eva Weicken (Fraunhofer HHI, Germany).

# Approval of Meeting I outcomes and updates

The meeting report of the virtual Meeting I (7-8 May 2020) in [I-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-101.docx) was approved without comments.

The following documents from Meeting I were noted by the meeting:

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

The meeting noted [J-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-047.docx) with the FG-AI4H progress report from October 2019 to June 2020 provided to ITU-T SG16, the parent group of the FG-AI4H, at its meeting 22 June – 3 July 2020.

1. The report of the virtual meeting held 7-8 May 2020 found in [I-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-101.docx) was approved without comments and its two output documents were noted ([I-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-102.docx) and [I-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-200.docx)).

# Review of incoming liaison statements

## ITU-T SG13

Two LSs were received from SG13:

* ITU-T SG13: New Recommendation ITU-T Y.3531 "Cloud computing- Functional requirements for machine learning as a service" ([J-028](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-028.docx) plus [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-028-A01.docx)). This LS informs on the Consent of draft new Recommendation ITU-T Y.3531 “*Cloud computing - Functional requirements for machine learning as a service*” and asks to be kept informed on future studies regarding machine learning service and framework.
* ITU-T SG13: Invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information ([J-029](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-029.docx) plus [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-029-A01.docx)). This LS invites the review of their Y-series Supplement Y.sup.aisr on an artificial intelligence standardization roadmap (attachment 1 of the LS) and requests that missing/updated information be provided to the ITU-T SG13: information/update of SDO’s deliverables; suggestions of technical categorization in AI fields; and comparative analysis of deliverables.

After review, it was felt that no reply was necessary. Both LSs were noted.

# Renewal of the FG-AI4H term

The chairman informed the meeting that ITU-T SG16 agreed to extend the term of the FG-AI4H by an additional two years (i.e. until September 2022), as requested. The submitted draft deliverables have been noted. The report provided to the SG16 meeting (22 June-3-July 2020), covering the period October 2019 to June 2020, is reproduced in [J-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-047.docx).

# FG-AI4H open code software initiative

[J-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-045.pptx) – Open Source Software [Editors]

**Summary:** Following Decision I-7 of the 7-8 May 2020 meeting of the FG-AI4H, steps were taken to start an open code software initiative within the FG-AI4H. This PPT contains a feedback on the work accomplished by the initiative in-between meetings I and J.

Marc Lecoultre is leading this initiative and presented J-045. The lifecycle of AI technologies in health involves several steps. It starts from the collection of (annotated) data, goes to the development of an AI model and is followed by a careful evaluation. Each step requires multiple resources such as medical expertise, technology experts, and regulatory bodies, to annotate the data, develop the model and evaluate its performance. Based on our work over the last two years, we identified two opportunities to move the field of health AIs forward:

1. The arbiter problem:
a. Challenge: Companies do not want to give away data and solution, regulators cannot see them
b. Idea: Software platform as a safe and neutral arbiter between distrusting parties
2. Health AIs at scale:
a. Challenge: Regulatory compliance in health is an expensive process
b. Idea: Map country requirements to automated tests

While the initial scope of this activity was to develop an annotation tool, it was felt that a more general approach is needed to meet the main goal of the activity, that is, to develop an open code software platform that seizes on these opportunities to make health AIs usable at scale in order to help close the gap between software developer’s community and medical regulators. The set of software tools to be developed includes packages for the storage and annotation of data, prediction of diagnoses and evaluation as well as the reporting of performance.

Members were welcomed others to join the project. Starting page info: <https://dev.azure.com/mllabai/FG-AI4H%20Assessment%20Platform>.

It was requested to add info on how to join the group re: the different tools. In response, it was agreed to make such intro info available from the FG-AI4H as a sub-page.

Next steps include the development of a functionality matrix for all modules, identify features and estimates. Then, define the MVP, start the code development and identify funding. It was suggested that the FG-AI4H should engage with IMDRF about this software initiative.

1. Create a landing page for the FG-AI4H open code initiative in the ITU website and engage with IMDRF.

# FG-AI4H deliverables

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

[J-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042.docx) – Draft description of the peer review process for FG-AI4H deliverables [Editors]

[J-042-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A01.docx) – Peer review Att. 1 – Internal Reviewer Volunteer Form [Editors]

[J-042-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A02.docx) – Peer review Att. 2 – Reviewer request template: Internal [Editors]

[J-042-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A03.docx) – Peer review Att. 3 – Reviewer request template: External [Editors]

**Summary:** 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, this document proposes a two-part (internal and external) peer review process.

The document was presented by the editor, Monique Kuglitsch (Fraunhofer HHI, Germany) using [J-042-A04](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A04.pptx). Key issues to be addressed include the methodology for review, expectations of reviewers, and how to recruit reviewers. It was clarified that this process would be done right before a document is finalized. The complexity of the process was noted, and it was suggested to check whether it could be simplified. Another aspect that could be useful is a "pre-review" (e.g. by FG members) before launching a full peer-review. It was suggested using an online platform like those used for academic conferences.

It was agreed to pursue further discussions in the FG management, targeting completion at the next FG-AI4H meeting.

Some brainstorming was held concerning publication of deliverables:

* Various parallel tracks. How to bring all together towards a single publication?
* What format?
* Avoid overlaps / duplication of efforts.
* Need an editor-in-chief.
* What is the most useful format for them a) to have access? b) to get involved.
* Other means to promote?
* Challenges? What comes out of it, only publicity? Useful feedback to the tests?
* Harmonization of content is needed.
1. Continue the development of the process for assessing quality of draft FG-AI4H deliverables between meetings J and K, based in J-042.

## List of deliverables

[J-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-005.docx) – Updated list of FG-AI4H deliverables (as of 2020-09-30) [TSB]

**Summary:** This document informs SG16 of 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 7-8 May 2020 and subsequently by the FG-AI4H management, based on feedback from editors. It is labelled as DEL00S, although it is not itself a deliverable.

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 [J-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-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. No updates were provided during the meeting for the following documents:

* DEL1 (AI4H ethics considerations, Andreas Reis, WHO)
NB – See report under WG Ethics, §12.4.
* DEL2 (progress report presented, but not of the deliverable itself)
* DEL2.1
* DEL5
* DEL5.1
* DEL5.2
* DEL5.4
* DEL5.5
* DEL7, DEL7.1, DEL7.3
* DEL9.1
* DEL9.2

The following deliverable does not have an initial draft yet:

* DEL8 (Sameer Pujari and Robyn Whittaker)

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 (J-005 plus updates)

| No. | Deliverable | Updated initial draft editor | Availability\* |
| --- | --- | --- | --- |
| 0 | Overview of the FG-AI4H deliverables | Shan Xu (CAICT, China) | [J-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-043.docx) |
| 1 | AI4H ethics considerations | Andreas Reis (WHO) | [G-201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-201.docx), [J-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-051.pptx) |
| 2 | AI4H regulatory best practices | Jackie Ma (Fraunhofer HHI, Germany), Khair ElZarrad & Rose Purcell (FDA, USA) | [J-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-055.pptx) |
| 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) | [J-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039.docx), [J-039-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-038-A01.pptx) & [Nextcloud document](https://datacloud.hhi.fraunhofer.de/nextcloud/s/izz73RgE474Rq9g) |
| 3 | AI4H requirement specifications | Pradeep Balachandran (India) | [J-041-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-R01.docx), [J-041-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-A01.pptx) |
| 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) |
| 5 | Data specification | Marc Lecoultre (MLlab.AI, Switzerland) | [G-205](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205.docx) |
| 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) | [J-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-034.docx%22%20%5Ct%20%22_blank) |
| 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) |
| 5.5 | Data handling  | Marc Lecoultre (MLlab.AI, Switzerland) | [DEL05](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05.docx) |
| 5.6 | Data sharing practices | Ferath Kherif (CHUV, Switzerland), Banusri Velpandian (ICMR, India), WHO Data Team | [J-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054.docx), [J-054-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054-A01.pptx) |
| 6 | AI training best practices specification | Xin Ming Sim and Stefan Winkler (AI Singapore) | [J-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-036.docx) |
| 7 | AI for health evaluation considerations | Markus Wenzel (Fraunhofer HHI, Germany) | [J-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-027.docx), [J-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-027-A01.pptx) |
| 7.1 | AI4H evaluation process description | Sheng Wu (WHO) | [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), [J-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-050.pptx) |
| 7.3 | Data and artificial intelligence assessment methods (DAISAM) reference | Luis Oala (Fraunhofer HHI, Germany) | [I-035](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-035.docx) & [Live version](https://docs.google.com/spreadsheets/d/1u3p5QrqkArL8_tJ8I1O5_j3qYIeycYLP0TD0siWmfM4/edit?usp=sharing) |
| 7.4 | Clinical evaluation of AI for health | Naomi Lee (Lancet, UK), Eva Weicken (Fraunhofer HHI, Germany), Shubhanan Upadhyay (ADA Health, Germany) | [J-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053.docx), [J-053-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053-A01.pptx) |
| 7.[5]\*\*\* | Assessment platform | Luis Oala (Fraunhofer HHI, Germany), Steffen Vogler (Bayer, Germany) | [I-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-037.docx) & [Git live version](https://gitlab.hhi.fraunhofer.de/fgai4h/assessment-platform) |
| 8 | AI4H scale-up and adoption | Sameer Pujari (WHO) and Robyn Whittaker (New Zealand) | – |
| 9 | AI4H applications and platforms | Manjeet Chalga (ICMR, India), Aveek De (CMS, India) | [J-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-044.docx), [J-044-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-044-A01.pptx) |
| 9.1 | Mobile applications | Khondaker Mamun (UIU, Bangladesh), Manjeet Chalga (ICMR, India) | [I-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-048.docx), [J-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-052.pdf) |
| 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), [J-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-052.pdf) |
| 10 | AI4H use cases: Topic description documents | Eva Weicken (Fraunhofer HHI, Germany) | [J-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-030.docx) |
| 10.1 | Cardiovascular disease management (TG-Cardio) | Benjamin Muthambi (Watif Health, South Africa) | [G-006](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-006.docx) (general) |
| 10.1A | Cardiovascular disease management (TG-Cardio), Subtopic: Cardiovascular disease (CVD) *risk prediction* *using AI* | Benjamin Muthambi (Watif Health, South Africa) | [J-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A01.docx) (risk prediction) |
| 10.2 | Dermatology (TG-Derma) | Weihong Huang (Xiangya Hospital Central South University, China)NOTE – Maria Vasconcelos (Fraunhofer, Portugal) resigned from the role, §13.3. | [J-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007-A01.docx) |
| 10.3 | Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | Nada Malou (MSF, France) | [J-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008-A01.docx) |
| 10.4 | Falls among the elderly (TG-Falls) | Inês Sousa (Fraunhofer Portugal) | [J-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012-A01.docx) |
| 10.5 | Histopathology (TG-Histo) | Frederick Klauschen (Charité Berlin, Germany) | [J-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013-A01.docx) |
| 10.6 | Malaria detection (TG-Malaria) | Rose Nakasi (Makerere University, Uganda) | [J-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-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) | [J-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015-A01.docx) |
| 10.8 | Neurological disorders (TG-Neuro) | Marc Lecoultre (MLlab.AI, Switzerland) | [J-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016-A01.docx) |
| 10.9 | Ophthalmology (TG-Ophthalmo) | Arun Shroff (MedIndia) | [J-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A01.docx) |
| 10.10 | Outbreak detection (TG-Outbreaks) | Auss Abbood (Robert Koch Institute, Germany) and Stéphane Ghozzi (HZI, Germany) | [J-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A01.docx) |
| 10.11 | Psychiatry (TG-Psy) | Nicolas Langer (ETH Zurich, Switzerland) | [J-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019-A01.docx) |
| 10.12 | AI for radiology (TG-Radiology) | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [J-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A01.docx) |
| 10.13 | Snakebite and snake identification (TG-Snake) | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [J-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A01.docx) |
| 10.14 | Symptom assessment (TG-Symptom) | Henry Hoffmann (Ada Health, Germany) | [J-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A01.docx) |
| 10.15 | Tuberculosis (TG-TB) | Manjula Singh (ICMR, India) | [J-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022-A01.docx) |
| 10.16 | Volumetric chest CT (TG-DiagnosticCT) | Kuan Chen (Infervision, China) | [J-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-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) | [J-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A01.docx) |
| 10.18 | Falsified Medicine (TG-FakeMed) | Franck Verzefé (TrueSpec-Africa, DRC) | [J-011-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A01-R01.docx) |
| 10.19 | Primary and secondary diabetes prediction (TG-Diabetes) | Andrés Valdivieso (Anastasia.ai, Chile) | [J-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024-A01.docx) |
| 10.20 | AI for endoscopy (TG-Endoscopy) | Jianrong Wu (Tencent Healthcare, China) | [J-025-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A01.docx) |
| 10.21 | AI for Musculoskeletal medicine (TG-MSK) | Yura Perov (EQL, UK) | – |

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| NOTES (TABLE 1)\* The document numbers indicated reflect the status as of the end of the e-meeting J. Colour codes indicate deliverable drafting status (as of the issuance of this document) as "*active*" (green) and "*unclear whether active*" (blue). 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.\*\* Acting editor.\*\*\* Provisional deliverable number assignment. TBC. |

Possible future Deliverables:

| No. | Deliverable | Updated initial draft editor | Availability |
| --- | --- | --- | --- |
| – | Reference software implementation | Marc Lecoultre | [J-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-045.pptx) |
| – | Guidance on digital technologies for COVID health emergency | Shan Xu (CAICT, China), Ana Riviere-Cinnamond (PAHO)  | [J-035-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-R01.docx), [J-035-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-A01.pptx) |

## Whitepaper

[J-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002.docx) – Draft updated FG-AI4H whitepaper [Editors]

[J-002-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002-A01.pptx) – Draft updated FG-AI4H whitepaper – Att.1: Presentation [Editors]

**Summary:** This document contains a new FG-AI4H whitepaper. With that, the previous whitepaper (see Bibliography, Salathé M. et al. (2018)) is superseded. The new whitepaper was developed with contributions from various FG-AI4H participants in the interim period since the FG-AI4H group meeting in May. The editing time took longer than originally expected and is consequently submitted for review by this FG-AI4H meeting.

There were no comments or questions. The meeting agreed to the updated version of the FG-AI4H whitepaper.

1. The FG-AI4H agreed to the new FG-AI4H whitepaper found in [J‑002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002.docx) for posting publicly in the FG-AI4H website (<https://www.itu.int/go/fgai4h/whitepaper>).

## New deliverable proposals

No new deliverables were created at this meeting, while there is potential for turning the open code package as a deliverable, as well as the AHG-DT4HE document *Guidance on digital technologies for COVID health emergency*. See further discussion in §12.7 (AHG-DT4HE), as well as in §9 concerning open code software.

## DEL00: Overview of the FG-AI4H deliverables

[J-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-043.docx) – Updated DEL00: Overview of the FG-AI4H deliverables [Editor]

The update to this deliverable was presented by the editor Shan Xu (CAICT, China). It provides an overview of the various FG-AI4H deliverables. To establish a standardized assessment framework for the evaluation of AI-based methods for health, a series of deliverables is planned, including 9 generalized specifications on ethics, regulatory, requirement, data, training, evaluation, application, etc., and 20 topic description documents on specific use cases with corresponding AI/ML tasks. This document is to give a comprehensive understanding and overview on the structure, relationship, progress, and corresponding scopes on those deliverables, and improve possible collaborations.

The update to DEL00 as found in [J-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-043.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL01: AI4H ethics considerations

This deliverable was introduced by the editor Andreas Reis (WHO). A review of [J-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-051.pptx) was presented that covers WG-Ethics and Deliverable 1, which has not progressed since May 2020. See §12.4 for further discussions.

There was no update to DEL01.

## DEL02: AI4H regulatory best practices

[J-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-055.pptx) – DEL02: AI4H regulatory best practices - Progress Review [Editors]

The progress of the work in the WG-RC and its DEL02 was presented byShada Alsalamah (WHO) using J-055. The deliverable addresses high level overview of key regulatory considerations for the use of AI in health. It is not intended as guidance policy or regulation per se, but rather as a resource that can be considered by *regulators*, *developers*, and other stakeholders. It is hoped that the document will facilitate the *Dialogue* between developers and regulators to establish a common understanding around the use of the AI solutions in health. An updated draft of the deliverable was *not* shared at the meeting, as it was still being checked within the working group.

It will have six main items:

1. Documentation and transparency
2. Risk management and lifecycle approach
3. Data quality
4. Analytical and clinical validation
5. Engagement and collaboration
6. Data protection and information privacy

There was no update provided to the text of Deliverable 2 at this meeting, as the group did not feel it was not ready for public review. The following are planned as next steps in 2020:

|  |  |
| --- | --- |
| **Target** | **Planned milestones** |
| October | * Develop DEL02 1st Draft
* Share with the whole WG-RC group
* Meet for discussion and feedback (tentative 25-26 Oct)
 |
| November | * Finalize DEL 02
* Receive written feedback from whole WG-RC group
* Internal check with contributors’ organizations
 |
| December | * Present it at FGAI4H meeting
* Welcome written feedback from FG members
* Submit to WHO editors
* Receive final approval from WG-RC group after editing
* Publish DEL02
 |

### DEL02.1: Mapping of IMDRF essential principles to AI for health software and DEL02.2: Guidelines for AI based medical device: Regulatory requirements

[J-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039.docx) & [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039-A01.pdf) – Updated DEL2.2: Good practices for health applications of machine learning: Considerations for manufacturers and regulators (E-meeting, 30 September – 2 October 2020) [Editors]

**Summary:** 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 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-MD).

Christian Johner (Johner Institute, Germany) presented J-039-A01, which highlighted the updates to DEL2.2. Goals of deliverable are the contribution to medical devices with highest possible safety, performance, clinical benefit; and promote common understanding of AI best practices; and promote a faster time to market of products (development, verification/validation and approval by authorities). The editors estimate that Deliverable 2.2 is near completion.

There was no update to DEL2.1. Asked to the editors whether DEL2.1 should still be pursued, as it has not evolved in a good while (Last edit: Meeting G, New Delhi). They feel it is still worthwhile, however it is a question of resources and priority.

The update to DEL2.2 as found in [J-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL03: AI4H requirements specifications

[J-041-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-R01.docx) – Updated DEL03: AI4H requirement specifications [Editor]

[J-041-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-A01.pptx) – Updated DEL03: AI4H requirement specifications - Att.1 - Presentation [Editors]

Pradeep Balachandran presented the update for DEL3 in [J-041-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-R01.docx) plus [J-041-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-A01.pptx).This document contains the draft version 3.0 of the project deliverable FG-AI4H DEL03 "AI4H requirement specification" and supersedes the previous version of the document (FG-AI4H-I-033). Some feedback was received from TG Drivers as requested at the last FG meeting, which allowed for improvement of the deliverable contents.

The update to DEL3 as found in [J-041-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-R01.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

[J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx) – Updated DEL04: AI software life cycle specification [Editor]

The editor of DEL04 is [Pat Baird](http://pat.baird@philips.com) (Philips, USA), who introduced J-033. This document is intended to be an introduction to non-experts to the topic and builds on existing work by other groups/organizations in this area. This version contains an updated structure for the FG-AI4H Deliverable 4, "AI Software Life Cycle Specification".

Software generic aspects are covered in ISO, IEC and DIN documents, but they so far do not cover AI specific work. E.g. one aspect is data quality for initial training of the model that will be used in a product. It was discussed to start preparing an update that could be late inserted into IEC 62304:2006 Medical device software — Software life cycle processes under TC215 Joint WG7 (with IEC 62).

ISO/IEC JTC1/SC42 is working on some aspects, e.g. on [ISO/IEC 5059](https://www.iso.org/standard/80655.html?browse=tc), *Software engineering – Systems and software Quality Requirements and Evaluation (SQuaRE) – Quality Model for AI-based systems* (WD stage), as well as on [ISO/IEC 5338](https://www.iso.org/standard/81118.html), *Information technology – Artificial intelligence – AI system life cycle processes* (WD stage). Pat is monitoring progress, and one concern is that SC42 is taking a different angle and will not be directly applicable to the IEC 62304 framework (which is the accepted reference in the field). There is an opportunity here to create relevant work.

The update to DEL4 as found in [J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL5: 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 the Brasilia meeting H. Discussions at this meeting focused on progressing the various sub-deliverables, as described next.

### DEL05.1: Data requirements

The latest draft was prepared by Marc Lecoultre (who oversees the parent Deliverable 5), as found in [DEL05.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_1.docx). We are still looking for new editors to take over this Deliverable.

No updates were provided to 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, New Delhi meeting), which tries to address the lack of widely-accepted, standardized ways to acquire medical data. A scalable platform would be needed.

It had been noted at the previous meeting that, noted 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

[J-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-034.docx) – Updated DEL05.3: Data annotation specification [Editors]

The update of DEL5.3 in J-034 was presented by [Shan Xu](https://ituint-my.sharepoint.com/personal/simao_campos_itu_int/Documents/Docs/FG-AI4H/2009-J-Virtual2/Report/xushan%40caict.ac.cn) on behalf of the various editors. Data annotation is an essential element for AI for health, and this document describes the topics to be addressed in the forthcoming Deliverable 5.3 "Data Annotation Specification". Data annotation would be one of the most dependable factors on model performance, it serves as one important aspect of data quality control on Artificial Intelligence for health. This document is addressed to give a general guideline of data annotation specification, including definition, background and goals, framework, standard operating procedure, scenario classifications and corresponding criteria, as well as recommended metadata, etc. A questionnaire is attached to seek input and collaboration with topic groups in FG-AI4H regarding data annotation. Feedback was received since last meeting via an online questionnaire, which remains open for further input from experts (<https://forms.gle/3fYrm3SZSrNQu3eeA>).

Good progress was achieved since last meeting. Items to be done include image and classification / segmentation scenarios (major case). There are other cases that would need to be covered.

The update to DEL5.3 as found in [J-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-034.docx) was adopted to be uploaded to 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 are Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (India). Luis informed the meeting that no updates of DEL5.4 were provided for this meeting, as the focus in WG-DAISAM was on an academic paper with information on their work from the past two months.

### DEL05.5: Data handling

The editor of DEL05.5 is Marc Lecoultre (MLlab.AI, Switzerland). Similar to DEL5.4, there was no update to DEL05.5 at this meeting.

### DEL05.6: Data sharing practices

[J-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054.docx) – Updated DEL5.6: Data sharing practices [Editors]

[J-054-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054-A01.pptx) – Updated DEL5.6 – Att.1: Presentation [Editors]

The editors of DEL5.6 are Ferath Kherif (CHUV, Switzerland), Banusri Velpandian (ICMR, India), assisted by the WHO Data Team. Ferath presented the updated draft in [J-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054.docx) using the PPT in [J-054-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054-A01.pptx).

The update to DEL5.6 as found in [J-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL06: AI Training best practices specification

[FGAI4H-J-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-036.docx) Updated DEL06: AI Training Best Practices Specification Editors

The editors of DEL6 are Xin Ming Sim and Stefan Winkler (AI Singapore). The update in [J-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-036.docx), was presented by Sim.

This document covers best practices for the training part of the training part of the AI tool development workflow, including selection of AI models, under- and over-fitting, hyperparameter optimization, treatment of missing data and AI model generalization. The document also provides a model reporting framework for transparency purposes that includes model details, use cases and typical users, model performance metrics and factors, data, analysis and ethics.

During the discussions, [Joachim Krois](https://ituint-my.sharepoint.com/personal/simao_campos_itu_int/Documents/Docs/FG-AI4H/2009-J-Virtual2/Report/joachim.krois%40charite.de) noted that his contribution [J-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-040.docx) (*Artificial intelligence for dental image analysis: A guide for authors and reviewers*; §13.6) raises similar issues. Joachim agreed to review and contribute to improve DEL6.

Suggestions:

* Develop spec sheets that can be used across different deliverables and have a common format to present the information
* Add the scenario where, instead of training models, health experts add knowledge directly into AI for expert systems.

The update to DEL6 as found in [J-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-036.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL07: AI for health evaluation considerations

The editor of DEL7 is Markus Wenzel (Fraunhofer HHI, Germany). No updates were provided at this meeting.

### DEL07.1: AI4H evaluation process description

The editor of DEL7.1 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 is Auss Abbood (Robert Koch Institute, Germany), who presented the update in [J-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-050.pptx). The objective is to identify best practices and how to test an assessment platform.

The update to DEL7.2 as found in [J-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-050.pptx) was adopted to be uploaded to 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 is Luis Oala (Fraunhofer HHI, Germany). No updates were prepared for this meeting.

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

The editors of DEL7.4 are Naomi Lee, Rupa Sarkar (Lancet, UK).

The editors of DEL7.4 are Naomi Lee, Rupa Sarkar (Lancet, UK), together with Eva Weicken (Fraunhofer HHI, Germany) and Shubs Upadhyay (ADA Health, Germany). Naomi presented the update in [J-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053.docx). Using the presentation in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053-A01.pptx).

The draft has progressed now that the WG-CE has started operations.

The update to DEL7.4 as found in [J-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053.docx) was adopted to be uploaded to the [deliverables website](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/).

## DEL08: AI4H scale-up and adoption

The editors of DEL8 are Sameer Pujari (WHO) and Robyn Whittaker (New Zealand).

No progress report was provided at this meeting. A draft of the deliverable is not yet available.

## DEL09: AI4H applications and platforms

The editors of DEL9 are Manjeet Chalga (ICMR, India), Aveek De (CMS, India).

A combined update was provided by Khondaker A. Mamun (UIU, Bangladesh) as found in the slides in [J-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-052.pdf). Highlights were made to actions taken during the COVID-19 pandemics. He was encouraged to contribute the experience gained to the work of the AHG-DT4HE.

No updates to the draft of DEL9 were provided at this meeting. The last update was made available in Meeting I ([I-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-050.docx)).

### DEL09.1: Mobile Applications

The editor of DEL9.1 are Khondaker Mamun (UIU, Bangladesh) and Manjeet Chalga (ICMR, India).

No updates to the draft of DEL9.1 were provided at this meeting. The last update was made available in Meeting I ([I-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-048.docx)).

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

The editor of DEL 9.2 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-J-049.docx)).

## Deliverable 10: AI4H use cases: Topic Description Documents

The editor of DEL10 is Eva Weicken (Fraunhofer HHI, Germany), who presented the updated deliverable in [J-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-030.docx) using the slides in [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-030-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.

# Horizontal and strategic topics

[J-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-037.docx) – Practical challenges of artificial intelligence in healthcare: building the evaluation framework for organizations [ETH Zurich]

[J-037-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-037-A01.pptx) – Practical challenges of artificial intelligence in healthcare: building the evaluation framework for organizations – Presentation [ETH Zurich]

**Summary:** This document describes the practical aspects of AI-based systems and tools that healthcare organizations should assess before deciding on implementation. The criteria were uncovered through 20 interviews with experienced business practitioners, complemented by the insights from recent literature as well as learnings from the empirical evaluation project. The analysis gave ground to a thesis which concluded the MAS MTEC study program at ETH. The thesis proposed an evaluation framework for AI-based systems, which may serve as a practical guideline to business generalists from the healthcare industry. The framework starts with a set of preparatory activities to be conducted by the adopting organization. The internal assessment is followed by six clusters of external evaluation criteria: compliance, capabilities of the provider, technology and training data, design and user experience, verification and clinical proof, and lastly, integrability.

The document was introduced by Agnieszka Sitarska. The research provided a business practitioner's perspective for the research question "what aspects should healthcare orgs consider when evaluating AI-driven tools and providers?". Research had three pillars; Pillar II was a questionnaire interviewing a number of developers. In the evaluation project phase, 19 out of 20 were start-up companies. Final framework comprises internal groundwork and external evaluation aspects.

How does it fit with the DASH work? Marc: interesting for the assessment framework, as it is based on real-world experience. Maybe more worth for DAISAM. Pat: gap analysis of the current deliverables should be done against the parameters in J-037. Suggestion: worth sub-group leaders do a gap analysis against the points in this document. Thomas: most items seem new to the current FG approach, good if we bring onboard the relevant items.

1. Assess which of the "real-life" assessment framework elements in [J-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-037.docx) would be missing from the DASH and DAISAM deliverables.

# 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).

[J-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-038.docx) – WG-DAISAM metrics and measures paper questionnaire [WG-DAISAM]

[J-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-048.docx) – DAISAM audit reporting template [WG-DAISAM Chair]

[J-038-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-038-A01.pptx) – WG-DAISAM metrics and measures paper questionnaire – Att.1: Presentation [WG-DAISAM]

**Summary:** J-038 contains a questionnaire to elicit details about the data and development process of an AI algorithm. These details are important to make useful qualitative conclusions about the applicability and safety of the algorithm. We enabled to elaborate on every answer. If you feel like a yes/no answer is sufficient to answer a question, you can also just write this into the answer field. You can also type 'NA' if a question is not applicable to your use case.

**Summary:** J-048 provides standardized templates to report results for the assessment processes developed by WG-DAISAM. In this version the, template comprises three elements: Data Specification Sheet, ML Model Specification Sheet and ML Model Summary Findings.

Alixandro Werneck (UnB, Brazil) introduced both documents using J-038-A01, which are related to [Deliverable 7.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_3.docx) *Data and artificial intelligence assessment methods (DAISAM) reference*. The document contains a questionnaire on development process of use case algorithms, which was designed to collect data to aid the preparation of this deliverable. There are seven sections:

1. Basic ML model information
2. Intended use of the ML model
3. ML model development
4. Legal aspects
5. Ethical considerations
6. ML model evaluation and metrics
7. Caveats and recommendations

Document J-048 complements J-037 and contains a template to report results for the assessment processes developed by WG-DAISAM.

Feedback was requested (submit use cases) to Luis Oala and Alixandro Werneck. Interested experts were invited to join discussions at <https://discord.gg/r5wJCT6>. Joachim Krois noted that the guide they are developing (see §13.6) also addresses this aspect and expressed interest in joining the activity, in particular to explore similarities with the dentistry case.

[J-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-049.docx) – ML4H Quality Assessment: From Paper to Practice [WG-DAISAM]

[J-049-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-049-A01.zip) – ML4H Quality Assessment: From Paper to Practice - Supporting Materials [WG-DAISAM Chair]

This document was a late submission that relate to recent developments of the FG-AI4H processing platform activity, in the form of an academic approved for inclusion in NIPS 2020. J-049 contains the paper and the attachment contains supporting materials.

The document was noted for review in detail at the next FG meeting.

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

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

DASH activities focused on the progressing of the various deliverables, as reported elsewhere in this report.

## Operations (WG-O)

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

[J-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-031.docx) & [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-031-A01.pptx)– Update – Onboarding document for the ITU/WHO Focus Group on AI for Health [Editors]

**Summary:** This document was prepared by Eva Weicken (Fraunhofer HHI, Germany) and it proposes an update to [FG-AI4H-G-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-107.docx), *Onboarding document for the ITU/WHO Focus Group on AI for Health*, which originally prepared at the FG-AI4H meeting in New Delhi, 13-15 November 2019. The onboarding document explains how to get involved in the ITU/WHO Focus Group on AI for Health and serves as an onboarding guide for new members and interested parties and individuals.

The updated document was agreed, and it will be issued as [J-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-107.docx). Future updates should include how to get open code community involved for the open code initiative of the FG-AI4H.

1. The meeting agreed to update the ITU/WHO Focus Group on AI for Health onboarding document, as found in [J-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-107.docx).

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

Andreas Reis (WHO) is the chair of the FG-AI4H WG-Ethics. He reported the overloaded in WHO because of COVID matters – e.g. contact tracing / digital proximity apps. He informed the meeting that WHO developed a WHO policy briefing in late May 2020, which was well received:

* Ethical considerations to guide the use of digital proximity tracking technologies for COVID-19 contact tracing <https://www.who.int/publications/i/item/WHO-2019-nCoV-Ethics_Contact_tracing_apps-2020.1>

Review and dissemination activities are underway.

Andreas asked whether horizontal deliverable editors would be interested in contributing some time for ethics matters, both in the WG, the group in WHO and the deliverable.

Henry Hoffmann shared some of his experiences that touch upon ethics aspects. Activities include to describe the intended use of an AI, so one can derive a relevant ethics checklist. A number of them are described in the TDD documents.

Thomas asked whether, conversely, someone from WHO could dig into our deliverables and help develop checklists. Andreas noted that it can be two-way.

The idea would be to produce a checklist of ethical aspects for designers and programmers. Andreas will share current drafts from the work in WHO relating to Digital Health that could be relevant.

One contribution was submitted.

[J-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-046.docx) – Translating Principles into Practices: Responsible Innovation and AI Taskforce at the University of Montreal Academic Health Center (CHUM) [Centre hospitalier de l’Université de Montréal (CHUM)]

**Summary:** Much of the debate on AI ethics in healthcare has focused on the what rather than the how. Key principles (e.g. benevolence, equity, explicability) have been put forward to guide the responsible development and deployment of AI applications in healthcare. However, there is still a lack of actionable methods and tools to help AI developers and implementors embed these principles in current practices. The University of Montreal Hospital Center (CHUM) has launched a multi-stakeholder task force to produce knowledge, tools and methods to enhance the governability of AI systems in real-life care settings.

The presentation of this document was **postponed** to meeting K due to the unavailability of the author.

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

The chair of the WG-RC, Naomi Lee (Lancet, UK), presented verbally a status update. Focus of the work has been in the preparation of DEL2, which has a planned delivery to the FG-AI4H audience at the January 2021 meeting.

## 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 WG started operations and organized a first workshop the week after this FG meeting to jump-start its activities.

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

The ToR for the FG-AI4H ad hoc group on AHG on digital technologies for COVID health emergency (AHG-DT4HE) was completed and approved by e-mail consultation (1 July 2020). Co‑chairs Shan Xu (CAICT, China) and Ana Rivière Cinnamond (PAHO/WHO) reported on the activities of the AHG (presentation in [J-035-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-A01.pptx)), that was established and is running regular weekly calls. General information is found in the collaboration page at: [https://extranet.itu.int/‌sites/itu-t/focusgroups/ai4h/SitePages/AHG-DT4HE.aspx](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/AHG-DT4HE.aspx). A public home page was created, as found at <https://www.itu.int/en/ITU-T/focusgroups/ai4h/Pages/dt4he.aspx>.

An initial draft of a new deliverable was prepared (see discussion below).

[J-035-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-R01.docx) – Initial draft – DEL[12] Guidance on digital technologies for COVID health emergency [Co-chairs AHG-DT4HE]

**Summary:** This document was prepared by the co-chairs and contains the initial draft of a proposed new Deliverable [12] as a result of the AHG-DT4HE activity. Entitled *Guidance on digital technologies for COVID health emergency*, it describes the diverse nature of addressing a pandemic such as COVID-19 and proposes to set up guidance on how to leverage AI and other digital technologies to combat COVID-19 and other health emergencies. This document proposes an AI and digital intervention targeted framework on public health emergency management, best practise and use cases on AI and other digital technologies to combat COVID-19 were collected under the emergency life cycle stages framework. It also discusses the technical feasibility, digital governance and performance evaluation on digital response to COVID-19 and other health emergencies. All parties interested in contributing should contact the co-chairs and visit the AHG-DT4HE home.

The draft has progressed well; the next steps will include:

* Case collection: continue the collection of typical cases in different countries and regions and consider designing a questionnaire to collect further information.
* Technical enablement: identify minimum set of requirements for the technical enablement components such as network, data resource, computing capacities, etc.
* Digital governance: considers governance factors on AI and other digital interventions on COVID-19 and other health emergencies.
* Outcome evaluation: Contains measures and indicators to evaluate the outcome and applicability of different AI and digital interventions.

After discussions, it was agreed to reflect a bit more on what would be the best format for this publication, Deliverable being one of the possibilities.

# Updates and new proposals for existing TGs

The following TGs received no updates at this meeting:

* TG-Bacteria (Diagnoses of bacterial infection and anti-microbial resistance)
Last updates: initial TDD in meeting J. Proposed at meeting F.
* TG-Derma (Dermatology)
Last updates: Meeting E. Proposed at meeting B.
* TG-Falls (Falls among the elderly)
Last updates: Meeting H. Proposed at meeting B.
* TG-Histo (Histopathology)
Lat updates: TDD: Meeting I; CfTGP: Meeting E. Proposed at meeting B.
* TG-MCH (Maternal and child health)
Last updates: TDD at meeting H. CfTGP at meeting H. Proposed at meeting D, re-started at meeting F, then meeting G.
* TG-Psy (Psychiatry)
Last updates: TDD at meeting I. CfTGP at meeting H. Proposed at meeting C.
* TG-TB (Tuberculosis)
Last updates: TDD at meeting I. CfTGP at meeting E. Proposed at meeting C.

Various groups have not shown or reported progress and that is a

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

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

[J-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004.docx) – TDD template: Proposed draft update [Editors]

[J-004-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004-A01.pptx) – Att.1: Presentation (J-004, J-030, J-031, J-032) [Editors]

The updated TDD template in J-004 was presented by Eva Weicken (Fraunhofer HHI, Germany). This template defines a common structure for all topic description documents (TDD) of the various topic groups of the ITU/WHO Focus Group on AI for Health (FG-AI4H). Each TDD specifies a standardized benchmarking of AI-based solutions for a specific topic that covers all scientific, technical, and other relevant aspects. This updated version was prepared by Henry, Markus, and Eva. There were no comments at the meeting, but it was felt it would be good to give one more opportunity for comments. Accordingly, the TDD template in J-004 would undergo a two-week approval period by e-mail. After approved, all TG Drivers should retrofit the current TDDs into the new structure.

1. The TDD template in [J-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004.docx) will undergo a two-week review period by e-mail. The approved version will be available as [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx).
2. After the new TDD is approved, TG Drivers are requested should retrofit the current TDDs into the new structure, in time for the next FG meeting (January 2021).

[J-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-032.docx) – Updated template for the call for participation in a topic group [Editors]

[J-032-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-032-A01.pptx) – Att.1: Presentation (J-031 & J-032; J-030, J-004) [Editors]

This document was introduced by Eva Weicken (Fraunhofer HHI, Germany). It contains an updated template for the different Calls for Topic Group Participation (CfTGP), based on [E-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-E-004.docx). The purpose of the calls for participation is to call on members of the medical and artificial intelligence communities with a vested interest in a topic to become engaged in the group dedicated to establishing a standardized benchmarking platform within the FG-AI4H. This version contains proposed updates to the previous version in E-004. The updated template was accepted and will be issued as [J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-103.docx).

1. It was agreed to adopt the updated call for topic group participation (CfTGP) template found in [J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-103.docx). TG Drivers are requested to use the updated version when updating their CfTGP.

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

Discussion points:

* A progress report was presented for subtopic 1 by the driver as seen in [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A03.pptx).
* Subtopic 2 is inactive. If Guo cannot continue, should find a new driver as it is an important area. Subtopic 3 and 4 are inactive.
* Subtopic 3 is also inactive. We would need to reach out to a company working on this domain.
* Call made to participation in the sub-groups.

## TG-Derma (Dermatology)

The Topic Driver was Maria Vasconcelos (Fraunhofer, Portugal). The latest documentation available is as follows:

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

No progress report was presented.

The TG driver informed the FG management that she would not be able to continue in this role. The FG-AI4H meeting thanked Ms Vasconcelos for her efforts in progressing TG-Derma.

NOTE – After the meeting, Mr Weihong Huang (Xiangya Hosp. Central S. University, China; whuangcn@qq.com) agreed to take on the role of TG Driver.

## 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: [J-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008-A01.docx)
CfTGP: N/A
Contributions: N/A

An initial TDD was uploaded, but the secretariat was notified that the model being developed by MSF has received significant updates and consequently the internal document prepared by the TG would need to be updated shortly.

No progress report was presented.

## TG-DiagnosticCT (Volumetric chest computed tomography)

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

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

An update was provided. A topic of interest is how entities can get access to data for model training purposes. In China, it is normally done through agreement with data owners/aggregators, e.g. hospitals.

## 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:

TDD: [J-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A01.docx) – [J-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A03.pptx)
CfTGP: [J-010-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A02.docx) (Same as Meeting I)
Contributions: [J-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-040.docx)

The Topic Drivers presented the progress report for TG-Dental found in [J-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A03.pptx). They also updated the group on the text of their draft guide for authors and reviewers for studies / papers on the use of AI for dentistry (see [J-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-040.docx) below).

[J-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-040.docx) – TG-Dental: Artificial intelligence for dental image analysis: A guide for authors and reviewers [TG-Dental Topic Driver]

**Summary:** The number of studies employing artificial intelligence (AI), specifically machine and deep learning, for dental image analysis is growing fast. The majority of studies shows weaknesses in planning, implementation and reporting, which in turn results in limited robustness and applicability. This guide aims to provide a process to establish a living, non-authoritative guidance for authors and reviewers on the conception, implementation and reporting of studies on dental image analysis under the roof of the TG Dentistry in the ITU/WHO Focus Group on AI for Health.

Falk Schwendicke and Joachim Krois presented the 2nd draft of the draft guide in J-040. The need for the guide stems from the lack of common base / set of parameters for studies on the use of AI in dentistry. Caries detection was used as an example for applying the principles in the guide.

Next steps for TG-Dentistry include: further advance the TDD; disseminate and publish the AI for dental image analysis guide for authors and reviewers; and further investigate how to bridge the gap between reporting practices in dentistry (metrics at tooth level) and AI model outputs.

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

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

TDD: [J-011-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A01-R01.docx) – [J-011-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A03.pptx)
CfTGP: [J-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A02.docx) (Same as Meeting H)
Contributions: N/A

The first draft of the TDD was prepared. The group is progressing. The driver noted that infrared spectrum analysing calibrated against the miniaturized reference sample.

## TG-Falls (Falls among the elderly)

The Topic Driver is Inês Sousa. The latest documentation available is as follows:

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

No progress report was presented.

## TG-Histo (Histopathology)

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

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

No updates were submitted at this meeting.

## TG-Malaria: Malaria detection

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

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

A progress report was presented by the Topic Driver and progress is well on track.

Need more collaborators, only her universities. How to get more people?

## TG-MCH: Maternal and child health

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

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

No one presented. No docs submitted.

## TG-Neuro: Neurological disorders

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

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

A progress report was presented by Ferath Kherif (CHUV, Switzerland) and progress is on track.

## TG-Ophthalmo (Ophthalmology)

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

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

The updated TDD was presented by the topic driver. He noted that sometimes even if camera is of good quality, images can be lacking. It was observed that this is a very mature topic group and that it is ready to move on to benchmarking. Ophthalmology is included in the WG-DAISAM paper submitted to NIPS ([J-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-049.docx)).

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

A progress report was presented by Auss Abbood and progress is on track.

## TG-Psy (Psychiatry)

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

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

TG driver sent his regrets. There was no update provided at this meeting.

## TG-Snake (Snakebite and snake identification)

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

TDD: [J-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A01.docx) (Same as Meeting I) – [J-020-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A03.pptx)
CfTGP: [J-020-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A02.docx) (Same as Meeting G)
Contributions: N/A

A progress report was presented by the topic driver. Several competitions over the last 18 months. Best performing app (over 245000 images) had an F of 0.8. App prototype being developed by the group. Discussion on joining forces with other projects that would expand the recognition to other venomous animals. Various publications. Funding ends at the end of the year, looking for donors for the next phase, that will have a practical component. There is a WHO roadmap that highlights the importance of tools for handling snakebite and snake identification.

## TG-Symptom (Symptom assessment)

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

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

A progress report was presented by the Topic Driver and progress is well on track.

## TG-TB (Tuberculosis)

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

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

No updates were provided at this meeting.

## TG-Radiology (Radiology)

The Topic Driver is Darlington Ahiale Akogo. The latest documentation available is as follows:

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

The topic driver presented the progress report in [J-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A03.pptx). Next steps include sharing information in journals and conferences, improve the metrics and scores according to the WG-DAISAM recommendations for image segmentation, object detection and 3D reconstruction, develop guidelines for AI input and output, develop ethical considerations.

Thomas suggested putting the group in contact with Geraldine McGinty (gbm9002@med.cornell.edu) fromthe American College of Radiology, that attended meeting B (New York city).

## TG-Diabetes

The Topic Driver is Andrés Valdivieso. The latest documentation available is as follows:

TDD: [J-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024-A01.docx)
CfTGP: Not yet available
Contributions: N/A

Marcos presented on behalf of the TG Driver. It was noted that overall good progress is being achieved, with increased collaboration. A current challenge is for diabetic foot, since it is difficult to find images.

## TG-Endoscopy

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

TDD: [J-025-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A01-R01.docx)
CfTGP: [J-025-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A02.docx)
Contributions: N/A

The text of the initial TDD in J-025-A01-R01 was presented by Yajun Zhang on behalf of the Topic Driver. A CfTGP has also been prepared. Progress is well on track.

# Proposals for new topic areas

## Proposal for new topic group: AI for Musculoskeletal medicine (TG-MSK)

[J-026-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-026-R01.docx) & [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-026-A01.pptx) – Proposal for new topic group: AI for Musculoskeletal medicine (provisional TG-MSK) [EQL (London, UK)]

**Summary:** J-026-R1 proposes the creation of a new topic group focusing on the prevention, triage, diagnosis, prognosis and treatment of musculoskeletal (MSK) conditions with the applications of artificial intelligence and machine learning (including computer vision and augmented reality). Painful MSK conditions affect up to 33% of the world's population, while lower back pain has been the single leading cause of disability for a long time [1]. Applications of AI and technology have the potential to enable more affordable, accessible and accurate diagnostics, prevention and care for people worldwide.

After discussion, it was agreed to create a new TG on AI for Musculoskeletal medicine (TG-MSK) with Yura Perov (EQL, UK) as Topic Driver. The collaboration site for the new TG is <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-MSK.aspx>. A specific mailing list was also established for the new TG, fgai4htgmsk@lists.itu.int (archive: <https://itu.int/ml/lists/arc/fgai4htgmsk>).

1. Agreed to create a new Topic Group on AI for Musculoskeletal medicine (TG-MSK) with Yura Perov (EQL, UK) as Topic Driver.

# Review / reconfirmation of previous output documents

The list of current output documents was reviewed, as follows.

Updates agreed:

* The new [FG-AI4H Whitepaper](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FG-AI4H_Whitepaper.pdf) is approved in [J-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002.docx).
* The call for proposals: use cases, benchmarking, and data in [I-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-102.docx) needs only the usual updates (venue, dates) and it will be issued as [J-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-102.docx) as soon as the date of the next meeting is defined.
* TDD Template in [C-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-C-105.docx) is superseded by [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx) (see §13.1)
* CfTGP template in [E-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-E-004.docx) is superseded by [J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx) (see §13.1)
* Onboarding document is updated as found in [J-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-107.docx) (see §12.3)

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

# Working methods

No changes were agreed to the working methods. One new mailing list was created:

* TG-MSK: fgai4htgmsk@lists.itu.int (archive: <https://itu.int/ml/lists/arc/fgai4htgmsk>)

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

* The WG on Clinical Evaluation co-chairs were appointed: Naomi Lee (The Lancet, UK), Shubhanan Upadhyay (ADA Health, Germany), and Eva Weicken (Fraunhofer HHI, Germany).

## TG updates

New TG/sub-TG:

* The TG-Derma Driver, Maria Vasconcelos (Fraunhofer Portugal) can no longer continue. The meeting thanked Ms Vasconcelos for her efforts in progressing TG-Derma.
* New TG on AI for Musculoskeletal medicine (TG-MSK) with Yura Perov (EQL, UK) as Topic Driver. The collaboration site for the new TG is <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/tg/SitePages/TG-MSK.aspx>.

Leadership / scope updates:

* None.

## Output liaison statements

No OLSs would be prepared.

## Output documents

The following updated output documents were agreed:

* [J-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-102.docx): Updated call for proposals: use cases, benchmarking, and data (to be published once the final dates of the next FG-AI4H meeting are defined)
* [J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx): Updated call for topic group participation (CfTGP) template
* [J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004.docx): Updated TDD Template
* [J-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-107.docx): Updated FG-AI4H onboarding document
* [J-200-R1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-200-R01.docx): Updated list of FG-AI4H deliverables
* [FG-AI4H whitepaper](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FG-AI4H_Whitepaper.pdf) ([J-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002.docx))

## Deliverables and parent group reporting

No new deliverables were agreed at this meeting. Future deliverables under consideration are:

* Reference software implementation (Editor: Marc Lecoultre). Initial elements: [J-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-045.pptx)
* Guidance on digital technologies for COVID health emergency (Editors: Shan Xu, CAICT, China), Ana Riviere-Cinnamond, PAHO). Initial draft from the AHG-DT4HE: [J-035-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-R01.docx).

No reports for the parent group were needed at this time.

# Future work

## Schedule of future FG meetings and workshops

The schedule of meetings in [J-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-003.docx) was reviewed; see Table 2 for easier reference. It is expected that at least for all of the 1st half of 2021, the meetings will continue to be virtual; for the remainder of 2021, it will depend of the evolution of travel restrictions related to the COVID-19 pandemic.

Table 2– Schedule of future FG meetings (as of 2020-10-03)

| Meeting | Date | Venue | Notes |
| --- | --- | --- | --- |
| K | January 2021 | Online | TBD |
| L | March to May 2021 | Online | TBC |

The following is a list of potential future meeting locations:

**Asia:**

1. Bangladesh
2. Philippines
3. Singapore
4. South Korea
5. Thailand

**Middle-East**

1. Oman
2. UAE

**Africa**

1. South Africa
2. Uganda
3. Kenya
4. Ghana
5. Rwanda
6. Nigeria

**Europe**

1. Berlin

**Americas**

1. Canada
2. US
3. Chile

It was noted that two WG workshops were planned: WG-CE on 14 October 2020 and WG-RC on 26-27 October 2020.

## Work plan and timeline

Update drafts of the deliverables in Table 1 (see §8) 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

None was mentioned beyond the need to include the open code community (recorded in §7).

It was noted that two WG workshops were planned: WG-CE on 14 October 2020 and WG-RC on 26-27 October 2020.

# A.O.B.

None.

# Closing

The FG-AI4H chairman thanked all participants for having joined 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, Bastiaan Quast, Ayda Dabiri and Kaoru Mizuno.

The meeting was closed on Fri 2 October 2020 around 1700 hours (Geneva time).

Annex A:
Agenda

|  |  |  |
| --- | --- | --- |
|  |  | Related Documents |
| 1 | Opening |  |
| 2 | Approval of agenda | [J-001-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001-R01.docx) (Agenda); Initial timing: [link](https://docs.google.com/spreadsheets/d/10W5W5Vdhe8Cf9_Sgglm0xOIFE0pVsWk5FBDz7p7Fvao/edit?usp=sharing)[FGAI4H-J-001-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001-A01.pptx): Introduction to FG-AI4H |
| 3 | Documentation and allocation | [J-001](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001.docx) (Allocation); Annex [B](#AnnexB) (Documentation)  |
| 4 | IPR | Annex [A](#AnnexA) |
| 5 | Management updates |  |
|  | Vice-chairs |  |
|  | WGs | WG-CE: Co-chairs: Naomi Lee, Eva Weicken, Upadhyay Shubhanan |
| 6 | Approval of Meeting I outcomes and updates | [I-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-101.docx): Meeting Report[I-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-102.docx): Updated call for Proposals: use cases, benchmarking, and data[I-200](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-200.docx): Updated list of FG-AI4H deliverablesTDD template, whitepaper: Later in agenda |
| 7 | Review of incoming LSs |  |
|  | ITU-T SG13: New Recommendation ITU-T Y.3531 "Cloud computing- Functional requirements for machine learning as a service" | [J-02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-028.docx)8 + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-028-A01.docx) |
|  | ITU-T SG13: Invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information | [J-02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-029.docx)9 + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-029-A01.docx) |
|  | Others? |  |
| 8 | Information on AI-related activities |  |
| 9 | Horizontal and strategic topics | [J-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002-A01.pptx): Update - Whitepaper[J-03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-031.docx)1: +[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-031-A01.pptx): Update - Onboarding document |
| 10 | Working Group updates |  |
| a | Data and AI solution assessment methods (WG-DAISAM) [Pat Baird; Luis Oala] - Metrics and Measures Paper Questionnaire [Alixandro Werneck] | [J-03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-038.docx)8 + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-038-A01.pptx): Metrics and Measures Paper Questionnaire [WG-DAISAM][J-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-048.docx): DAISAM Audit Reporting Template [WG-DAISAM Chair][J-049-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-049-A01.zip): ML4H Quality Assessment: From Paper to Practice - Supporting Materials [WG-DAISAM Chair] |
| b | Data and AI solution handling (WG-DASH) [Marc Lecoultre; Ferath Kherif]  | [J-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-037.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-037-A01.pptx): Practical challenges of Artificial Intelligence in healthcare: building the evaluation framework for organizations [ETH Zurich] |
|  | Ethics (WG-Ethics) [Andreas Reis] |  |
|  | Operations (WG-O) [Markus Wenzel/Monique Kuglitsch] |  |
|  | Regulatory considerations (WG-RC) [Naomi Lee] |  |
| f | Clinical Evaluation (WG-CE) [Naomi Lee] |  |
|  | New WG on AI and other digital technologies for COVID-19 health emergency (AHG-DT4HE) |  |
| 11 | FG-AI4H deliverables | [J-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042.docx) +[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A01.docx) + [A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A02.docx) + [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A03.docx) + [A04](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A04.pptx): Draft description of the peer review process for deliverables [Editors][J-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-005.docx): Updated list of FG-AI4H deliverables (as of 2020-09-30) [TSB] |
| a | New deliverables:  | [J-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-045.pptx): DEL[05.x|11]: Software Annotation tool - Draft requirements study [Marc Lecoultre] [J-035-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-R01.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-A01.pptx): Initial draft - DEL[12]: Guidance on digital technologies for COVID health emergency[Editors / AHG-DT4HE][J-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-046.docx): Translating Principles into Practices: Responsible Innovation and AI Taskforce at the University of Montreal Academic Health Center (CHUM) |
| b | [DEL00](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL00.docx): New overview deliverable | [J-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-043.docx) [Editor] |
|  | [DEL01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL01.docx): AI4H ethics considerations | [J-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-051.pptx) [Editors] |
|  | [DEL02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL02.docx): AI4H regulatory best practices | [J-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-055.pptx) [Editors] |
|  | [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 | [Editor] |
|  | [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 (*title changed*) | [J-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039-A01.pdf) [Editors] |
|  | [DEL03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL03.docx): AI4H requirements specifications | [J-041-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-R01.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-A01.pptx) [Editor] |
|  | [DEL04](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL04.docx): AI software life cycle specification | [J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx) [Editor] |
|  | [DEL05](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05.docx): Data specification | [Editor] |
|  | [DEL05.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_1.docx): Data requirements | [Editor] |
|  | [DEL05.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_2.docx): Data acquisition | [Editors] |
|  | [DEL05.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_3.docx): Data annotation specification | [J-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-034.docx) [Editors] |
|  | [DEL05.4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_4.docx): Training and test data specification | [Editors] |
|  | [DEL05.5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_5.docx): Data handling | [Editor] |
|  | [DEL05.6](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05_6.docx): Data sharing practices | [J-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054-A01.pptx) [Editors] |
|  | [DEL06](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL06.docx): AI Training Best Practices Specification | [J-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-036.docx) [Editors] |
|  | [DEL07](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07.docx): AI for Health Evaluation Considerations | [J-02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-027.docx)7 +[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-027-A01.pptx) [Editors] |
|  | [DEL07.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_1.docx): AI4H evaluation process description | [Editors] |
|  | [DEL07.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_2.docx): AI Technical Test Specification | [J-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-050.pptx) [Editors] |
|  | [DEL07.3](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_3.docx): Data and artificial intelligence assessment methods (DAISAM) reference | [Editors] |
|  | [DEL07.4](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_4.docx): Clinical evaluation of AI for health | [J-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053-A01.pptx)[Editors] |
|  | [DEL07.5](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL07_5.docx): Assessment platform | [Editors] |
|  | [DEL09](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09.docx): AI4H applications and platforms | [J-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-044.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-044-A01.pptx) [Editors] |
|  | [DEL09.1](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09_1.docx): Mobile Applications | [J-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-052.pdf) [Editors] |
|  | [DEL09.2](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL09_2.docx): Cloud-based AI applications | [J-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-052.pdf) [Editors] |
|  | [DEL10.0](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL10_0.docx): AI4H use cases: Topic Description Documents | [J-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-030.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-030-A01.pptx) [Editor] |
| 12 | Updates to TGs and new proposals |  |
|  | Template updates: TDD, CfTGP | [J-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004-A01.pptx) - Draft updated TDD template [Editors][J-03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-032.docx)2 + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-032-A01.pptx): Draft updated CfTGP template [Editor] |
| b | TG-Cardio (Cardiovascular Risk Prediction) [Benjamin Muthambi] | TDD: [J-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A01.docx) - [[J-006-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-006-A03.pptx)CfTGP: [J-006-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A02.docx)Contributions: N/A |
| c | TG-Derma (Dermatology) [Maria Vasconcelos] | TDD: [J-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007-A01.docx)<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007-A03.pptx>CfTGP: [J-007-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007-A02.docx)Contributions: N/A |
|  | TG-Bacteria (Diagnoses of bacterial infection and anti-microbial resistance - AMR)[Nada Malou] | TDD: [J-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008-A01.docx)<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008-A03.pptx>CfTGP: N/A <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008-A02.docx>Contributions: N/A |
|  | TG-DiagnosticCT (Volumetric chest computed tomography) [Kuan Chen] | TDD: [J-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-009-A01.docx) - [J-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-009-A03.pptx)CfTGP: [J-009-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-009-A02.docx)Contributions: N/A |
|  | TG-Dental (Dental diagnostics and digital dentistry)[Falk Schwendicke, Joachim Krois] | TDD: [J-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A01.docx) - [J-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A03.pptx)CfTGP: [[J-010-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-010-A02.docx)Contributions: [J-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-040.docx) (A guide for authors and reviewers) [TG Drivers] |
|  | TG-FakeMed: AI-based detection of falsified medicine[Franck Verzefé] | TDD: [J-011-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A01-R01.docx)[<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A03.pptx>](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-011-A03.pptx)CfTGP: [[J-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-011-A02.docx)Contributions: N/A |
|  | TG-Falls (Falls among the elderly) [Inês Sousa] | TDD: [J-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012-A01.docx)<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012-A03.pptx>CfTGP: [J-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012-A02.docx)Contributions: N/A |
|  | TG-Histo (Histopathology) [Frederick Klauschen] | TDD: [J-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013-A01.docx)<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013-A03.pptx>CfTGP: [J-013-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013-A02.docx)Contributions: N/A |
|  | TG-Malaria: Malaria detection[Rose Nakasi] | TDD: [J-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-014-A01.docx) - [[J-014-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-014-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-014-A03.pptx)CfTGP: [[J-014-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-014-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-014-A02.docx)Contributions: N/A |
|  | TG-MCH: Maternal and child health[Raghu Dharmaraju, Hafsa M. Mitwa] | TDD: [J-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015-A01.docx) - <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015-A03.pptx>CfTGP: [J-015-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015-A02.docx)Contributions: N/A |
|  | TG-Neuro: Neurological disorders[Marc Lecoultre, Ferath Kherif] | TDD: [J-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016-A01.docx) - <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016-A03.pptx>CfTGP: [J-016-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016-A02.docx)Contributions: N/A |
|  | TG-Ophthalmo (Ophthalmology) [Arun Shroff] | TDD: [J-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A01.docx) - [J-017-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A03.pptx)CfTGP: [J-017-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A02.docx)Contributions: N/A |
|  | TG-Outbreaks (AI for Outbreak Detection)[Stéphane Ghozzi] | TDD: [J-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A01.docx) - [J-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A03.pptx)CfTGP: [J-018-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A02.docx)Contributions: N/A |
|  | TG-Psy (Psychiatry) [Nicholas Langer] | TDD: [J-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019-A01.docx)<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019-A03.pptx>CfTGP: [J-019-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019-A02.docx)Contributions: N/A |
|  | TG-Snake (Snakebite and snake identification) [Rafael Ruiz] | TDD: [J-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A01.docx) - [J-020-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A03.pptx)CfTGP: [J-020-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A02.docx)Contributions: N/A |
|  | TG-Symptom (Symptom assessment) [Henry Hoffmann] | TDD: [J-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A01.docx) - [[J-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A03.pptx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-021-A03.pptx)CfTGP: [[J-021-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A02.docx)](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-H-021-A02.docx)Contributions: N/A |
|  | TG-TB (Tuberculosis) [Manjula Singh] | TDD: [J-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022-A01.docx)<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022-A03.pptx>CfTGP: [J-022-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022-A02.docx)Contributions: N/A |
|  | TG-Radiology (Radiology) [Darlington Ahiale Akogo] | TDD: [J-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A01.docx) - [J-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A03.pptx)CfTGP: [J-023-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A02.docx)Contributions: N/A |
|  | TG-Diabetes[Andrés Valdivieso] | TDD: [J-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024-A01.docx)<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024-A03.pptx>CfTGP: N/A <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024-A02.docx>Contributions: N/A |
|  | TG-Endoscopy[Jianrong Wu] | TDD: [J-025-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A01-R01.docx)<https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A03.pptx>CfTGP: [J-025-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A02.docx)Contributions: N/A |
| 13 | Proposals for new topic areas |  |
|  | Proposal for new topic group: AI for Musculoskeletal medicine (provisional TG-MSK)  | [J-026-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-026-R01.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-026-A01.pptx) [EQL, UK] |
|  | Others? |  |
|  |  |  |
| 14 | Review / reconfirmation of previous output documents | [I-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-102.docx): Updated call for proposals: use cases, benchmarking, and data[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 🡪 take out of list of deliverables and reconsider the approach[F-106](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-106.docx): Guidelines on FG-AI4H online collaboration tools 🡪 ReconfirmedOthers? |
| 15 | Outcomes of this meeting | a) Outgoing liaison statements \_noneb) Structure updates New TG-MSK - approvedc) Call for proposals - updatedd) Output documents- Updated FG-AI4H Whitepaper [J‑002]- Updated CfP (J-102) - approved- Updated TDD template ([J-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004.docx)🡪 J-105)- Updated CfTGP templ. ([J-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-032.docx)🡪 J‑103)- Updated onboarding doc ([J-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-031.docx)🡪J-107) e) Updated list of planned deliverables[[J-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-005.docx)🡪J-200] |
| 16 | Future work |  |
|  | Schedule of future FG meetings and workshops | [J-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-003.docx) Two workshops – WG-CE 14 Oct and WG-RC 26-27 OctFG plenary? Mid January 2021, probably virtual (TBC but likely) |
|  | Format of next meeting |  |
|  | Work plan and timeline |  |
|  | Interim activities (online) |  |
|  | Extension of the FG |  |
| 17 | Promotion and outreach |  |
|  | Promotional activities |  |
|  | Press communication |  |
|  | Funding and partnerships |  |
|  | Report to SG16 | [J-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-047.docx): FG-AI4H progress report to SG16 for the period from October 2019 to June 2020 (22 June – 3 July 2020) |
| 18 | A.O.B. |  |
| 19 | Closing |  |

Annex B:
Documentation

| Name | Title | Source |
| --- | --- | --- |
| [FGAI4H-J-00-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001-R01.docx)+[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-001-A01.pptx) | Agenda of the 10th meeting (Meeting J) of the Focus Group on Artificial Intelligence for Health (FG-AI4H) | Chairman FG-AI4H |
| [FGAI4H-J-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002.docx)+[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-002-A01.pptx) | Draft updated FG-AI4H whitepaper | Editor |
| [FGAI4H-J-003](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-003.docx) | Schedule of future FG meetings (as of 2020-09-30) | Chairman FG-AI4H |
| [FGAI4H-J-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004.docx)+[A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-004-A01.docx) | Draft updated TDD template | Editors |
| [FGAI4H-J-005](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-005.docx) | Updated list of FG-AI4H deliverables (as of 2020-09-30) | TSB |
| [FGAI4H-J-006](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006.docx) | Updates for Cardiovascular disease risk prediction (TG-Cardio) | TG-Cardio Topic Driver |
| [FGAI4H-J-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A01.docx) | Att.1 – TDD update (TG-Cardio) |  |
| [FGAI4H-J-006-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A02.docx) | Att.2 – CfTGP (TG-Cardio) |  |
| [FGAI4H-J-006-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A03.pptx) | Att.3 – Presentation (TG-Cardio) |  |
| [FGAI4H-J-007](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007.docx) | Updates for Dermatology (TG-Derma) | TG-Derma Topic Driver |
| [FGAI4H-J-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007-A01.docx) | Att.1 – TDD update (TG-Derma) |  |
| [FGAI4H-J-007-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007-A02.docx) | Att.2 – CfTGP (TG-Derma) |  |
| [FGAI4H-J-008](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008.docx) | Updates for Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | TG-Bacteria Topic Driver |
| [FGAI4H-J-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008-A01.docx) | Att.1 – TDD update (TG-Bacteria) |  |
| [FGAI4H-J-009](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-009.docx) | Updates for Volumetric chest CT (TG-DiagnosticCT) | TG-DiagnosticCT Topic Driver |
| [FGAI4H-J-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-009-A01.docx) | Att.1 – TDD update (TG-DiagnosticCT) |  |
| [FGAI4H-J-009-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-009-A02.docx) | Att.2 – CfTGP (TG-DiagnosticCT) |  |
| [FGAI4H-J-009-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-009-A03.pptx) | Att.3 – Presentation (TG-DiagnosticCT) |  |
| [FGAI4H-J-010](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010.docx) | Updates for Dental diagnostics and digital dentistry (TG-Dental) | TG-Dental Topic Driver |
| [FGAI4H-J-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A01.docx) | Att.1 – TDD update (TG-Dental) |  |
| [FGAI4H-J-010-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A02.docx) | Att.2 – CfTGP (TG-Dental) |  |
| [FGAI4H-J-010-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A03.pptx) | Att.3 – Presentation (TG-Dental) |  |
| [FGAI4H-J-011](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011.docx) | Updates for falsified medicine (TG-FakeMed) | TG-FakeMed Topic Driver |
| [FGAI4H-J-011-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A01-R01.docx) | Att.1 – TDD update (TG-FakeMed) |  |
| [FGAI4H-J-011-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A02.docx) | Att.2 – CfTGP (TG-FakeMed) |  |
| [FGAI4H-J-012](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012.docx) | Updates for Falls among the elderly (TG-Falls) | TG-Falls Topic Driver |
| [FGAI4H-J-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012-A01.docx) | Att.1 – TDD update (TG-Falls) |  |
| [FGAI4H-J-012-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012-A02.docx) | Att.2 – CfTGP (TG-Falls) |  |
| [FGAI4H-J-013](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013.docx) | Updates for Histopathology (TG-Histo) | TG-Histo Topic Driver |
| [FGAI4H-J-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013-A01.docx) | Att.1 – TDD update (TG-Histo) |  |
| [FGAI4H-J-013-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013-A02.docx) | Att.2 – CfTGP (TG-Histo) |  |
| [FGAI4H-J-014](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-014.docx) | Updates for Malaria detection (TG-Malaria) | TG-Malaria Topic Driver |
| [FGAI4H-J-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-014-A01.docx) | Att.1 – TDD update (TG-Malaria) |  |
| [FGAI4H-J-014-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-014-A02.docx) | Att.2 – CfTGP (TG-Malaria) |  |
| [FGAI4H-J-014-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-014-A03.pptx) | Att.3 – Presentation (TG-Malaria) |  |
| [FGAI4H-J-015](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015.docx) | Updates for Maternal and child health (TG-MCH) | TG-MCH Topic Driver |
| [FGAI4H-J-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015-A01.docx) | Att.1 – TDD update (TG-MCH) |  |
| [FGAI4H-J-015-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015-A02.docx) | Att.2 – CfTGP (TG-MCH) |  |
| [FGAI4H-J-016](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016.docx) | Updates for Neurological disorders (TG-Neuro) | TG-Neuro Topic Driver |
| [FGAI4H-J-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016-A01.docx) | Att.1 – TDD update (TG-Neuro) |  |
| [FGAI4H-J-016-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016-A02.docx) | Att.2 – CfTGP (TG-Neuro) |  |
| [FGAI4H-J-017](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017.docx) | Updates for Ophthalmology (TG-Ophthalmo) | TG-Ophthalmo Topic Driver |
| [FGAI4H-J-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A01.docx) | Att.1 – TDD update (TG-Ophthalmo) |  |
| [FGAI4H-J-017-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A02.docx) | Att.2 – CfTGP (TG-Ophthalmo) |  |
| [FGAI4H-J-017-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A03.pptx) | Att.3 – Presentation (TG-Ophthalmo) |  |
| [FGAI4H-J-018](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018.docx) | Updates for Outbreak detection (TG-Outbreaks) | TG-Outbreaks Topic Driver |
| [FGAI4H-J-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A01.docx) | Att.1 – TDD update (TG-Outbreaks) |  |
| [FGAI4H-J-018-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A02.docx) | Att.2 – CfTGP (TG-Outbreaks) |  |
| [FGAI4H-J-018-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A03.pptx) | Att.3 – Presentation (TG-Outbreaks) |  |
| [FGAI4H-J-019](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019.docx) | Updates for Psychiatry (TG-Psy) | TG-Psy Topic Driver |
| [FGAI4H-J-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019-A01.docx) | Att.1 – TDD update (TG-Psy) |  |
| [FGAI4H-J-019-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019-A02.docx) | Att.2 – CfTGP (TG-Psy) |  |
| [FGAI4H-J-020](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020.docx) | Updates for Snakebite and snake identification (TG-Snake) | TG-Snake Topic Driver |
| [FGAI4H-J-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A01.docx) | Att.1 – TDD update (TG-Snake) |  |
| [FGAI4H-J-020-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A02.docx) | Att.2 – CfTGP (TG-Snake) |  |
| [FGAI4H-J-020-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A03.pptx) | Att.3 – Presentation (TG-Snake) |  |
| [FGAI4H-J-021](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021.docx) | Updates for Symptom assessment (TG-Symptom) | TG-Symptom Topic Driver |
| [FGAI4H-J-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A01.docx) | Att.1 – TDD update (TG-Symptom) |  |
| [FGAI4H-J-021-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A02.docx) | Att.2 – CfTGP (TG-Symptom) |  |
| [FGAI4H-J-021-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A03.pptx) | Att.3 – Presentation (TG-Symptom) |  |
| [FGAI4H-J-022](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022.docx) | Updates for Tuberculosis (TG-TB) | TG-TB Topic Driver |
| [FGAI4H-J-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022-A01.docx) | Att.1 – TDD update (TG-TB) |  |
| [FGAI4H-J-022-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022-A02.docx) | Att.2 – CfTGP (TG-TB) |  |
| [FGAI4H-J-023](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023.docx) | Updates for Radiology (TG-Radiology) | TG-Radiology Topic Driver |
| [FGAI4H-J-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A01.docx) | Att.1 – TDD update (TG-Radiotherapy) |  |
| [FGAI4H-J-023-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A02.docx) | Att.2 – CfTGP (TG-Radiotherapy) |  |
| [FGAI4H-J-023-A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A03.pptx) | Att.3 – Presentation (TG-Radiotherapy) |  |
| [FGAI4H-J-024](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024.docx) | Initial documents for Primary and secondary diabetes prediction (TG-Diabetes) | TG-Diabetes Topic Driver |
| [FGAI4H-J-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024-A01.docx) | Att.1 – TDD update (TG-Diabetes) |  |
| [FGAI4H-J-025](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025.docx) | Initial documents for Endoscopy (TG-Endoscopy) |  |
| [FGAI4H-J-025-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A01-R01.docx) | Att.1 – TDD update (TG- Endoscopy) |  |
| [FGAI4H-J-025-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A02.docx) | Att.2 – CfTGP (TG- Endoscopy) |  |
| [FGAI4H-J-026-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-026-R01.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-026-A01.pptx) | Proposal for new topic group: AI for Musculoskeletal medicine (provisional TG-MSK) | EQL (London, UK) |
| [FGAI4H-J-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-027.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-027-A01.pptx) | Updated DEL07: AI for Health Evaluation Considerations | Editors |
| [FGAI4H-J-028](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-028.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-028-A01.docx) | LS on new Recommendation ITU-T Y.3531 "Cloud computing- Functional requirements for machine learning as a service" | ITU-T SG13 |
| [FGAI4H-J-029](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-029.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-029-A01.docx) | LS on invitation to review Artificial Intelligence Standardization Roadmap and provide missing or updated information | ITU-T SG13 |
| [FGAI4H-J-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-030.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-030-A01.pptx) | Updated DEL10: AI4H use cases: Topic Description Documents | Editors |
| [FGAI4H-J-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-031.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-031-A01.pptx) | Update – Onboarding document for the ITU/WHO Focus Group on AI for Health | Editors |
| [FGAI4H-J-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-032.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-032-A01.pptx) | Updated template for the call for participation in a topic group | Editors |
| [FGAI4H-J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx%22%20%5Ct%20%22_blank) | Updated DEL04: AI software life cycle specification | Editor |
| [FGAI4H-J-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-034.docx%22%20%5Ct%20%22_blank) | Updated DEL5.3: Data annotation specification | Editors |
| [FGAI4H-J-035-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-R01.docx%22%20%5Ct%20%22_blank) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-A01.pptx) | Initial draft – DEL[12] Guidance on digital technologies for COVID health emergency | Editors |
| [FGAI4H-J-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-036.docx%22%20%5Ct%20%22_blank) | Updated DEL06: AI Training Best Practices Specification | Editors |
| [FGAI4H-J-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-037.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-037-A01.pptx) | WG-DASH: Practical challenges of Artificial Intelligence in healthcare: building the evaluation framework for organizations | WG Chairs |
| [FGAI4H-J-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-038.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-038-A01.pptx) | WG-DAISAM: Metrics and Measures Paper Questionnaire | Editors |
| [FGAI4H-J-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039-A01.pdf) | Updated DEL2.2: Good practices for health applications of machine learning: Considerations for manufacturers and regulators | Editors |
| [FGAI4H-J-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-040.docx) | TG-Dental: Artificial intelligence for dental image analysis: A guide for authors and reviewers | TG-Dental Topic Driver |
| [FGAI4H-J-041-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-R01.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-A01.pptx)  | Updated DEL03: AI4H requirement specifications | Editors |
| [FGAI4H-J-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A01.docx)+ [A0](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A02.docx)2+ [A03](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A03.docx) + [A04](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-042-A04.pptx) | Draft description of the peer review process for FG-AI4H deliverables | Editors |
| [FGAI4H-J-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-043.docx) | Updated DEL00: Overview of the FG-AI4H deliverables | Editor |
| [FGAI4H-J-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-044.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-044-A01.pptx) | Updated DEL09: AI4H applications and platforms | Editors |
| [FGAI4H-J-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-045.pptx) | Open Source Software | Editors |
| [FGAI4H-J-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-046.docx) | Translating Principles into Practices: Responsible Innovation and AI Taskforce at the University of Montreal Academic Health Center (CHUM) | Centre hospitalier de l’Université de Montréal (CHUM) |
| [FGAI4H-J-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-047.docx) | FG-AI4H progress report to SG16 for the period from October 2019 to June 2020 (22 June – 3 July 2020) | Chairman of FG-AI4H |
| [FGAI4H-J-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-048.docx) | DAISAM Audit Reporting Template | WG-DAISAM Chair |
| [FGAI4H-J-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-049.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-049-A01.zip) | ML4H Quality Assessment: From Paper to Practice - Supporting Materials | WG-DAISAM Chair |
| [FGAI4H-J-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-050.pptx) | DEL7.2: AI technical test specification - Progress Review | Editors |
| [FGAI4H-J-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-051.pptx) | DEL01: AI4H ethics considerations - Progress Review | Editors |
| [FGAI4H-J-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-052.pdf)  | DEL9.1 & DEL9.2 progress review | Editors |
| [FGAI4H-J-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053-A01.pptx) | Updated DEL7.4: Clinical Evaluation of AI for Health | Editors |
| [FGAI4H-J-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054.docx) + [A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054-A01.pptx) | Updated DEL5.6: Data sharing practices | Editors |
| [FGAI4H-J-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-055.pptx) | DEL02: AI4H regulatory best practices - Progress Review | Editors |
| [FGAI4H-J-101](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-101.docx) | Report of the 10th meeting (Meeting J) of the Focus Group on Artificial Intelligence for Health (FG-AI4H) | FG-AI4H |
| [FGAI4H-J-102](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-102.docx) | Updated call for proposals: Use cases, benchmarking, and data | FG-AI4H |
| [FGAI4H-J-103](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-103.docx) | Updated call for topic group participation (CfTGP) template | FG-AI4H |
| [FGAI4H-J-105](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-105.docx) | Updated TDD Template | FG-AI4H |
| [FGAI4H-J-107](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-107.docx) | Onboarding document for the ITU/WHO Focus Group on AI for Health (2 October 2020) | FG-AI4H |
| [FGAI4H-J-200-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-200-R01.docx) | Updated list of FG-AI4H deliverables | FG-AI4H |

Annex C:
List of participants

| Last Name | First Name | Organization | E-mail | Country |
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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 Monique Kuglitsch (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)
* Wolfgang Lauer (Federal Institute for Drugs and Medical Devices, Germany)
* Peng Liang (National Medical Products Administration, China)
 |
| Ethical considerations on AI for health (WG-RC) | Chair: Andreas Reis (WHO) |

Topic Groups

| Topic group | Acronym | Leader | References | Created |
| --- | --- | --- | --- | --- |
| 1. Cardiovascular disease risk prediction
 | TG-Cardio | Benjamin Muthambi (Watif Health, South Africa) | [J-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A01.docx) | C |
| 1. Dermatology
 | TG-Derma | Weihong Huang (Xiangya Hospital Central South University, China)NOTE – Maria Vasconcelos (Fraunhofer, Portugal) resigned from the role | [J-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007-A01.docx) | B |
| 1. Diagnosis of bacterial infection and anti-microbial resistance
 | TG-Bacteria | Nada Malou (MSF, France) | [J-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008-A01.docx);Proposal: [F-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-F-033.docx) (MSF, France) | F |
| 1. Volumetric chest CT
 | TG-DiagnosticCT | Kuan Chen (Infervision, China) | [J-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-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) | [J-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A01.docx) | G |
| 1. Falsified Medicine
 | TG-FakeMed | Franck Verzefé (TrueSpec-Africa, DRC) | [J-011-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A01-R01.docx);Proposal: [G-022](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-022.docx) (TrueSpec-Africa, DRC) | G |
| 1. Falls among the elderly
 | TG-Falls | Inês Sousa (Fraunhofer Portugal) | [J-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012-A01.docx) | B |
| 1. Histopathology
 | TG-Histo | Frederick Klauschen (Charité Berlin, Germany) | [J-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013-A01.docx) | B |
| 1. Malaria detection
 | TG-Malaria | Rose Nakasi (Makerere University, Uganda) | [J-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-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) | [J-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015-A01.docx) | D; G |
| 1. Neurological disorders
 | TG-Neuro | Marc Lecoultre (ML Labs, Switzerland) | [J-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016-A01.docx) | B |
| 1. Ophthalmology
 | TG-Ophthalmo | Arun Shroff (MedIndia) | [J-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A01.docx) | B |
| 1. Outbreak detection
 | TG-Outbreaks | Stéphane Ghozzi (Robert Koch Institute, Germany) | [J-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A01.docx) | E |
| 1. Psychiatry
 | TG-Psy | Nicolas Langer (ETH Zurich, Switzerland) | [J-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019-A01.docx) | C |
| 1. Snakebite and snake identification
 | TG-Snake | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [J-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A01.docx) | B |
| 1. Symptom assessment
 | TG-Symptom | Henry Hoffmann (Ada Health, Germany) | [J-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A01.docx) | B |
| 1. Tuberculosis
 | TG-TB | Manjula Singh (ICMR, India) | [J-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022-A01.docx) | C |
| 1. Radiology
 | TG-Radiology | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [J-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A01.docx) | D; H |
| 1. Primary and secondary diabetes prediction
 | TG-Diabetes | Andrés Valdivieso (Anastasia.ai & Tecnigen, Chile) | [J-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024-A01.docx) | H |
| 1. AI for endoscopy
 | TG-Endoscopy | Jianrong Wu (Tencent Healthcare, China) | [J-025-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A01-R01.docx);Proposal: [J-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039.pptx) (Tencent Healthcare, China) | I |
| 1. AI for musculoskeletal medicine
 | TG-MSK | Yura Perov (EQL, UK) | Proposal: [J-026-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-026-R01.docx) | J |

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-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> |
| 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, 30 September – 2 October 2020):

[Dec-J-1. TG Drivers are asked to read the IPR call as found in J-001-R01 Annex A and collect any declarations of made in return to the IPR question in their meeting minutes.](#_Toc62335967)

[Dec-J-2. The report of the virtual meeting held 7-8 May 2020 found in I-101 was approved without comments and its two output documents were noted (I-102 and I-200).](#_Toc62335968)

[Dec-J-3. Create a landing page for the FG-AI4H open code initiative in the ITU website and engage with IMDRF.](#_Toc62335969)

[Dec-J-4. Continue the development of the process for assessing quality of draft FG-AI4H deliverables between meetings J and K, based in J-042.](#_Toc62335970)

[Dec-J-5. The FG-AI4H agreed to the updated version of the FG-AI4H whitepaper found in J‑002 for posting publicly in the FG-AI4H website (https://www.itu.int/go/fgai4h/whitepaper).](#_Toc62335971)

[Dec-J-6. Assess which of the "real-life" assessment framework elements in J-037 would be missing from the DASH and DAISAM deliverables.](#_Toc62335972)

[Dec-J-7. The meeting agreed to update the ITU/WHO Focus Group on AI for Health onboarding document, as found in J-107.](#_Toc62335973)

[Dec-J-8. It was agreed to remind TG Drivers that an update of their activities is expected at each FG meeting.](#_Toc62335974)

[Dec-J-9. The TDD template in J-004 will undergo a two-week review period by e-mail. The approved version will be available as J-105.](#_Toc62335975)

[Dec-J-10. After the new TDD is approved, TG Drivers are requested should retrofit the current TDDs into the new structure, in time for the next FG meeting (January 2021).](#_Toc62335976)

[Dec-J-11. It was agreed to adopt the updated call for topic group participation (CfTGP) template found in J-103. TG Drivers are requested to use the updated version when updating their CfTGP.](#_Toc62335977)

[Dec-J-12. Agreed to create a new Topic Group on AI for Musculoskeletal medicine (TG-MSK) with Yura Perov (EQL, UK) as Topic Driver.](#_Toc62335978)

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