|  |  |  |
| --- | --- | --- |
| A black and white logo  Description automatically generated with low confidence | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2022-2024 | FG-AI4H-O-005 |
| **ITU-T Focus Group on AI for Health** |
| **Original: English** |
| **WG(s):** | Plenary | Berlin, 31 May – 2 June 2022 |
| **DOCUMENT** |
| **Source:** | TSB |
| **Title:** | List of FG-AI4H deliverables (as of 2022-02-17) |
| **Purpose:** | Admin |
| **Contact:** | TSB | Tel: +41-22-730-6805Fax: +41-22-730-5853E-mail: tsbfgai4h@itu.int  |

|  |  |
| --- | --- |
| **Abstract:** | This document summarizes the current status of the planned deliverables for the ITU-T Focus Group on AI for health (FG-AI4H), based on the output list from the virtual meeting on 15-17 February 2022 and subsequent updates by the secretariat, as found in N-200. |

NOTE – Latest version of deliverables are stored in the FG-AI4H collaboration area at <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx>. The page will be updated after each FG-AI4H meeting.

Table 1 – Updated list of deliverables (N-200)

| No. | Deliverable | Updated initial draft editor | Availability\* |
| --- | --- | --- | --- |
| 0 | Overview of the FG-AI4H deliverables | Shan Xu (CAICT, China) | [M-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-044.docx)([N-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-050.pptx)) |
| 0.1 | Common unified terms in artificial intelligence for health | Markus Wenzel (Fraunhofer HHI, Germany) | [N-040](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-040.docx) |
| 1 | AI4H ethics considerations | Andreas Reis (WHO) | [K-028](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-028.docx)([K-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-028-A01.pptx)) |
| 2 | Overview of regulatory considerations on artificial intelligence for health | Shada Alsalamah (WHO) | [N-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-049.docx) |
| 2.1 | Mapping of IMDRF essential principles to AI for health software | Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (Technical Consultant eHealth, India), Pat Baird (Philips, USA), Thomas Wiegand (Fraunhofer HHI, Germany) | [G-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-038.docx), [G-038-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-038-A01.xlsx) |
| 2.2 | Good practices for health applications of machine learning: Considerations for manufacturers and regulators | Pradeep Balachandran (India) and Christian Johner (Johner Institut, Germany) | [N-031](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-031.docx) |
| 3 | AI4H requirement specifications | Pradeep Balachandran (India) | [N-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032.docx) |
| 4 | AI software life cycle specification | Pat Baird (Philips, USA) | [J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx)([L-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-046.pptx)) |
| 5 | Data specification | Marc Lecoultre (MLlab.AI, Switzerland) | [G-205](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205.docx%22%20%5Ct%20%22_blank) |
| 5.1 | Data requirements | [Marc Lecoultre (MLlab.AI, Switzerland)]\*\* | [I-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-044.docx) |
| 5.2 | Data acquisition  | Rajaraman (Giri) Subramanian (Calligo Tech, India), Vishnu Ram (India) | [G-205-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205-A02.docx) |
| 5.3 | Data annotation specification | Shan Xu (CAICT, China), Harpreet Singh (ICMR, India), Sebastian Bosse (Fraunhofer HHI, Germany) | [M-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-045.docx) |
| 5.4 | Training and test data specification  | Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (India) | [I-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-034.docx)([L-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-045.pptx)) |
| 5.5 | Data handling  | Marc Lecoultre (MLlab.AI, Switzerland) | [I-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-045.docx) |
| 5.6 | Data sharing practices | Ferath Kherif (CHUV, Switzerland), Banusri Velpandian (ICMR, India), WHO Data Team | [L-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-044.pptx) |
| 6 | AI training best practices specification | Xin Ming Sim and Stefan Winkler (AI Singapore) | [K-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-037.docx%22%20%5Ct%20%22_blank) |
| 7 | AI for health evaluation considerations | Markus Wenzel (Fraunhofer HHI, Germany) | [N-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-042.docx) |
| 7.1 | AI4H evaluation process description | Vacant | [G-207-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-207-A01.docx) |
| 7.2 | AI technical test specification | Auss Abbood (Robert Koch Institute, Germany) | [I-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-027.docx%22%20%5Ct%20%22_blank)([L-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-051.pptx)) |
| 7.3 | Data and artificial intelligence assessment methods (DAISAM) reference | Luis Oala (Fraunhofer HHI, Germany) | [N-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-033.docx)([L-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-052.pptx)) |
| 7.4 | Clinical evaluation of AI for health | Naomi Lee (Lancet, UK), Eva Weicken (Fraunhofer HHI, Germany), Shubhanan Upadhyay (ADA Health, Germany) | [N-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-048.docx) |
| 8 | AI4H scale-up and adoption | Sameer Pujari (WHO), Yu ZHAO and Javier Elkin [Previously: Robyn Whittaker (New Zealand)] | –([K-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-052.pptx)) |
| 9 | AI4H applications and platforms | Manjeet Chalga (ICMR, India) | [L-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-050.docx) |
| 9.1 | Mobile applications | Khondaker Mamun (UIU, Bangladesh), Manjeet Chalga (ICMR, India) | [N-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-043.docx) |
| 9.2 | Cloud-based AI applications | Khondaker Mamun (UIU, Bangladesh) | [I-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-049.docx) |
| 10 | AI4H use cases: Topic description documents | Eva Weicken (Fraunhofer HHI, Germany) | [N-041](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-041.docx) |
| 10.1 | Cardiovascular disease management (TG-Cardio) | Benjamin Muthambi (Watif Health, South Africa) | [N-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-006-A01.docx) |
| 10.2 | Dermatology (TG-Derma) | Weihong Huang (Xiangya Hospital Central South University, China)NOTE – Maria Vasconcelos (Fraunhofer, Portugal) resigned from the role. | [N-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-007-A01.docx) |
| 10.3 | Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | Nada Malou (MSF, France) | [N-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-008-A01.docx) |
| 10.4 | Falls among the elderly (TG-Falls) | Pierpaolo Palumbo (University of Bologna, Italy); Inês Sousa (Fraunhofer Portugal) | [N-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-012-A01.docx) |
| 10.5 | Histopathology (TG-Histo) | Frederick Klauschen (LMU Munich & Charité Berlin, Germany) | [N-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-013-A01.docx) |
| 10.6 | Malaria detection (TG-Malaria) | Rose Nakasi (Makerere University, Uganda) | [N-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-014-A01.docx) |
| 10.7 | Maternal and child health (TG-MCH) | Raghu Dharmaraju (Wadhwani AI, India) and Alexandre Chiavegatto Filho (University of São Paulo, Brazil) | [N-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-015-A01.docx) |
| 10.8 | Neurological disorders (TG-Neuro) | Marc Lecoultre (MLlab.AI, Switzerland) | [N-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-016-A01.docx) |
| 10.9 | Ophthalmology (TG-Ophthalmo) | Arun Shroff (MedIndia) | [N-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-017-A01.docx) |
| 10.10 | Outbreak detection (TG-Outbreaks) | Auss Abbood (Robert Koch Institute, Germany) and Stéphane Ghozzi (HZI, Germany) | [N-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-018-A01.docx) |
| 10.11 | Psychiatry (TG-Psy) | Nicolas Langer (ETH Zurich, Switzerland) | [N-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-019-A01.docx) |
| 10.12 | AI for radiology (TG-Radiology) | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [N-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-023-A01.docx) |
| 10.13 | Snakebite and snake identification (TG-Snake) | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [N-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-020-A01.docx) |
| 10.14 | Symptom assessment (TG-Symptom) | Henry Hoffmann (Ada Health, Germany) | [N-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-021-A01.docx) |
| 10.15 | Tuberculosis (TG-TB) | Manjula Singh (ICMR, India) | [N-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-022-A01.docx) |
| 10.16 | Volumetric chest CT (TG-DiagnosticCT) | Kuan Chen (Infervision, China) | [N-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-009-A01.docx) |
| 10.17 | Dental diagnostics and digital dentistry (TG-Dental) | Falk Schwendicke and Joachim Krois (Charité Berlin, Germany); Tarry Singh (deepkapha.ai, Netherlands) | [N-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-010-A01.docx) |
| 10.18 | Falsified Medicine (TG-FakeMed) | Franck Verzefé (TrueSpec-Africa, DRC) | [N-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-011-A01.docx) |
| 10.19 | Primary and secondary diabetes prediction (TG-Diabetes) | Andrés Valdivieso (Anastasia.ai, Chile) | [N-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-024-A01.docx) |
| 10.20 | AI for endoscopy (TG-Endoscopy) | Jianrong Wu (Tencent Healthcare, China) | [N-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-025-A01.docx) |
| 10.21 | AI for musculoskeletal medicine (TG-MSK) | Peter Grinbergs (EQL, UK), Yura Perov (UK) | [N-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-026-A01.docx) |
| 10.22 | AI for human reproduction and fertility (TG-Fertility) | Susanna Brandi, Eleonora Lippolis, (Merck KGaA, Darmstadt, Germany) | [N-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-027-A01.docx) |
| 10.23 | AI in sanitation for public health (TG-Sanitation) | Khahlil Louisy (Institute for Technology & Global Health, ITGH, US), Alexander Radunsky (ITGH, US) | [N-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-028-A01.docx) |
| 10.24 | AI for point-of care diagnostics (TG-POC) | Nina Linder, University of Helsinki, Finland | [N-029-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-029-A01.docx) |

NOTES

\* The document numbers indicated reflect the status as of the end of the e-meeting N. 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. Documents in parenthesis are status updates, not a deliverable text.

\*\* Acting editor

Possible future Deliverables:

| No. | Deliverable | Updated initial draft editor | Reference |
| --- | --- | --- | --- |
| – | Open Code Initiative reference software implementation | Marc Lecoultre (MLlab.AI, Switzerland) | [K-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-043.docx) |
| – | Risk management in AI for health | Pat Baird (Philips, USA) | [K-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-034.pptx)  |

Initial public version already available:

| No. | Deliverable | Editor(s) | Reference |
| --- | --- | --- | --- |
| [AHG-DT4HE Output 1](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FGAI4H-DT4HE-O-001.pdf) | Guidance on digital technologies for COVID health emergency | Shan Xu (CAICT, China), Ana Riviere-Cinnamond (PAHO)  | [K-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-042.docx) |
| [TG-Dental Output 1](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FGAI4H-TG-Dental-O-001.pdf) | Artificial intelligence in dental research: A checklist for authors and reviewers | Falk Schwendicke, Joachim Krois (Charité Berlin, Germany) | [M-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-004.docx) |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_