

GISSC 2025

Global ICT Standards Conference 2025

(세션 2) AI-X 융합과 표준화: 산업지능의 미래

AI - Medical 혁신 : 글로벌 표준 및 서비스 동향

도형호 대표
(주)헬스올

ICT Standards and Intellectual Property:
AI for All

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01 SDOs for the entire
Healthcare sector

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06 IHE

07 Toward Healthcare AI

Abstract

| Standardization activity (existing -> toward AI)

Health ICT Standards

- 범 Healthcare 관련한 공적표준화 기구의 간략한 소개와 역할
- 헬스케어 분야의 사실상 표준화 기구들의 AI를 위한 변화와 트렌드
- 앞으로의 방향성과 우리나라 전략

01. SDOs for the entire Healthcare sector

| Healthcare Standardization effort

215
304
314
212
...



62
AAL
...



21/Q2
...



02. ISO TC 215

I ISO TC 215

- Standardization in the field of health informatics, to facilitate capture, interchange and use of health-related data, information, and knowledge to support and enable all aspects of the health system.

ISO/TC 215 Health informatics

Secretariat: **ANSI** (United States)

Committee Manager: **Ms Rachel Hawthorne**

Chairperson (until end 2026): Mr Todd Cooper

ISO Technical Programme Manager [TPM]: **Mme Maho Takahashi**

ISO Editorial Manager [EM]: **Ms Valeria Agamennone**

Creation date: 1998

243

Published ISO standards *
of which **231** under the direct
responsibility of ISO/TC 215

65

ISO standards under
development *
of which **60** under the direct
responsibility of ISO/TC 215

38

Participating members

34

Observing members

I ISO TC 215

Reference	Title	Type
ISO/TC 215/SC 1	Genomics Informatics	Subcommittee
ISO/TC 215/SC 2	Pharmacy and medicines business	Subcommittee (NEW!!)
ISO/TC 215/CAG 1	P-member Leadership (National Heads of Delegation)	Working group
ISO/TC 215/CAG 2	Technical Program Leadership	Working group
ISO/TC 215/JWG 1	Joint ISO/TC 215 - ISO/TC 249/SC1 WG: Traditional Chinese Medicine (Informatics)	Working group
ISO/TC 215/JWG 7	Joint ISO/TC 215 - IEC/SC 62A WG: Safe, effective and secure health software and health IT systems, including those incorporating medical devices	Working group
ISO/TC 215/TF 1	Task Force on Quantities and Units to be used in e-health	Working group
ISO/TC 215/TF 3	Outreach & Communications	Working group
ISO/TC 215/TF 5	AI technologies in health informatics	Working group
ISO/TC 215/TF 6	Process and quality improvement	Working group
ISO/TC 215/TF 7	Telehealth and Virtual Care (TVC) Standards	Working group
ISO/TC 215/WG 1	Architecture, Frameworks and Models	Working group
ISO/TC 215/WG 2	Systems and Device Interoperability	Working group
ISO/TC 215/WG 3	Semantic content	Working group
ISO/TC 215/WG 4	Security, Safety and Privacy	Working group
ISO/TC 215/WG 6	Pharmacy and medicines business	Working group
ISO/TC 215/WG 10	Traditional Medicine	Working group
ISO/TC 215/WG 11	Personalized digital health	Working group

ISO TC 215

ISO/TR 24291:2021 ed.1 - id.78345 ISO/TC 215/WG 2 60.60

Edition date 2021-03

Title

enfr

en Health informatics — Applications of machine learning technologies in imaging and other medical applications

fr Informatique de santé — Applications de technologies d'apprentissage automatique en imagerie et autres applications médicales

Ballots

Type	Version	Started	End date	Status	Result
DTR		2020-07-02	2020-08-28	CLOSED	-

Responsibilities

Project Leader

Namkug Kim Dr

Shin Soo-Yong Mr

Committee Manager

Hawthorne Rachel Ms

Secretariat

ANSI

Convenor

Yi Byoung Kee Mr

ISO Technical Programme Manager (TPM)

Takahashi Maho Mme

ISO Editorial Programme Manager (EPM)

Agamennone Valeria Ms

ISO TC 215 with JTC1 SC42

Reference ↑	Title	Type
ISO/IEC JTC 1/SC 42/AHG 4 ⓘ	Liaison with SC 27	Working group
ISO/IEC JTC 1/SC 42/AHG 8 ⓘ	Best practices for new proposals	Working group
ISO/IEC JTC 1/SC 42/JAG ⓘ	Joint Advisory Group on AI and sustainability with ISO/IEC JTC1/SC 39 and JTC1/SC 42	Working group
ISO/IEC JTC 1/SC 42/JWG 2 ⓘ	Joint Working Group ISO/IEC JTC1/SC 42 - ISO/IEC JTC1/SC 7	Working group
ISO/IEC JTC 1/SC 42/JWG 3 ⓘ	Joint Working Group ISO/IEC JTC1/SC42 - ISO/TC 215 WG : AI enabled health informatics	Working group
ISO/IEC JTC 1/SC 42/JWG 4 ⓘ	Joint Working Group ISO/IEC JTC1/SC42 - IEC TC65/SC65A: Functional safety and AI systems	Working group
ISO/IEC JTC 1/SC 42/JWG 5 ⓘ	Joint Working Group ISO/IEC JTC1/SC42 - ISO/TC 37 WG: Natural language processing	Working group
ISO/IEC JTC 1/SC 42/JWG 6 ⓘ	Joint Working Group ISO/IEC JTC1/SC42 - ISO/CASCO: Conformity assessment schemes for AI systems	Working group
ISO/IEC JTC 1/SC 42/JWG 7 ⓘ	Joint Working Group ISO/IEC JTC1/SC 42 - ISO/TC 68: Artificial intelligence	Working group
ISO/IEC JTC 1/SC 42/WG 1 ⓘ	Foundational standards	Working group
ISO/IEC JTC 1/SC 42/WG 2 ⓘ	Data	Working group
ISO/IEC JTC 1/SC 42/WG 3 ⓘ	Trustworthiness	Working group
ISO/IEC JTC 1/SC 42/WG 4 ⓘ	Use cases and applications	Working group
ISO/IEC JTC 1/SC 42/WG 5 ⓘ	Computational approaches and computational characteristics of AI systems	Working group

03. ITU-T

| FG-AI4H

Focus Group on "Artificial Intelligence for Health"

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[Focus Groups](#)

[All Focus Group Publications](#)

[Concluded Focus Groups](#)

[Register and participate](#)

[fgai4hfilemap.xml](#)



World Health
Organization

FG-AI4H

The Focus Group on Artificial Intelligence for Health (FG-AI4H) was a partnership of ITU and the World Health Organization (WHO) to establish a standardized assessment framework for the evaluation of AI-based methods for health, diagnosis, triage or treatment decisions. Participation in the FG-AI4H was free and open to all. The group was established by ITU-T Study Group 16 at its meeting in Ljubljana, Slovenia, 9-20 July 2018 and closed operations on 30 September 2023. Its work is grandfathered in the [Global Initiative on AI for Health \(GI-AI4H\)](#) launched by ITU, WHO and WIPO on 5 July 2023 during the AI for Good Summit.

The FG scope and general process were described in a [commentary in The Lancet](#) and a [white paper](#). The documentation of all previous meetings can be found on the [collaboration site](#) (free ITU account needed; see [instructions](#) for help). Learn more about the FG operations in the [onboarding document](#).

[Terms of reference](#) >

[Parent group](#) > [ITU-T Study Group 16](#)

[Final report](#) >



03. ITU-T

| GI-AI4H

ITU/WHO/WIPO Global Initiative on AI for Health

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About

The Global Initiative on Artificial Intelligence for Health (GI-AI4H) was launched by the three United Nations (UN) Specialized Agencies ITU, WHO and WIPO in July 2023 at the [AI for Good Global Summit](#) in Geneva. You find further information in the [press release](#) and below.

Partners

The Global Initiative on AI for Health is a joint programme by three Specialized Agencies of the United Nations:

International Telecommunication Union

Place des Nations
1211 Geneva 20
Switzerland

www.itu.int[Secretariat](#)

World Health Organization

Avenue Appia 20
1211 Geneva 27
Switzerland

www.who.int[Secretariat](#)

World Intellectual Property Organization

Chemin des Colombettes 34
1211 Geneva 20
Switzerland

www.wipo.int

03. ITU-T

I SG21/Q2 With AI4H

- FG-AI4H 가 2018년 7월 ~ 2023년 11월로 진행. 2023년에 종료됨에 따라 FG에서 개발한 문서를 ITU-T Q2/21로 이관
- 영국 반대, Deliverable을 Living list로 만들어서, 추후 기고를 통하여 진행 여부를 결정

HSTP-AI4H-Neuro (Technical Paper)	Gap analysis of AI for neurological disorders	TD37/WP2
HSTP-AI4H-Ophthalmology (Technical Paper)	Gap analysis of AI for ophthalmology	TD38/WP2
HSTP-Radiology (Technical Paper)	Gap analysis of AI for radiology	TD39/WP2
HSTP-AI4H-Endoscopy (Technical Paper)	Gap analysis of AI for endoscopy	TD30/WP2
HSTP-MSK (Technical Paper)	Gap analysis of AI for musculoskeletal medicine	TD36/WP2
HSTP-Dental (Technical Paper)	Gap analysis of AI for dental diagnostics and digital dentistry	TD26/WP2
HSTP-AI4H-Dental-Research (Technical Paper)	Artificial intelligence in dental research: A checklist for authors and reviewers	TD29/WP2
HSTP-AI4H-Dental-Core (Technical Paper)	Artificial intelligence for oral and dental healthcare: Core education curriculum	TD27/WP2
FSTP-WHO-AI-Ethics (Technical Paper)	Ethics and governance of artificial intelligence for health	TD23/WP2
HSTP-AI4H-Regulatory (Technical Paper)	Regulatory considerations on artificial intelligence for health	TD40/WP2
HSTP-AI4H-IMDRF (Technical Paper)	Mapping of IMDRF essential principles to AI for health software	TD35/WP2
HSTP-AI4H-Clinical	Clinical evaluation of AI for health	TD61/WP2
HSTP-AI4H-DataAnon (Technical Paper)	Data annotation for AI for Health	TD25/WP2
HSTP-AI4H-Dental-Ethics (Technical Paper)	Ethical considerations on artificial intelligence in dentistry: A framework and checklist	TD28/WP2
HSTP-AI4H-Terms(Technical Paper)	Common unified terms in artificial intelligence for health	TD24R1/WP2

03. ITU-T

| SG21/Q2

SG21 - Technologies for multimedia, content delivery and cable television

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Q2/21 (WP2/21)

Multimedia framework for digital health applications

- [Terms of reference](#)
- [Work Items](#)

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03. ITU-T

| SG21/Q2

Work item	Question	Subject/title	Timing	Study group	Study period
 F.780.6 (V2)	Q2/21	Requirements for colourimetry for telemedicine systems using ultra-high definition imaging	2026	SG21	2025-2028
 F.CarePlatReqs	Q2/21	Requirements for critical care monitoring service platform	2027	SG21	2025-2028
 F.FAST	Q2/21	Requirements and framework for stroke detection services	2026	SG21	2025-2028
 F.HPP-Req	Q2/21	Requirements and framework for the health portrait platform	2026	SG21	2025-2028
 F.HR-AP	Q2/21	Framework for access permission of person-generated health records in digital health platforms	2025	SG21	2025-2028
 F.Med-MTS	Q2/21	Requirements on Maritime Telehealth System	2026-10	SG21	2025-2028
 F.Med-VHN	Q2/21	Telemedicine service framework based on distributed virtual healthcare network	2026	SG21	2025-2028
 F.mMRI-Rural	Q2/21	Framework for moveable MRI systems for rural and remote areas	2026	SG21	2025-2028
 F.PGHR	Q2/21	Framework for management of person-generated health records in digital health platforms	2026-12	SG21	2025-2028
 F.PreTG	Q2/21	Requirements and framework for pre-triage guidance platform	2026-12	SG21	2025-2028

03. ITU-T

| SG21/Q2

 F.PreTG	Q2/21	Requirements and framework for pre-triage guidance platform	2026-12	SG21	2025-2028
 F.Reg-surgical	Q2/21	Framework and requirements on multimedia communication aspects of remote surgical system	2027-06	SG21	2025-2028
 F.RFS-FH	Q2/21	Requirements, reference framework and scenarios of a family health service platform	2026	SG21	2025-2028
 F.TP-IHA	Q2/21	Requirements and framework for telehealth platform for institutional healthy ageing	2027-06	SG21	2025-2028
 FSTP.CONF-Req-Med-Colour	Q2/21	Conformance Specification for the Requirements on colorimetry for telemedicine systems using ultra-high definition imaging	2026	SG21	2025-2028
 FSTP-Online-Med	Q2/21	Framework for inclusive online medical treatment	2025	SG21	2025-2028
 FSTP-UHD-Colour-UC	Q2/21	Use-cases of colorimetry for telemedicine systems using ultra-high definition imaging	2026	SG21	2025-2028
 H.SL-AD	Q2/21	Accurate dosimetry for safe-listening transducers	2026	SG21	2025-2028
 H.SV-DS	Q2/21	Safe-viewing devices and systems	2026-10	SG21	2025-2028
 HSTP.BHQ-UC	Q2/21	Use cases of brain healthcare quotients	2026	SG21	2025-2028
 HSTP.Med-AI-CCTA	Q2/21	Development of guidelines for application of artificial intelligence in coronary computed tomography angiography: A Case in China	2025	SG21	2025-2028

04. IEC SyC AAL

| SyC AAL

- Create a vision of Active Assisted Living that takes account of the evolution of the market
- Foster standardisation which: enables usability and accessibility of AAL systems and services
- Enables cross-vendor interoperability of AAL systems, services, products and components
- Addresses systems level aspects such as safety, security and privacy
- Communicate the work of the SyC appropriately to foster a strong community of stakeholders

SyC AAL Officers



Chair	Mr Dejun Ma (CN) Term of office : 2029-11	✉ Send Email
Vice-Chair	Ms Pamela D Gwynn (US) Term of office : 2025-12	✉ Send Email
Vice-Chair	Ms Tae Hwa Han (KR) Term of office : 2027-07	✉ Send Email
Secretary	Mr Hajime Yamada (JP)	✉ Send Email
Assistant Secretary	Mr Atsushi MIYOSHI (JP)	✉ Send Email

IEC Secretariat Contacts

Technical Officer	Mr Daniel Lopez Rojas	✉ Send Email
Technical Officer	Mr Miroslav Siket	✉ Send Email
Standards Project Administrator	Ms Izabela Witik	✉ Send Email
Editor	Mrs Lucy Sonner	✉ Send Email

04. IEC SyC AAL

| SyC AAL

[IEC SRD 63234-2:2020](#)

Edition 1.0 (2020-02-19)

Economic evaluation of active assisted living services - Part 2: Example of use - Monitoring patients with chronic diseases

EN

[IEC 63240-1:2024](#)

Edition 2.0 (2024-11-08)

Active assisted living (AAL) reference architecture and architecture model - Part 1: Reference architecture

EN

[IEC 63240-2:2020](#)

Edition 1.0 (2020-11-18)

Active assisted living (AAL) reference architecture and architecture model - Part 2: Architecture model

EN

[IEC 63310:2025](#)

Edition 1.0 (2025-01-17)

Functional performance criteria for AAL robots used in connected home environment

EN

[IEC SRD 63314:2024](#)

Edition 1.0 (2024-09-03)

Active assisted living (AAL) guidance for education and training of persons working in the field of AAL

EN

[IEC SRD 63408:2024](#)

Edition 1.0 (2024-11-05)

Safety aspects – Guidelines for adult AAL care recipients in standards and other specifications

EN

[IEC SRD 63416:2023](#)

Edition 1.0 (2023-09-15)

Ethical considerations of artificial intelligence (AI) when applied in the active assisted living (AAL) context

EN

[IEC SRD 63426:2024](#)

Edition 1.0 (2024-06-28)

Reference standards portfolio (RSP) on interoperability and connectivity for active assisted living (AAL) in the connected home environment (CHE)

EN

[IEC SRD 63473:2024](#)

Edition 1.0 (2024-04-17)

Active assisted living (AAL) use case standards inventory and mapping

EN

04. IEC SyC AAL

| SyC AAL

Project Reference	Online (Y/N)	Document Reference	Init. Date	Current Stage	Next Stage	Working Group
IEC 63168 ED1 Cooperative multiple systems in connected home environments - AAL functional safety requirements of electronic safety-related systems	N	SyCAAL/381/CD  914 kB  61 kB	2023-08	ACD 2025-07	2CD 2025-09	WG 7
IEC SRD 63420 ED1 Cooperative Multiple Systems in Connected Home Environments – AAL SOTIF of E/E Systems	N	SyCAAL/223/NP  2077 kB	2021-11	ACD 2021-11	CD 2025-01	WG 7
IEC SRD 63642 ED1 General requirements for the development and implementation of Active Assisted Living (AAL) Systems and Services	Y	SyCAAL/377/NP  266 kB	2025-03	ACD 2025-03	CD 2025-06	WG 3
IEC SRD 63658 ED1 Guidance for AAL services based on the smart speaker in connected home environment (CHE)	Y	SyCAAL/386/NP  419 kB	2025-02	ACD 2025-06	CD 2025-05	WG 5
IEC SRD 63659 ED1 Collaboration between AAL users and AAL systems	Y	SyCAAL/384/NP  522 kB	2025-02	ACD 2025-06	CD 2026-01	WG 1

04. ISO TC 314(IEC SyC AAL)

I ISO TC 314

- Standardization in the field of ageing societies

ISO/TC 314/JWG 1	Joint ISO/TC 314 - IEC/SyC AAL: Ageing-inclusive living in smart homes
ISO/TC 314/TCG 1	Terminology coordination group
ISO/TC 314/TG 1	Strategic advisory group
ISO/TC 314/TG 2	Communications
ISO/TC 314/TG 3	Metrics
ISO/TC 314/WG 4	Wellbeing
ISO/TC 314/WG 6	Digital inclusive.
ISO/TC 314/WG 7	Smart multigenerational neighbourhoods
ISO/TC 314/WG 8	Care

Secretariat: BSI (United Kingdom)

Committee Manager: Ms Nicola Packer

Chairperson (until end 2026): Ms Britta Berge

ISO Technical Programme Manager [TPM]: Ms Monja Korter

ISO Editorial Manager [EM]: Ms Valeria Agamennone

Creation date: 2017

6

Published ISO standards *

5

ISO standards under
development *

29

Participating members

19

Observing members

05. Health Level Seven

I HL7




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This page is part of the FHIR Specification (v5.0.0: R5 - STU). This is the current published version. For a full list of available versions, see the [Directory of published versions](#).

Page versions: [R5](#) [R4B](#) [R4](#) [R3](#) [R2](#)

Welcome to FHIR®

FHIR is a standard for health care data exchange, published by HL7®.

First time here?

See the [executive summary](#), the [developer's introduction](#), [clinical introduction](#), [patient introduction](#), or [architect's introduction](#), and then the [FHIR overview & how FHIR versions work](#). See also the [open license \(CC0\)](#) (and don't miss the full [Table of Contents](#) and the [Community Credits](#) or you can [search this specification](#)).

Level 1 Basic framework on which the specification is built

 Foundation	Base Documentation, XML, JSON, RDF, Datatypes, Extensions
---	---

Level 2 Supporting implementation and binding to external specifications

 Implementer Support	 Security & Privacy	 Conformance	 Terminology	 Exchange
Downloads, Version Mgmt, Use Cases, Testing	Security, Consent, Provenance, AuditEvent	StructureDefinition, CapabilityStatement, ImplementationGuide, Profiling	CodeSystem, ValueSet, ConceptMap, Terminology Svc	REST API + Search Documents Messaging Services Databases Subscriptions

Level 3 Linking to real-world concepts in the healthcare system

 Administration	Patient, Practitioner, CareTeam, Device, Organization, Location, Healthcare Service
---	---

Level 4 Record-keeping and Data Exchange for the healthcare process

05. Health Level Seven

| HL7

HL7
International



05. Health Level Seven

I HL7

HL7 Strategic Approach to AI

The AI office positions HL7 at the forefront of healthcare's AI revolution, creating frameworks that ensure emerging technologies are trusted, explainable, interoperable, and scalable across clinical, operational, and research settings worldwide. As artificial intelligence rapidly transforms healthcare, the AI Office will serve as the hub for aligning emerging technologies with ethical frameworks, building trusted infrastructure, and ensuring AI delivers meaningful improvements in care quality, accessibility, and outcomes.

05. Health Level Seven

| HL7

Four Strategic Pillars

The AI Office will drive transformative impact through four strategic workstreams:

Standards

Building the AI-ready interoperability stack for safe, explainable AI with provenance capabilities that advance human health

Global Leadership & Partnerships

Convening the worldwide AI+health community to align standards, shape policy, and accelerate responsible innovation

AI Innovation Lab

Incubating AI solutions to enhance member experiences, accelerate standards development, and pioneer new ways of working

Community Excellence

Empowering implementers with tools and best practices for responsible, standards-powered AI deployment

06. Integrating the Healthcare Enterprise

IHE



Integrating
the Healthcare
Enterprise

Member Login

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IHE Domains

IHE Worldwide

About IHE

Making
Healthcare
Interoperable



06. Integrating the Healthcare Enterprise

IHE

<u>IHE Domains</u>
Cardiology
Dental
Devices
Endoscopy
Eye Care
IT Infrastructure
Patient Care Coordination
Pathology and Laboratory Medicine
Pharmacy
Quality, Research and Public Health
Radiation Oncology
Radiology

IHE Domains

IHE is organized by clinical and operational domains. In each domain users with clinical and operational experience identify integration and information sharing priorities and vendors of relevant information systems develop consensus, standards-based solutions to address them.

Each domain includes a technical committee, whose primary task is developing and documenting the solutions (known as profiles), and a planning committee, whose primary tasks are long-term scope planning and organizing deployment activities (such as testing events and educational programs). Each domain develops and maintains its own set of [Technical Framework](#) documents. Coordination among domains is the responsibility of the Domain Coordination Committee, comprising representatives from each of the domain planning and technical committees.

The IHE domains are listed below with links to domain-specific information pages:

- [Devices](#)
- [Endoscopy](#)
- [IT Infrastructure](#)
- [Pathology and Laboratory Medicine](#)
- [Patient Care Coordination](#)
- [Pharmacy](#)
- [Quality, Research and Public Health](#)
- [Radiation Oncology](#)
- [Radiology](#)

06. Integrating the Healthcare Enterprise

IHE

Resources

IHE has created a set of information resources and tools for vendors and users of healthcare information systems to help them integrate systems and share information more effectively.

Integration Profiles

Understand the standards-based integration capabilities defined in the IHE Technical Frameworks, in plain language.

User Handbooks

Learn how to use IHE to improve the way systems are selected, specified, purchased and deployed.

Case Studies

See projects that have made use of IHE to integrate systems within a healthcare institution.

Technical Frameworks

See detailed reference documents that guide systems developers and integrators in implementing standards.

Public Comment

View and submit comments on Technical Framework documents.

Webinars

View educational webinars to help your organization develop and implement HIT systems.

06. Integrating the Healthcare Enterprise

IHE

Testing

Connectathon

Take part in face-to-face interoperability testing events around the world.

Connectathon Results

See the results of Connectathon testing [here](#).

Product Registry

Create, manage and publish Integration Statements, or browse for these systems.

Conformity Assessment

Learn more about IHE programs in accredited conformity assessment.

Testing Tools

Download the software tools required for baseline testing as your work to implement the IHE Technical Framework.

06. Integrating the Healthcare Enterprise

IHE

- [SVS] [Sharing Value Sets](#) distributes centrally-managed, common, uniform nomenclatures.
- [XPID] [XAD-PID Change Management](#) updates the relationship between XDS Affinity Domain patient identifiers and other patient identifiers.
- [APPC] [Advanced Patient Privacy Consents](#) defines a structural representation of a patient-specific Privacy Policy.
- [BasicAudit] [Basic AuditEvent Log Patterns \(BALP\)](#) defines some basic and reusable AuditEvent patterns. 
- [CSD] [Care Services Discovery](#) queries directories containing data about organizations, facilities, services, and providers.
- [XCF] [Cross Community Fetch](#) fetches a single or small pre-negotiated list of documents from another community.
- [XCDR] [Cross-Community Document Reliable Interchange \(XCDR\)](#) pushes documents to systems in another community.
- [DEN] [Document Encryption](#) encrypts individual documents and portable media content.
- [DSUBm] [Document Metadata Subscription for Mobile \(DSUBm\)](#) defines how HL7 FHIR is used for subscription and notification for IHE Document Sharing Health Information Exchange. 
- [HPD] [Healthcare Provider Directory](#) supports discovery and management of healthcare provider information, both individual and organizational, in a directory structure.
- [IUA] [Internet User Authorization](#) provides user authorization for RESTful interfaces. 
- [mACM] [Mobile Alert Communication Management\(mACM\)](#) provides a RESTful interface to an alert infrastructure. 
- [MHD] [Mobile access to Health Documents](#) provides a RESTful interface to Document Sharing including XDS. 
- [MHDS] [Mobile Health Document Sharing \(MHDS\)](#) provides a Document Sharing using only FHIR. 
- [mCSD] [Mobile Care Services Discovery \(mCSD\)](#) provides a RESTful interface to discover Care Services: Organization, Location, Practitioner, and Health Services. 
- [mXDE] [Mobile Cross-Enterprise Document Data Element Extraction](#) accesses data elements extracted from shared structured documents. 
- [NPFS] [Non-patient File Sharing \(NPFS\)](#) provides a RESTful interface enable sharing of non-patient files such as clinical workflow definitions, domain policies, and stylesheets. 
- [PCF] [Privacy Consent on FHIR \(PCF\)](#) provides support for patient privacy consents and access control where a FHIR API is used to access Document Sharing Health Information Exchanges. 
- [PDQm] [Patient Demographics Query for Mobile \(PDQm\)](#) provides a RESTful interface to a patient demographics supplier. 
- [PIXm] [Patient Identifier Cross-Reference for Mobile \(PIXm\)](#) provides a RESTful interface to patient identifier cross-references. 

06. Integrating the Healthcare Enterprise

IHE

1. AI Results (AIR) Profile

- Domain: Radiology (RAD)
- Purpose: Standardizes how AI algorithm results (e.g., image annotations, measurements, detection findings) are communicated and integrated into radiology workflows.
- Details: Defines FHIR/DICOM structures to represent AI results so they can be viewed in PACS, RIS, or EHR. Helps make AI findings interoperable and visible in the same environment as human interpretations.

2. AI Workflow for Imaging (AIW-I)

- Domain: Radiology / IT Infrastructure
- Purpose: Describes workflow integration for AI algorithms in imaging.
- Details: Handles orchestration—how images are routed to AI engines, how AI jobs are triggered, and how results are linked back to patient exams.
- Key Point: Ensures AI systems fit seamlessly into radiology workflows without disrupting existing clinical systems.

3. AI Workflow for Non-Imaging Data (AIW-NI)

- Domain: IT Infrastructure
- Purpose: Extends AIW concepts beyond imaging—for clinical and laboratory data.
- Details: Focused on sending structured clinical data (FHIR-based) to AI engines for analysis and receiving back predictions, scores, or decision-support recommendations.

06. Integrating the Healthcare Enterprise

IHE

4. Cross-Enterprise Document Sharing for AI (XDS-I + AI use cases)

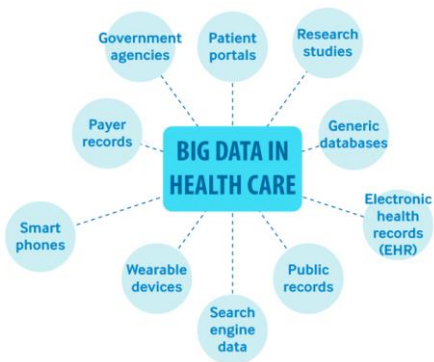
- Domain: IT Infrastructure
- Purpose: While XDS-I was not originally AI-specific, it supports cross-enterprise sharing of imaging studies and AI-derived results.
- Details: Often used in AI research networks or federated learning setups where annotated imaging data is shared.

07. Toward AI

| How to prepare?

DATA Quality

- 양질의 데이터 확보
- 비정형 데이터의 정형화
- 상호운용성의 규범화(KR Core, PGHD...)
- 데이터 품질 및 레이블링



그림출처: 2023 Quantiphi

Governance

- 임상 유효성 실사용 증거(RWE)
- 책임 및 추적성(Audit 등)
- 시험 인증(Conformity Assessment) 체계
- 수가 체계 등
- AI 윤리 문제



그림출처: A Comprehensive Guide to Stakeholder Analysis in AI Governance (Part 1)

Security & Privacy | Safety

- 동의 권리
- 데이터 품질
- 프라이버시 (RBAC, ABAC 등의 표준 정립)
- 의료시스템의 위험관리(AI 기반)



그림출처: Traverse Legal, - May 28, 2024 - Artificial Intelligence, Privacy

GISC 2025

Global ICT Standards Conference 2025

- 감사합니다 -

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ICT Standards and Intellectual Property:
AI for All