



Eco-system for disease specific clinical workflow
and data integration

DELIVERABLE D7.8

Public report of projects' results



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ITEA Roadmap challenge:

Smart Health

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HISTORY

| Document version # | Date | Remarks |
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| V0.1 | 15-01-2026 | Starting version, template |
| V0.2 | 02-02-2026 | Compilation of first input by partners |
| V0.3 | 10-02-2026 | Second compilation of input by partners |
| V1.0 | 23/02/2026 | Final version |

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1 Introduction

In this deliverable a public, non-confidential summary of results from the ITEA project *SYMPHONY – Eco-system for disease-specific clinical workflow and data integration* is provided.

The deliverable consolidates information from the project's public pages and the consortium's deliverables, while abstracting or omitting any sensitive details.

For more background, see the public project pages: the ITEA entry and the project public website.

SYMPHONY Public website: <https://symphony-iteaproject.eu/>

Executive overview

SYMPHONY's goal is to enable vendor-agnostic, disease-centric healthcare IT ecosystems so that clinical teams can access the right data at the right time across a patient's pathway. The project focuses on open architectures, standard-based data exchange (e.g., HL7® FHIR®, DICOM, openEHR, IHE profiles), and pluggable applications and algorithms that integrate into routine workflows.

SYMPHONY prioritised four representative use cases—prostate cancer, aortic aneurysm, atrial fibrillation, and multiple sclerosis—to ensure that solutions were clinically grounded and transferrable.

2 Architecture & platform building blocks

Reference architecture (WP2)

- **D2.1 — Reference architecture for an open eco-system (Public):** Defines the target architecture and key drivers (openness, lifecycle decoupling, usability), with an emphasis on **interoperability** and **extensibility** across vendors and sites.
- **D2.4 — Data access, ingestion, and processing architecture:** Describes strategies for **secure, multi-vendor, multi-modal, and multi-origin data access**, detailing the role of standards and core services for ingestion and processing.
- **D2.5 — Open algorithm & application ecosystem architecture:** Specifies how **pluggable apps and AI components** integrate through documented interfaces and API contracts, referencing the earlier public architecture and standardisation plans.

Public takeaway

SYMPHONY provides a standards-first blueprint for integrating clinical systems, algorithms, and apps so that care teams can orchestrate disease-specific workflows without lock-in.

3 Interoperability standards & open APIs

- **D5.3 — Final report for Standards and Open API (Public):** Catalogues **which standards were adopted** (e.g., FHIR resources/profiles, DICOM services, openEHR archetypes, IHE profiles such as AIR, IID), how they were used in SYMPHONY, security/access-control considerations, and lessons learned when aligning clinical, legal, and technical standards.

Public takeaway

The project validated that combining established health standards with clear API design is practical for cross-vendor ecosystems, while also documenting typical integration challenges and mitigations.

4 Privacy, security & compliance

- **D5.2 / D5.5 — Data privacy and security tools:** Defines **security and privacy requirements**, a **security architecture**, and **tooling patterns** (e.g., identity, access control, data protection) applied consistently across the four use cases. The final report synthesises approaches for **privacy-by-design** integration in a distributed ecosystem. *(Technical particulars and site-specific details remain confidential; this summary reflects only the general approach.)*

Public takeaway

SYMPHONY operationalised **privacy-preserving data flows** and **defence-in-depth** controls within a multi-party clinical setting, aligned with the standards stack described above.

5 Clinical pathway modelling & workflow enablement

- **D3.1 — Clinical pathway inventory:** Documents current pathways and information needs for the four use cases, providing the **clinical backbone** against which the ecosystem components are designed.
- **D4.1 — Inventory of workflow applications:** Identifies common workflow capabilities (e.g., collaborative workspaces, risk identification, holistic assessments) needed to support disease-specific MDT processes.
- **D4.4 — Algorithms for workflow decision support and analytics (Public):** Summarises the portfolio of **AI models/algorithms/tools** that can be plugged into SYMPHONY workflows (e.g., decision support in oncology or cardiovascular care), including principles for integration and FHIR-aligned I/O where applicable. *(Algorithmic details and datasets remain abstracted in this public summary.)*

Public takeaway

By **starting from the clinical pathways**, SYMPHONY ensures that interoperability and AI are **purpose-built for MDT decision-making**, not isolated pilots.

6 Demonstrators, validation & outcomes

- Use-case demonstrators & validation (**D1.4 – in progress at time of extract**): The project defines validation aims and criteria per use case to demonstrate end-to-end workflows (data ingress → orchestration → decision support → documentation), using standards and APIs described above. (*Validation plans are summarised at a high level here; site-specific evaluation artefacts and metrics remain confidential.*)
- **Project overview decks:** Public-oriented overviews describe targeted outcomes per use case (e.g., streamlined MDTs, reduction of manual paperwork, patient-centric data views), and the targeted innovations (comprehensive interoperability; guideline-driven pathway models; open, pluggable ecosystems).

Public takeaway

The demonstrators show that pluggable, standard-based components can support real clinical pathways and can be adapted across sites and vendors—an essential step towards scalable ecosystems.

7 Project governance, communication & dissemination

- **D7.1 — Project start-up meeting:** Confirms the project's launch events and partner engagement structure.
- **D7.2 — Communication portal:** Describes the Teams-based collaboration environment for secure consortium communication and document sharing.
- **D7.3 & D7.5 — Standardisation & dissemination plan (Public):** Outlines target standards bodies/forums, journals, and conferences for outreach, plus the approach to public deliverables and press/social media.
- **D7.4 — Public project website (Public):** Provides the URL and scope of the website used to disseminate public results and materials.

8 Consolidated deliverable landscape (public view)

A consolidated tracker lists the scope and public/confidential status of key outputs (e.g., D2.1, D4.4, D5.3 public; software artefacts and certain reports confidential). This helps stakeholders see what is publicly shareable and where to request further information.

9 SYMPHONY Key public contributions

1. **Open reference architecture** for disease-specific ecosystems that is **standards-first** and **vendor-agnostic**.
2. **Documented use** of **FHIR/DICOM/openEHR/IHE** and associated open API conventions to support **safe, secure data exchange**.
3. **Privacy & security patterns** suitable for **distributed clinical settings**, designed to integrate with the above standards and APIs.
4. **Clinically anchored pathway and workflow modelling**, ensuring AI and apps serve MDT decisions in real pathways.
5. **Pluggable AI & decision-support artefacts** that demonstrate how analytics can be integrated and governed in routine workflows.
6. A **public website and dissemination plan** to share results, publications, and standardisation activities with the wider community.

10 Where to learn more (public)

- **ITEA project page:** overview, high-level scope, selected public deliverables and news.
- **Project website:** updates, public artefacts, and contact information.

Note on confidentiality

Many SYMPHONY deliverables are **confidential** or include **site-specific** or **partner-specific** details. This public summary intentionally abstracts such information and only reflects content appropriate for public dissemination.