From Screenathon to Landscape Insights

Leveraging Expert Knowledge for AI-aided Information Synthesising

Elena Jalsovec[1,2], Justine van der Feen[1], Jim Ingebretsen Carlson[1], Ilja Kocken[1], Rutger Neeleman[1,2], Jonathan de Bruin[1,2], Frans Folkvord[1], Rens van de Schoot[1,2]

[1] FwdFaster Research B.V., Utrecht · [2] Utrecht University

FACTS & FIGURES

Start date	**1 February 2026**
End date	**31 July 2029**
Duration	**42 months**
IHI JU funding	**€8,942,328**
Industry contribution	**€7,140,617**
Contributing partners	**€ 176,000**
Total cost	**€16,258,945**
Consortium	**24 partners**
Coordinator	**European Dynamics Luxembourg SA**
Grant agreement	**No. 101253520**
More information	**www.path-ihi.eu**

CHALLENGE

Project goal: Safe & effective **AI integration** into **cancer care**

→ Interoperable & privacy-preserving **digital platform**

→ **Landscape analysis** as a basis, informing all consequent engineering work

→ **6-dimensional analysis** of **barriers, enablers & gaps** of AI tool integration: **legal, ethical, technical, social, economic and care delivery**

APPROACH & METHODOLOGY

Applying methodologies from previous projects: Screenathon

IMPROVE H@H

BEFORE

- **TREX-COMET:** cornerstone records by experts, double-verified
- **69,073 identified** grey literature and policy records

DURING

- **Calibration:** live inclusion criteria alignment
- **ASReview**: active learning prioritisation
- **Screened 12,418 records** in the span of a week

AFTER

- **Noisy label filter (NLF) event:** quality check for potentially missed records
- **Knowledge Warehouse:** Overview of **351** relevant records

AI-aided, validated extraction & synthesis

- **Prompt engineering**: structured output format and variable codebook
- **LLM selection**: document processing in Gemini Notebook
- **Validation**: manually extracted benchmarks, LMM-as-a-judge, random checks

RESULTS

Preliminary findings per dimension

across 351 policies, strategies & initiatives

	Barrier	Enabler	Gap
Legal	Cross-border rules differences	EHDs harmonisation, EU AI Act	No liability framework
Ethical	Unrepresentative data (bias)	Equity by design, EU AI Act	No certification or oversight body for failures
Technical	Outdated hospital IT infrastructure	HL7/FHIR DICOM	No post-deployment drift monitoring
Social	Low trust & digitial literacy	AI as co-pilot framing, patient navigators	Literacy divide persists
Economic	Fee-for-service model ignores impact AI	Shared procurement	No empirical ROI evidence
Care Delivery	Fragmented UX adds to workload	Ambient scribing and dictation	Pilot-to-practice bottleneck

VALUE OF IHI COLLABORATION

Learning lessons across IHI projects

Integrating the methodology and lessons learned from previous projects such as **IMPROVE** and **H@H** and applying them in **PATH** and (soon) **COMPASS**.

IMPROVE H@H PATH Patient AI Treatment Hub Compass

Consensus & community

- Domain experts, researchers & industry **align** on project focus
- Engineering builds on both **public and private** sector needs
- Create space for **future collaboration** & **interdisciplinary innovation** with experts at the top of their field



CAREER IMPACT

International management, network expansion & skills

- Establishing qualities to **drive cross-sector, EU-wide** events, pilot studies and responsible research initiatives
- Mastering **cutting-edge research methodologies**, such as Vectorised Search, AI-aided screening and LLM-based data extraction

Seeing expert knowledge applied practically

- Witnessing **live discussions** between public- and private-domain **experts** about project goals and priorities, especially during the **calibration** before screening
- **Working closely with experts** from different disciplines and synthesising their input into one **big relevant knowledge base**

PATH is funded by the Innovative Health Initiative Joint Undertaking (IHI JU) under grant agreement No 101253520. The JU receives support from the European Union's Horizon Europe research and innovation programme and COCIR, EFPIA, EuropaBio, MedTech Europe, Vaccines Europe.

COCIR Advancing Healthcare · efpia · EuropaBio · MedTech Europe from diagnosis to cure · Vaccines Europe · Co-funded by the European Union

This project is supported by the Innovative Health Initiative Joint Undertaking and its members.