ChatMED Quarterly

Infrastructure, Industry and the European Network

Funded by the European Union

Edition 06 | Q6 (December 2025 – February 2026)

If Q5 was about expanding the network, Q6 was about giving it foundations. Over the winter the ChatMED ecosystem acquired its own computing gateway with the launch of the Vezilka AI Antenna, converted four industry conversations into signed partnerships with defined technical agendas, and carried its science into two of Europe's largest medical research institutions in Paris. The quarter also closed the publication cycle of our second project year, with new journal articles on multi-agent drug discovery and explainable AI, the full release of the IS2025 papers, and the opening of a ChatMED-organised Special Issue.

Vezilka: the AI Antenna Goes Live

December 2025 | From EU Acceptance to Operating Infrastructure

The AI Antenna announced as accepted in Q5 now has a name and a mandate. Vezilka has been officially launched as a node of the Greek Pharos AI Factory, within the European Union's AI Factories and Antennas initiative funded by EuroHPC JU.

> **What it changes:**
> Vezilka gives researchers and innovators in North Macedonia secure access to AI resources and supercomputers hosted in Europe's main AI Factories, removing the need to build massive local infrastructure first.

> **Cross-sectoral scope:**
> Beyond health, the Antenna targets energy, culture and language — including a Macedonian language model — agriculture, and digital public administration, while building a skilled national AI workforce.

> **Capacity building, proven:**
> The Vezilka proposal was authored by ChatMED team member prof. Dimitar Trajanov. The project's objective of equipping researchers in Widening countries to lead European initiatives is no longer a plan on paper. For ChatMED, Vezilka becomes the deployment engine that can carry our medical AI pilots from the lab into national health infrastructure.

Four Industry Partnerships, Four Technical Agendas

December 2025 | Institutionalising Innovation

The Memorandums signed with our industry partners have been translated into concrete work packages. Each partnership answers a different question about what it takes to move a generative AI model into a hospital.

Sorsix — the route to national deployment.

As vendor of the National Health Information System, Sorsix runs the digital backbone of primary, secondary and tertiary care in North Macedonia and operates in several other countries. Together we are exploring how ChatMED models can be embedded in the Pinga system, so that diagnosis predictions and decision support reach clinicians inside the electronic health record they already use.

Fingerprint Diagnostics — specialised domain knowledge.

The company's methodology for early cancer detection from blood samples brings domain expertise and unique datasets that help our models recognise diagnostic patterns that general-purpose systems miss.

Bioengineering — the microbiology layer.

Laboratory-grade insight so that our multi-agent systems can reason accurately about infectious disease and laboratory results.

Ekonet (Kontron Group) — infrastructure and the edge.

Work on embedded devices that let clinicians use ChatMED on the fly, including speech-to-text and recommendation models running inside secure medical hardware without constant connectivity.

Paris: Building Bridges with AP-HP and Inserm

4 December 2025 | European Clinical Networks

At the invitation of AP-HP (Assistance Publique – Hôpitaux de Paris) and Inserm, the ChatMED team travelled to Paris for a networking meeting with two of the largest actors in European medical research. Our Prompt-to-Pill work was presented there and attracted strong interest from participating experts, opening concrete avenues for future collaboration.

Closer to home, the project remained present in national health policy debate. The coordinator joined the panel on recommendations for the year ahead at the 4th AmCham North Macedonia Healthcare Conference, where the discussion centred on the shift from a reactive to a proactive healthcare system. ChatMED was also presented as a panellist contribution at the Twinning Info Day hosted by the Faculty of Electronic Engineering in Niš, alongside eleven other Twinning projects at different stages of implementation.

Research Excellence & Publication Success

Academic Impact | Peer-Reviewed Leadership

Prompt-to-Pill (Bioinformatics Advances).

A multi-agent architecture that treats drug development as one end-to-end workflow — discovery, preclinical evaluation and clinical simulation — coordinated by a central orchestrator, and demonstrated on the DPP4 target. doi.org/10.1093/bioadv/vbaf323

Topological Data Analysis for Explainable LLMs (Mathematics, MDPI).

A scoping review of 26 studies introducing the first taxonomy that organises LLM interpretability research along topological and algebraic axes, and showing that robustness failures carry a measurable geometric signature.

AI Act Compliance within MyHealth@EU (JMIR).

Our tutorial paper on the dual-compliance challenge facing European developers of AI-based clinical decision support was published and explained for a wider audience on the project blog.

IS2025 proceedings released.

All five consortium papers from the 28th Information Society Multiconference are now open in the Knowledge Repository, including the Best Paper Award work from TU Graz on extracting formal knowledge representations from medical questionnaires, the M-LEAF multidimensional evaluation framework, the privacy-sensitive LLM study behind the zero-egress HomeDOCtor architecture, the University Clinical Center Niš study on epilepsy questions, and the analysis of IQ progression in large language models.

Editorial leadership: a ChatMED Special Issue.

"Machine Learning and Computational Methods for Smart Healthcare Applications" is now open for submissions in Future Internet (MDPI, JCR Q2, IF 3.6), organised within the ChatMED framework. Submissions close on 20 November 2026.

Art, AI and Cognitive Wellbeing

December 2025 | Public Engagement

ChatMED was conceived around cognitive wellbeing, not only around data points and diagnostics. The quarter's retrospective on our first art exhibition revisited that founding idea and set the direction for the second edition planned for 2026: art as a way of asking what AI is doing to the human mind, in parallel with the science of what it can do for the clinic.

Q6 Progress at a Glance

Infrastructure win: Vezilka AI Antenna officially launched as a node of the Pharos AI Factory under EuroHPC JU.

Industrial backbone: Four industry partnerships formalised with defined technical agendas — Sorsix, Fingerprint Diagnostics, Bioengineering, Ekonet.

Scientific authority: Two new journal articles plus the full release of five IS2025 papers in the Knowledge Repository.

Editorial leadership: ChatMED Special Issue opened in Future Internet (MDPI), deadline 20 November 2026.

European networking: ChatMED hosted in Paris by AP-HP and Inserm; national presence at the AmCham Healthcare Conference and the Niš Twinning Info Day.

A Message from the Project Coordinator

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> Q6 gave ChatMED its foundations. With Vezilka we have computing power, with our four industry partners we have a route into real clinical systems, and with Paris we have proof that a Widening-country consortium can be invited to the table by Europe's largest medical research institutions. The task for the year ahead is to connect these three things.
>
> — Dr. Monika Simjanoska Misheva, Project Coordinator

Follow our progress

- www.chatmed-project.eu
- Zenodo Community
- GitHub
- X (Twitter)
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- Threads

Project Partners

"Ss. Cyril and Methodius" University in Skopje
FACULTY OF COMPUTER SCIENCE AND ENGINEERING

Jožef Stefan Institute

Univerzitet u Nišu
MEDICINSKI FAKULTET

TU Graz