

Newsletter #10

July 2026

AI-PROGNOSIS

Towards Parkinson's risk assessment and prognosis through AI



Newsletter
highlights

Scientific
publications

Public
deliverables

Knowledge
Base

Events

Learn more on www.ai-prognosis.eu



Funded by
the European Union

AI-PROGNOSIS receives funding from the European Union under Grant Agreement No. 101080581.

Scientific Publications

Recent research outputs from the AI-PROGNOSIS consortium

Comparing Stakeholders' Perspectives on Parkinson Disease Management and Digital Technologies: Exploratory International Survey

Luckhaus JL, et al. JMIR Form Res 2026; 10:e90377
doi: [10.2196/90377](https://doi.org/10.2196/90377)

[Read the full publication](#)

Clinical AI is Not (Yet) Trustworthy-But It Could Be

Saad A, et al. J Med Internet Res 2026; 28:e85433
doi: [10.2196/85433](https://doi.org/10.2196/85433)

[Read the full publication](#)

A Qualitative Exploration of Ethical Aspects of Using AI in Parkinson Disease: Patient Panel Study

Luckhaus JL, et al. JMIR AI 2026; 5:e74144
doi: [10.2196/74144](https://doi.org/10.2196/74144)

[Read the full publication](#)

"ChatGPT knows my Parkinson's": Perspectives of people with Parkinson's disease on use of generative AI

Luckhaus JL, et al. Journal of Parkinson's Disease 2026; 16(4):782-787
doi: [10.1177/1877718X261445949](https://doi.org/10.1177/1877718X261445949)

[Read the full publication](#)

Public deliverables

Updated report on domain review and datasets

[Read here](#)

Updated report on user research and co-creation

[Read here](#)

Trustworthy AI development and evaluation framework (updated version)

[Read here](#)

Final report on digital biomarkers for PD

[Read here](#)

Final report on predictive modelling for PD

[Read here](#)

The AI-PROGNOSIS digital health ecosystem (MVP)

[Read here](#)

Report on the status of posting results (dBM-DEV study)

[Read here](#)

Study initiation package (AI-PMP study)

[Read here](#)

Midterm report on project visibility and educational material

[Read here](#)

Knowledge Base

Educational resources from the AI-PROGNOSIS Learning Hub

Raising awareness about Parkinson's disease and the role of artificial intelligence in its diagnosis and care.



Quizzes

Test your knowledge about Parkinson's disease

AI and Predicting Parkinson's Disease Progression

Take quiz

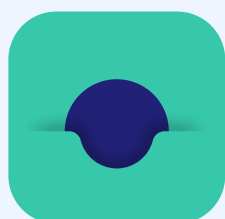
AI and Early Detection of Parkinson's

Take quiz

Living with Parkinson's Disease

Take quiz

See all quizzes



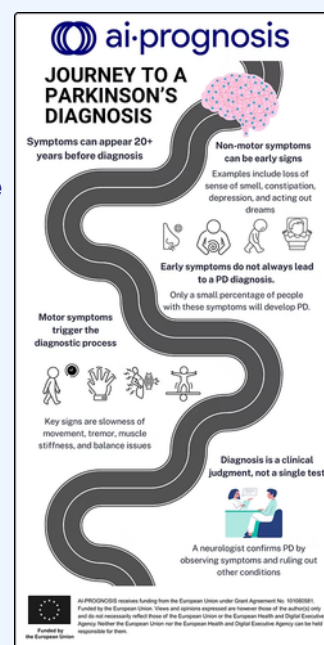
Infographics

Visual guides to Parkinson's disease and care

Journey to a Parkinson's diagnosis

How symptoms progress and a diagnosis is reached

Explore infographic



Events

Recent outreach and dissemination activities

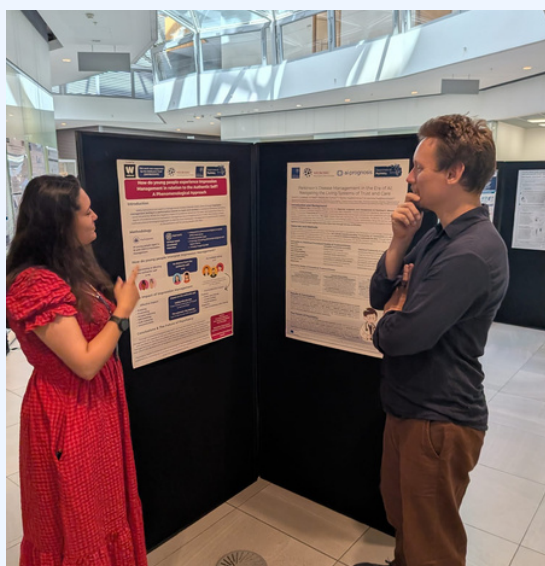
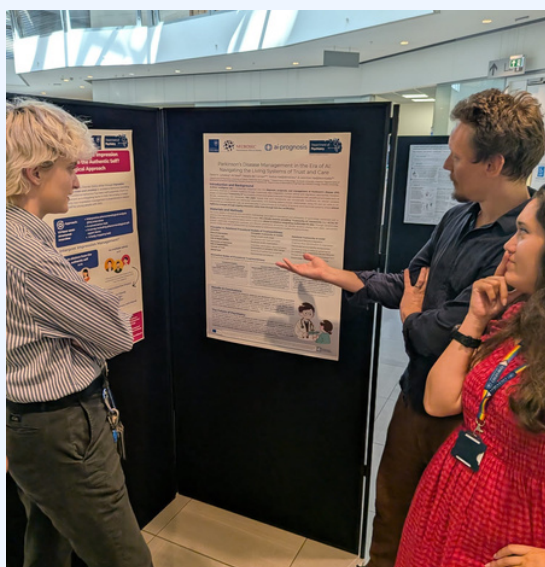
Future of Psychiatry

8 July 2026

Dr David Lyreskog presented the poster "Parkinson's Disease Management in the Era of AI: Navigating the Living Systems of Trust and Care" at the **"Future of Psychiatry"** event organised by the Department of Psychiatry, University of Oxford.

The paper positions AI-PROGNOSIS as an example of how Trustworthy AI can be re-imagined and systematically implemented in order to better meet the needs and values of key stakeholders.

[Read more](#)








Parkinson's Disease Management in the Era of AI: Navigating the Living Systems of Trust and Care

David M. Lyreskog*, Ali Saad**, Natalia del Campo***, Stelios Hadjilimitriou*, & Leontios Hadjileontiadis**

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Introduction and Background

Artificial Intelligence (AI) is increasingly integrated into the **diagnosis, prognosis, and management of Parkinson's disease (PD)**, promising advances in precision medicine through multimodal data integration. Current ethical and regulatory approaches, however, largely conceptualise **"Trustworthy AI"** as a property of technical systems secured through compliance with predefined principles such as fairness, transparency, and robustness. **This paper** argues that such frameworks are conceptually insufficient for clinical contexts characterised by longitudinal care, distributed responsibility, and evolving patient-clinician relationships. Using PD and our work in AI-PROGNOSIS as a paradigmatic case, we reconceptualise Trustworthiness as a property of dynamic socio-technical systems, where **ethical legitimacy emerges through ongoing interaction rather than through tick-box certification**.

Materials and Methods

The study adopts a conceptual and normative methodology grounded in neuroethics and philosophy of technology, combined with a practice-informed analysis of the AI-PROGNOSIS project. **We critically examine prevailing "Trustworthy AI" frameworks** (e.g., ALTAI, EU AI Act) and analyse their implementation within a real-world **clinical AI initiative integrating multimodal PD data**. Through iterative case analysis, stakeholder engagement practices, and lifecycle governance structures, we identify tensions arising from static, tool-centric ethical models, and ways to address them by instead applying relational procedural models of trustworthiness.

Principlist vs. Relational Procedural Models of Trustworthiness	Principlist Trustworthy AI models	Relational Trustworthy AI model
Dimension	Design and/or audit stage	Ongoing value identification & negotiation
Time of intervention	Compliance with fixed principles	Continuous lifecycle integration
Normative Logic	Developer and/or organisation	Monitoring loops & reflexive governance
Unit of Responsibility	Checklists, certification, documentation	Co-creation and -adaptation across lifecycle
Mechanism of Assurance	Consultation or validation after design	Process of sustained, relational engagement
Role of Stakeholders	Outcome of verified tool properties	Stakeholder trust cultivation over time
Concept of Trust	Demonstrate compliance	
Ethical Goal		

Normative Nodes of Procedural Trustworthiness

Building on these insights, we develop a normative framework of relational and procedural trustworthiness, articulated through three operational nodes.

Contextual Integrity

Trustworthiness depends on **maintaining appropriate flows of information and responsibility within specific care contexts**. Data governance, model transparency, and explanation strategies must be calibrated to clinical purpose and patient vulnerability rather than to generic benchmarks.

Dynamic Responsibility

As AI models are retrained, redeployed, or reinterpreted by clinicians, responsibilities should migrate accordingly. Version control, audit trails, and documentation pipelines (such as MFlow and TRIPPOD-AI reporting) exemplify tools that can help **operationalising** this dynamic form of responsibility and corresponding accountability, but more needs to be done in this area.

Participatory Reflexivity

Ethical governance includes continual participation by those affected by the practice in question (patients, carers, clinicians, developers) **allowing shifting experiences of benefit, harm, or capacity to be registered and addressed**. Co-design sessions, stakeholder workshops, and living-lab-type evaluations can help translate abstract commitments into co-deliberation and support responsibility over time.

Together, these nodes triangulate Trustworthy AI as an ongoing socio-technical practice. Crucially, ethics is not external to engineering, medicine, or care, but constitutive of it.

Results & Conclusions

Existing frameworks fail to capture the temporal, relational, and distributed nature of trust in AI-enabled care systems. Empirical and conceptual analysis of AI-PROGNOSIS reveals persistent ethical dissonance, including responsibility diffusion, temporal model drift, and context-sensitive trade-offs that cannot be resolved through checklist compliance. **We propose a shift toward a relational procedural ethics, where Trustworthiness is continuously enacted** through lifecycle-embedded governance, stakeholder co-creation, and adaptive monitoring infrastructures. This can be enacted through **three operational nodes**: Contextual Integrity, Dynamic Responsibility, and Participatory Reflexivity. This reconceptualisation reframes ethical evaluation from static assurance to dynamic system maintenance.

The Future of Psychiatry

Psychiatry is entering an era in which **AI will become an active participant in care** rather than just a clinical tool. **The central challenge** is therefore no longer building more intelligent algorithms, but **designing systems that remain Trustworthy as they evolve within complex healthcare environments**. In such environments, Trustworthiness needs to be understood as a dynamic, relational property of the living systems of care, maintained through continuous ethical governance, stakeholder participation, and adaptive responsibility monitoring and assurance. This shift in understanding lays the **foundation for AI that enhances the trust, collaboration, and therapeutic relationships at the heart of the future of psychiatric care**.



DSAI 2026

23-25 June 2026

AI-PROGNOSIS was represented at **DSAI 2026, the 12th International Conference on Software Development and Technologies for Enhancing Accessibility and Fighting Info-exclusion**, by the team from the Signal Processing & Biomedical Technology Unit - AUTH.

Project coordinator Prof. L. Hadjileontiadis moderated the Opening Panel "Translational Research in Rehabilitation, Digital Inclusiveness and Education in the Era of AI" and presented the paper "Multimodal Digital Phenotyping in Psoriatic Arthritis, Parkinson's Disease, and Breast Cancer: Tri-project Insights from iPROLEPSIS, AI-PROGNOSIS, and REBECCA".

Prof. L. Hadjileontiadis, Scientific and Technical manager S. Hadjidimitriou and V. Charisis co-chaired the Special Track "Digital Biomarkers' Potentialities: From Digital Phenotyping to Systemic Thinking in Health and Education," and S. Hadjidimitriou also chaired the session "Artificial Intelligence and Learning Support".

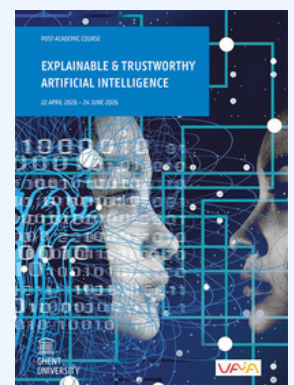


UGent/VAIA course on Explainable and Trustworthy AI

24 June 2026

On 24 June 2026, AI-PROGNOSIS was presented as part of the **online course "Explainable & Trustworthy Artificial Intelligence"**, organised by UGent - UGent Academie voor Ingenieurs and VAIA - Flanders AI Academy.

Ali Saad from AINIGMA Technologies contributed to the session, which focused on practical use cases, and presented the AI-PROGNOSIS Trustworthy AI development and evaluation framework as a concrete healthcare AI use case. The presentation highlighted how trustworthy AI principles can be applied in practice to support the development and evaluation of healthcare AI solutions.



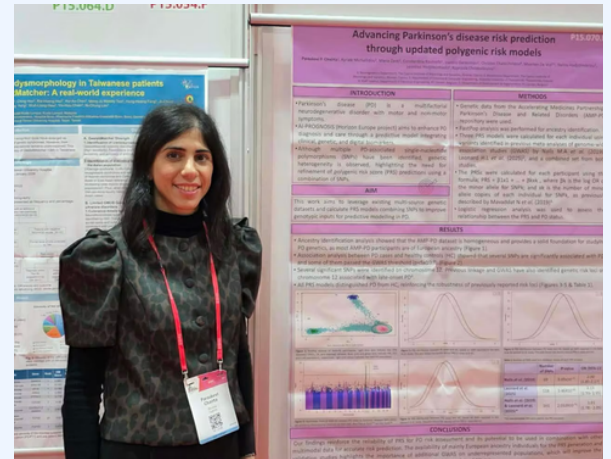
ESHG 2026

13-16 June 2026

The AI-PROGNOSIS project was presented at the European Human Genetics Conference (ESHG), held in Gothenburg, Sweden, from 13-16 June 2026. Paraskevi Chairta from the Cyprus Institute of Neurology and Genetics (CING) presented the poster "Advancing Parkinson's Disease Risk Prediction Through Updated Polygenic Risk Models".

The poster focused on Parkinson's disease risk prediction using updated polygenic risk score (PRS) models. PRS are based on multiple genetic variants and are used to assess genetic risk. For this work, genetic data from the AMP-PD repository were analysed.

Three PRS were calculated per individual based on known Parkinson's-associated genetic variants. All three distinguished Parkinson's disease cases from healthy controls, with a slightly stronger effect for the PRS incorporating the largest number of variants.



[Read more](#)

AI-PROGNOSIS Plenary Meeting 7

4-5 June 2026

The AI-PROGNOSIS consortium held its 7th Plenary Meeting on 4-5 June 2026 in Athens, Greece, hosted by project partner Netcompany. Partners reviewed the project's latest progress and aligned on priorities for the coming months.



Over two days, the consortium discussed updates across all active areas of the project – from data harmonisation and platform development to clinical study recruitment, digital biomarker research, and dissemination and communication activities. Progress on exploitation and regulatory planning was also presented.

An External Expert Advisory Board (EEAB) session was held, where members reviewed key research outcomes and provided scientific and strategic feedback.

Aristotle Innovation Forum 2026

18-22 May 2026

AI-PROGNOSIS participated in the **Aristotle Innovation Forum 2026**, held in Thessaloniki, Greece, from 18-22 May 2026. This year's Forum, themed "Aristotle Meets AI", focused on innovation, technology, and artificial intelligence, bringing together the academic community and the general public.

AI-PROGNOSIS team members Ioannis Gerasimou, Scientific and Technical manager Stelios Hadjidimitriou, and Project Coordinator Prof. Leontios Hadjileontiadis, from the Signal Processing & Biomedical Technology Unit - AUTH communicated the project and its objectives and demonstrated the project's prototype AI tools for Parkinson's screening and care, including the mAI-Care app for persons with Parkinson's and the mAI-Insights dashboard for healthcare professionals.



Vitalis 2026

4-7 May 2026



AI-PROGNOSIS was presented at **Vitalis 2026**, the largest medtech and eHealth conference and exhibition in the Nordic region, held on 4-7 May 2026 with 7,000 participants. The presentation, titled "Balancing hope and harm: A qualitative exploration of ethical aspects of using AI in Parkinson's Disease", was delivered by AI-PROGNOSIS project partner Uppsala University.

It was based on the recent publication "A Qualitative Exploration of Ethical Aspects of Using AI in Parkinson Disease: Patient Panel Study".

As rates of Parkinson's disease continue to rise, so does interest in using predictive artificial intelligence to support care and self-care. The presentation explored how people with Parkinson's themselves feel about these technologies.

A+R Expo 2026

25-27 April 2026

At the **A+R Expo 2026**, held in Athens, Greece, from 25-27 April 2026, SquareDev presented the AI-PROGNOSIS project, outlining its main goals and current development progress. Visitors learned how the project uses AI to transform complex, multi-source data into meaningful and actionable insights through an integrated digital ecosystem.

SquareDev also showcased the three core applications developed for the project: mAI-Health, mAI-Care, and the mAI-Insights platform. The presentation gave attendees a clear view of how these tools work together as part of a unified solution, with a focus on the platform's architecture, evolution, and transition from concept to implementation.



Medtech Science & Innovation Day 2026

22 April 2026



On 22 April 2026, AI-PROGNOSIS research was presented at **Medtech Science & Innovation Day 2026**, organised by the Uppsala MedTech Science & Innovation Centre (MTSI) at the University Main Building in Uppsala, Sweden.

This year's event focused on "The shift towards a more preventive healthcare system – from healthcare needs to research and innovation in early diagnostics and Medtech". The conference brought together academic researchers, healthcare professionals, industry representatives, entrepreneurs, innovation support organisations, public sector actors and funding agencies to discuss how research and innovation can support more preventive, efficient and sustainable healthcare.

European OHDSI Symposium 2026

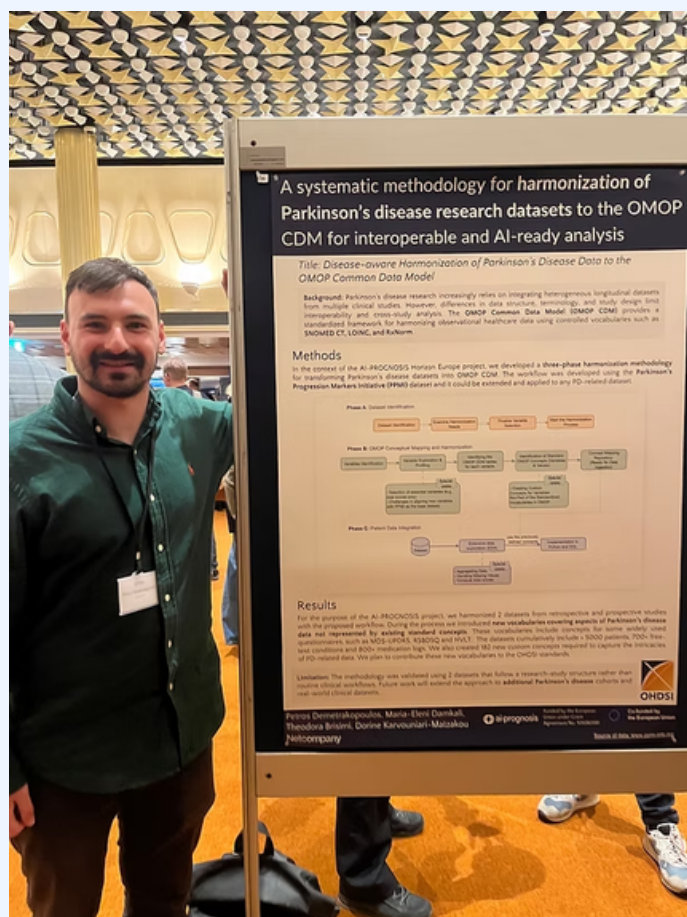
18-20 April 2026

At the European **OHDSI Symposium 2026** in Rotterdam, project partner NETCOMPANY presented a poster on disease-aware harmonisation of Parkinson's disease research data to the OMOP Common Data Model (OMOP CDM). The work was carried out in the context of the AI-PROGNOSIS project.

Parkinson's disease datasets present specific challenges, including study-defined events instead of real-world visits, free-text medical histories, heterogeneous medication descriptions, and disease-specific questionnaires that do not fit neatly into standard OMOP concepts.

To address these challenges, the team applied a systematic methodology for disease-aware harmonisation. The work included mapping more than 9,000 free-text medical condition entries to standardised SNOMED CT concepts, harmonising medication records into consistent RxNorm concepts, and defining custom OMOP concepts for Parkinson's disease-specific questionnaires used in clinical care.

The poster also highlighted a reusable and reproducible blueprint for future Parkinson's disease datasets across the OHDSI ecosystem.



Webinar on ethical aspects of predictive AI in Parkinson's disease

24 March 2026

As the prevalence of Parkinson's disease increases, so does the interest in using predictive artificial intelligence to support care and self-care. During a **webinar organised by Health Data Sweden** on 24 March 2026, Jamie Luckhaus, a PhD student within the AI-PROGNOSIS project, presented the qualitative study "Balancing Hope and Harm: A Qualitative Exploration of Ethical Aspects of using AI in Parkinson's Disease".

The study drew on reflections from the AI-PROGNOSIS patient panel and focused on the ethical dimensions of AI-based risk prediction, prognosis assessment, and tools supporting medication response.

The webinar highlighted key findings from the study and opened a multidisciplinary discussion on which ethical aspects may be specific to Parkinson's disease and which may also be relevant to other conditions.

[Read more](#)



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Balancing Hope and Harm: A Qualitative Exploration of Ethical Aspects of using AI in Parkinson's Disease

Jamie LUCKHAUS

^a Department of Women's and Children's Health, Participatory eHealth and Health Data, Uppsala University,
Uppsala, Sweden



Upcoming events

Webinar: Parkinson's Disease and Artificial Intelligence – What Does AI Mean for Us Living with Parkinson's?

26 August 2026

Artificial intelligence – or AI – is everywhere today. But what does it actually mean? And how can this new technology affect the lives of people with Parkinson's disease (PD) and their families?

Join AI-PROGNOSIS webinar that provides an accessible introduction to AI and how it can be applied in PD. You will get an overview of what AI is, what types exist, and how AI is already being used today to understand symptoms, track disease progression, and develop the treatments of the future.

Time: 26 August 2026, 18:00–19:30 CET

Location: Online via Zoom



Scan or [register here](#)

European Signal Processing Conference (EUSIPCO) 2026

31 August – 4 September 2026

EUSIPCO 2026 will be held in Bruges, Belgium, from 31 August to 4 September 2026, offering a rich technical programme and strong networking opportunities. AI-PROGNOSIS will contribute via the special session “Digital Biomarkers for Chronic Diseases”.

Event details: <https://eusipco2026.org/>

International Congress of Parkinson's Disease and Movement Disorders®

4–8 October 2026

AI-PROGNOSIS will be represented at this year's International Congress of Parkinson's Disease and Movement Disorders®, with five abstracts accepted for presentation, spanning AI-based prediction of Parkinson's disease risk and progression, digital phenotyping from wearable and smartphone sensor data, and detection of sleep-related symptoms – reflecting contributions from across the project's clinical and technical partners.

Event details: <https://www.mdscongress.org/>