



SmartAgeCare International Conference – Lodz 2026

Digital Health Competencies as empowerment for independence

Multiplier Event in SmartAgeCare Partnership

Under the Honorary Patronage of Marshal of the Łódź Voivodeship

Vanue: Regional Assembly of the Łódź Voivodeship

Official Representatives:

- Chairperson of the Regional Assembly of the Łódź Voivodeship, Ms. Małgorzata Grabarczyk
- Member of the Board of the Łódź Region, Mr. Artur Ostrowski
- President of European Federation of Older Persons - EURAG - Dirk Jarré

Guests/Participants: representatives of several organizations, institutions and groups from 11 countries: Austria, Czech Republic, Denmark, Germany, Greece, Israel, Kosovo, Lithuania, Netherlander, Poland



Summary and Recommendations

Conference overview

The SmartAgeCare International Conference (Łódź, 2026) concluded that digital tools can strengthen older people's health and independence only when paired with digital health literacy, critical thinking and human support. Speakers from Poland, Israel, Kosovo, Austria and Czech Rep. approached this from policy, education, clinical-prevention and community angles.

The organisers framed the event around digital health literacy (eHealth literacy). The WHO defines it as the ability to seek, find, understand and appraise health information from electronic sources, and to apply that knowledge to health problems. The WHO Global Strategy on Digital Health treats it as a "digital determinant of health".

The framing drew on the Transactional Model of eHealth Literacy, which has four levels:

- **Functional** – basic reading and writing skills for everyday situations.
- **Communicative** – the ability to exchange and manage health communication in online and multimedia settings.
- **Critical** – the ability to judge the credibility, relevance and risks of health information online.
- **Transactional** – the ability to apply online health knowledge in real-life contexts; the highest level, built on the other three.

Risk factors for low digital health literacy include age, ethnicity, socio-economic status and education, which can deepen health inequalities. The organisers noted that screening tools such as the eHealth Literacy Scale (eHEALS) are little known in Poland, and that a dedicated digital health literacy questionnaire should be developed and promoted.

This summary draws on the organisers' thematic notes, speaker abstracts, slide decks and supporting materials in Polish and English. Where a contribution existed in both languages, it is summarised once.

Presentations and contributions

Speaker	Organisation	Contribution
Artur Ostrowski	Board of the Łódź Voivodeship	Can we trust AI? Recognising and verifying AI hallucinations
Prof. Besnik Fetahu	IBCM College, Mitrovica (Kosovo)	Active ageing without infrastructure? Digital health literacy policy in the Western Balkans



Speaker	Organisation	Contribution
Moti Geller	Histadrut Pensioners' Union (Israel)	Self-management in health
Grażyna Busse	ECIM HIPOKAMP Association (SMARTageCARE project)	Building capacity for smart ageing: from care recipients to digital change agents
Doctor Robert team	St. Family Hospital Medical Centre; Łakomy na Zdrowie Foundation	Doctor Robert, a health prevention assistant app
Prof. Jolanta Walusiak-Skorupa	Nofer Institute of Occupational Medicine	Ageing, Work and Digital Health: New Opportunities or New Inequalities?

Can we trust AI? (Artur Ostrowski)

Ostrowski argued that confidence is not evidence: generative AI produces the most probable answer, not a verified one. He distinguished a fact (confirmable in sources), a mistake (false but credible-sounding) and a hallucination (an invented fact, source or quote stated with certainty), following NIST AI 600-1.

He cited studies showing the scale of the problem:

- **Bhattacharyya et al., Cureus 2023** – of 115 medical references generated by ChatGPT-3.5, 47% were fabricated, 46% existed but contained errors, and only 7% were authentic and accurate.
- **Tiller et al., BMJ Open 2026** – experts rated 49.6% of 250 answers from five popular chatbots as problematic, all delivered with high confidence.
- **Seifi & Seyfi, 2026** – in neurocritical care, 55.0% of 300 generated references had at least one verifiable error and 28.3% were entirely fabricated.

He proposed five red flags: no source, overconfidence, fictitious sources, false precision and contradiction. His practical rule is **STOP – CHECK – COMPARE**: do not accept an answer because it sounds professional; find the primary source (WHO, Ministry of Health, pacjent.gov.pl, scientific publications); and confirm in at least two independent sources.

AI can simplify medical language, prepare questions for the doctor and organise information. It should not replace diagnosis, qualify patients for treatment or be the sole basis of health decisions. For local government, he called for education that combines digital, health and media literacy. His closing message: technology can increase independence, but critical thinking makes it safe.



Active ageing without infrastructure? (Prof. Besnik Fetahu)

Fetahu identified a policy paradox in the Western Balkans. WHO and EU frameworks treat digital health literacy as a foundation of healthy ageing, but the region combines rapid ageing, youth emigration, fragmented digital infrastructure and a wide urban–rural connectivity gap.

Only about 23–25% of people in Albania and Kosovo have basic digital skills, less than half the EU average. The study asks whether digital health literacy policy for older people is genuine empowerment or a shift of responsibility onto an under-served population.

The method is a comparative longitudinal secondary analysis. It uses RCC Balkan Barometer microdata (2014–2025, about 71,000 respondents in six countries), RCC DESI and Eurostat ICT-skills data for ages 65–74, and macro indicators of ageing and health-system capacity. Outputs include a regional map of digital engagement against institutional capacity and a proposed co-governance policy sensitive to territorial and age inequalities.

Self-management in health (Moti Geller)

Geller defined self-management as a person's ability to understand and internalise the physical and mental effects of a health condition, and to make the necessary changes. It matters most in chronic disease, where recognising early warning signs can be life-saving.

Apps, telemedicine, devices and online contact with clinicians enable real-time information and response. Self-management also needs motivation, a supportive social environment and access to medical resources. Health professionals therefore carry responsibility for teaching it. People with higher digital health literacy manage medication, communication with specialists and health decisions better.

Building capacity for smart ageing (Grażyna Busse)

Busse described a paradigm shift from older people as passive care recipients to active "digital change agents" engaged in lifelong learning. The SMARTageCARE project rests on three pillars:

- **Digital transition and autonomy** – digital skills as a basic condition of independence, not a technical hobby.
- **e-Health and crisis prevention** – wearables, smartwatches and AI tools for home monitoring, so problems are addressed before a crisis and the senior becomes a partner to the doctor.
- **Citizenship and social participation** – technology as a route into community life, interest groups and civic platforms.

She stressed geragogy: older adults learn for relationships and autonomy, not careers, and build on life experience. Providing devices alone ("cold infrastructure") creates anxiety and resistance. The most effective method is a peer "ambassador network", in which seniors teach each other practical micro-tasks, such as scanning a QR code to buy a bus ticket.

Motivation comes from meaning. Linking technology to a person's passion (ikigai), such as gardening, turns resistance into engagement. The deeper goal is ontological security: confidence that one's life is meaningful, coherent and connected to the future.



Key figures she cited: 72% of EU citizens search for health information online; 22–58% struggle to access, understand or use it; and only 14 of 27 EU member states have digital health literacy policies. Her warning: we are digitalising healthcare without preparing patients.

Doctor Robert – health prevention assistant

The team started from the burden of preventable disease. Cardiovascular disease and cancer have led causes of death in Poland for 30 years (36% and 27% in 2024). Eurostat data show over 725,000 preventable deaths in the EU in 2022, with Poland at 244 per 100,000 against an EU average of 168.

Doctor Robert, available as an app and a website, collects age, sex, BMI, lifestyle, chronic disease and genetic risk factors through an online survey. It then builds a personalised five-year schedule of preventive tests drawn from guidelines of Polish and international medical societies. It explains test preparation, sends reminders and cites the source guideline for each recommendation.

The team presented benefits for patients (motivation, reminders, health literacy), doctors (an up-to-date guideline database) and the health system (stronger primary care and NCD prevention). It complements the national "Moje Zdrowie" programme with a yearly plan. Planned steps include new languages, automated medical records, a coordinated-care panel, an asynchronous pre-visit process and more therapeutic pathways.

Ageing, Work and Digital Health: New Opportunities or New Inequalities?

Technology is Not Neutral: The impact of digital technology and AI on the workplace depends entirely on job design, implementation, level of autonomy, and data governance.

Avoid the Deficit Model: Chronological age is a poor indicator of digital competence. Older workers possess valuable expertise and functional diversity, while digital barriers stem from poor workplace design rather than individual deficits.

Work Ability as the Ultimate Test: Successful digital innovation must support health, sustainable work ability, participation, and fair access to good work—it should extend working life rather than stratify it.

Balanced Dual Impact (Strengthen vs. Disrupt):

- **Opportunities:** Technology (e.g., exoskeletons, AI tools, adaptive interfaces) can reduce physical/cognitive strain, compensate for functional limitations, and enable flexible, longer working lives.
- **Risks:** Poor implementation can increase work pace, lower autonomy through constant monitoring, cause cognitive overload, and lead to digital exclusion.

Human-Centered Implementation & Participatory Design: Worker participation (co-design, testing, feedback), protected learning time, and human fallback options are essential protective factors for safe deployment.



Non-Negotiable Safeguards in Digital Health & AI: Occupational health data and AI tools must be used for early support and risk prevention, ensuring privacy, algorithmic bias testing, transparency, and strictly non-punitive human oversight.

Key lessons:

- **Recruitment** – start early, over-recruit to cover dropouts, use NGOs, mental health associations and local multipliers, and tailor channels to each group. Reach people who are hard to reach, such as those living alone.
- **Sites** – accessible by public transport, welcoming rather than clinical, mixing urban and rural, and supported by a digital channel and digital navigator for people with limited mobility.
- **Navigators** – a reliable point of contact with fixed hours, clear professional boundaries, and roughly one navigator per 6–7 participants. Automate reminders and reduce paperwork digitally.
- **Activities** – individualised, low-threshold, enjoyable and peer-based, with self-monitoring apps, family involvement, positive feedback and one goal at a time. Use existing community resources first.
- **Other** – timely data entry, consent for messaging channels such as WhatsApp, a mid-point Plan-Do-Study-Act cycle, navigator self-care, and a plan for what participants receive after the project ends.

Digital technology in everyday life

The Memory Workshops contribution showed technology as a daily ally for seniors across communication, health (e-visits, e-prescriptions, monitoring blood pressure, glucose, activity, medication and sleep), information, leisure, cognitive games, creativity, mobility, digital services and lifelong learning. Its message: technology is a question of opportunity, not age. It does not replace human relationships or health professionals, but supports autonomy, stimulates the brain and counters isolation.

The role of education (organisers' note)

The organisers' note set out four educational priorities: critical thinking, digital health awareness, personal data protection and communication skills for teleconsultations. It anticipated wider use of AI, telemedicine, wearables and blockchain-based data storage. It named the key challenges as the digital divide, ethics and cybersecurity. It described empowerment, individual and collective, as an essential companion to education.

Cross-cutting themes

Five themes ran through nearly every contribution.

1. **Digital health literacy is a determinant of health, not a technical extra.** Every speaker linked it to better self-management, prevention and quality of life. Its absence deepens inequality by age, income and place of residence.



2. **Healthcare is being digitalised faster than patients are being prepared.** Busse's data (only 14 of 27 EU states with policies) and Fetahu's Balkan paradox point to the same risk: responsibility shifts to older people without the infrastructure or skills to carry it.
3. **Critical appraisal is now a core competence.** Ostrowski's evidence on AI hallucinations shows that the ability to doubt and verify matters as much as the ability to use a device. The Doctor Robert team made the same case by grounding its app in cited medical-society guidelines rather than open-ended generation.
4. **Devices alone do not work; people and meaning do.** Busse's "cold infrastructure", Co-Captain's navigators and the Memory Workshops all show that motivation, peer support, trusted contacts and personal purpose drive adoption.
5. **Technology supports, but does not replace, human care.** Speakers agreed that AI and apps can inform, remind and monitor, while diagnosis, treatment decisions and relationships remain human responsibilities.

One tension is worth noting. The Doctor Robert deck states that it "always delivers reliable knowledge", while Ostrowski argued that no digital source should be trusted without verification. Guideline-based tools reduce risk, but the STOP – CHECK – COMPARE habit still applies, including to guideline currency and to fit with an individual patient.

Conclusions and recommendations

The conference's central conclusion: technology can increase older people's independence, but only digital health literacy, critical thinking and human support make it safe and fair. The recommendations below follow from the presentations and are grouped by who should act.

For national and regional policymakers

1. **Adopt a national digital health literacy policy.** Treat it as a digital determinant of health, in line with the WHO Global Strategy on Digital Health, and set measurable targets for people aged 65+.
2. **Invest in infrastructure before shifting responsibility.** Close urban–rural connectivity gaps and fund access points before making services digital-only, to avoid the paradox described for the Western Balkans.
3. **Keep non-digital routes open.** Every digitalised health service should retain an accessible in-person or telephone alternative.
4. **Measure the baseline.** Develop, validate and promote a Polish digital health literacy questionnaire (building on eHEALS) and track results by age, income and place of residence.
5. **Regulate for trust.** Set clear rules on health data protection, cybersecurity and the use of AI in health, including transparency about sources and limits.

For local government

1. **Fund education that combines digital, health and media literacy.** Programmes should teach how to assess the credibility of information, not only how to operate devices.
2. **Build peer ambassador networks.** Train older volunteers to support their peers through practical micro-tasks, such as e-prescriptions, mObywatel, timetables and QR codes.



3. **Use trusted community settings.** Deliver training through senior clubs, libraries, NGOs and memory workshops that are accessible by public transport.
4. **Co-design with older people.** Involve seniors as partners in planning digital services and local programmes, not only as recipients.

For healthcare providers and professionals

1. **Teach self-management as part of care.** Build time into visits to help patients use apps, devices and telemedicine correctly, especially for chronic conditions.
2. **Recommend vetted tools.** Point patients to guideline-based, source-cited applications and official sources such as pacjent.gov.pl, rather than open-ended chatbots, for health decisions.
3. **Consider patient navigators.** For hard-to-reach groups, navigators with clear roles, manageable caseloads (about 6–7 participants each) and digital support for reminders and paperwork improve access.
4. **Stay the decision-maker.** Use AI to support explanation and organisation of information, never as a substitute for diagnosis or qualification for treatment.

For developers of digital health tools

1. **Show sources and uncertainty.** Cite the guideline behind every recommendation, state its date and flag when advice may not fit an individual case.
2. **Design for older users.** Offer simple interfaces, large text, multiple languages and a printable output.
3. **Connect to people.** Link tools to clinicians, navigators or caregivers so users are never left alone with a result.

For educators, families and caregivers

1. **Start from interests, not devices.** Introduce technology through the person's passions (gardening, cooking, genealogy, grandchildren) rather than handing over hardware alone.
2. **Teach one useful task at a time.** Short, practical steps build confidence faster than lectures on technology.
3. **Teach the habit of doubt.** Make STOP – CHECK – COMPARE and the five red flags a standard part of every course that covers AI or online health information.
4. **Protect privacy.** Explain which health data should never be shared with chatbots or unknown apps.

For older people

1. **Treat AI answers as suggestions, not facts.** Ask "how do I know this is true?" and check important health information with a second reliable source or a professional.
2. **Use tools that support prevention.** Reminder and screening-schedule apps can help keep up with preventive tests.
3. **Learn together.** Join workshops or peer groups, and share what you learn; experience is an asset, not a barrier.



For researchers

1. **Evaluate outcomes.** Study the effect of digital health literacy interventions on health outcomes and on inequalities.
2. **Monitor AI reliability.** Continue independent audits of health chatbots, as in the studies cited at the conference.
3. **Use participatory methods.** Apply approaches like Co-Captain's Gallery Walk and Plan-Do-Study-Act cycles to adapt interventions to local contexts.