**Effectiveness of Digital Health Care Services: Case Studies from Finland**

**Date: 14 January 2026**
**Hosted within:** ISfTeH National Members Webinar Series
**Organized by:** Finnish Society of Telemedicine and eHealth (FSTeH)
**Format:** Online Webinar (Zoom)

## 1. Purpose and Context of the Webinar

This webinar marked the first session in a new ISfTeH-led series showcasing national digital health initiatives through its network of national member societies. The objective of the series is to strengthen global learning by allowing each country's society to present real-world experiences, lessons learned, and ongoing developments in digital health and telemedicine. ISfTeH leadership emphasized the society's broader role as a global network bringing together national associations, companies, institutions, researchers, and health professionals to support networking, education and training, research exchange, and policy advocacy, including collaboration with the World Health Organization.

The webinar series and its national member coordination were credited to the leadership of national members, including contributions from Finland and Morocco, notably from Dr. Pirkko Kouri (Finland) and Prof. Hassan Ghazal (Morocco), who helped convene national-member discussions that led to the creation of this webinar series.

## 2. Welcome and Finnish Digital Health Landscape

The webinar was introduced by ISfTeH representatives and handed over to Outi Ahonen, President of the Finnish Society of Telemedicine and eHealth (FSTeH), who welcomed participants and provided a brief national overview. Finland was presented as a Nordic country of approximately 5 million people, characterized by long distances and geographic features that make remote services particularly relevant.

Outi Ahonen described Finland's major healthcare system shift beginning in early 2023, when wellbeing services counties were created to organize healthcare and social care services. She emphasized that Finland's digitalization priorities focus on efficiency, accessibility, and quality, supported by nationwide electronic health records and a national record archive enabling health information transfer across providers. She noted Finland's emphasis on integration and interoperability, particularly the goal of connecting health and social care through standardized data exchange, and highlighted the relevance of broader European developments, such as emerging European health data initiatives.

She also referenced Finland's national AI vision (2030), framing AI as a tool to support people and professionals in an "AI transformation" in which the country benefits from AI without being "run" by it. A strong theme was the importance of competencies and shared knowledge creation among healthcare professionals as AI-enabled services expand.

Outi Ahonen also introduced FSTeH as a long-standing organization (founded in 1995) and as one of the early ISfTeH national members. She highlighted the society's activities, including its annual eHealth conference and the Finnish Journal of eHealth and Welfare, described as an open journal welcoming international readership and submissions.

### 3. Speakers and Chairing

The webinar was chaired by **Outi Ahonen** (President, FSTeH) together with **Elina Laukka** (Treasurer, FSTeH). The session included three main presentations:

- **Paulus Torkki**, Associate Professor of Healthcare Operations Management, University of Helsinki
- **Silja Kosola**, MD, Adjunct Professor; Research Director, Western Uusimaa Wellbeing Services County
- **Jaana Kotila**, Development Manager, Helsinki University Hospital (HUS)

### 4. Research Evidence on Digital Health Effectiveness (Paulus Torkki)

Paulus Torkki presented a research-based overview focusing on interactive digital health services (beyond basic information sharing). He emphasized that effectiveness evaluation depends strongly on the goal of the solution, noting that Finland's most widespread digital health tool is currently chat-based primary care, covering a large majority of the population and primarily aiming to manage minor conditions efficiently and reduce resource use rather than change clinical outcomes.

His presentation focused largely on chronic disease care, summarizing findings from a review of systematic reviews and additional evidence published in *Lancet Digital Health*. Across chronic care digital solutions, outcomes were often comparable to traditional care, and in some cases improved. Evidence supporting improved outcomes was described as strongest in type 2 diabetes, hypertension, and heart failure, where meta-analytic evidence is increasingly available. He also noted that cost-effectiveness results are generally positive, with many published studies reporting reduced resource use and costs, while also cautioning about potential publication bias.

Key challenges identified included heterogeneity in study designs, patient group selection, and intervention descriptions. He emphasized the need for better intervention reporting, a clearer definition of mechanisms (e.g., chat, alerts, or information exchange), and longer-term follow-up to determine true sustained effectiveness. He concluded by highlighting the importance of value co-creation, noting that different users and professionals may derive different benefits depending on capabilities and engagement.

### 5. Regional Implementation and AI Use Cases (Silja Kosola)

Silja Kosola presented the implementation perspective from Western Uusimaa Wellbeing Services County, describing the scale-up process following the 2023 structural reform, during which the county unified 10 organizations with different systems and electronic medical

records. She described the county's shift toward a strong development focus and outlined key services being deployed.

A central example was the Luna digital service/app, available to residents in three languages (Finnish, Swedish, and English). Luna provides chat services, non-urgent messaging with defined response expectations, and video appointments. She described an emerging workflow in which chat can be escalated to an ad hoc video visit and highlighted self-help programs supported by prior evidence. She also introduced a digital treatment pathway for lower back pain, opened by a professional but delivered digitally, presented as a pathway where measurable health outcomes are expected.

She then presented two AI implementations:

1. **AI-based real-time translation**, developed to address the challenge that more than 20% of the local population speaks languages other than Finnish and Swedish at home, making interpreter use costly and slow. The tool listens to consultations and translates between the clinician and patient. Pilots were described in maternal clinics and social services, starting with Ukrainian, Russian, and Arabic. Early feedback highlighted strong convenience and neutrality, but variable translation quality across languages, and she emphasized the need for change management and training.

2. **AI scribe/clinical documentation support**, addressing the large amount of clinician time spent on documentation. The AI listens, records, and generates a draft note using a large language model, which professionals review and correct. Preliminary learnings included hallucinations and the need for constant refinement, and uncertainty about net time savings due to required review. She noted that evaluation studies are ongoing, but results were not yet available.

### 6. Health Village and National Digital Care Pathways (Jaana Kotila)

Jaana Kotila presented Finland's **Health Village (Terveyskylä)** as a national digital ecosystem developed through collaboration among Finnish university hospitals over the past 10 years. She described three main components:

- **Digital care pathways** (over 300 nationally, with a substantial share within Helsinki University Hospital)

- **Self-care hubs/programs** providing evidence-based disease guidance and tools openly accessible online

- **Health Village Pro**, a professional platform with protocols, strategies, webinars, and training material for healthcare and social care workers

She framed Health Village as a success story due to the scale of professional collaboration (over 500 professionals contributing content), patient participation in development, and evidence-based design. She noted that the platform operates within medical device regulatory frameworks (MDR) and that clinical evaluation is required.

Kotila also described the structured development model used to build services, including multidisciplinary teams, proof-of-concept development, service architecture planning, service design methods (including the "double diamond"), pilot studies, engagement methods, and continuous redesign informed by research results. She emphasized that change leadership and change management are essential for translating digital innovation into real-world clinical adoption.

Evidence themes summarized included improved access to care, provision of reliable patient information, differentiation from commercial platforms through collaboration and clinical credibility, strengthened cooperation between primary and specialist care, and improved visibility and engagement for patients at home through interactive pathways.

**7. Discussion and Q&A: Measuring Effectiveness and Scaling**

During the moderated discussion, Paulus Torkki outlined how effectiveness should be assessed using comparative designs aligned to the solution's objectives, emphasizing understanding mechanisms and ensuring longer-term follow-up.

Silja Kosola described the practical challenge that rigorous research protocols can slow technology development, creating tension between rapid deployment and robust comparative evaluation. She noted that many services are currently monitored using satisfaction targets and response time metrics, while health outcomes research is harder to maintain alongside rapid iteration.

Jaana Kotila described continuous monitoring of user satisfaction (including NPS metrics), monthly tracking, MDR-linked reporting of technical issues, and iterative service improvement. She also highlighted ongoing challenges in integrating open digital pathways with slower-developing EHR infrastructures, causing fragmentation.

A key exchange addressed how these models might scale beyond Finland. Kotila cited an example of Health Village content being translated and implemented in **Bulgaria**, but noted that countries often need their own platform infrastructure to implement such services. Kosola emphasized that providing trustworthy health information online may be a feasible early step for less digitally mature contexts, whereas implementing full digital care pathways requires stronger foundational capacity, including data protection. Torkki notedthat scalability is possible but depends on whether solutions are context-specific or designed to be adaptable across settings.

On safety and nationwide rollout, panelists noted Finland's strict regulatory environment and strong emphasis on legislation, cybersecurity, and continuous monitoring. Torkki added that Finland has active evaluation and funding programs, though he also noted that regulatory and safety requirements can be demanding and may slow early-stage development.

The panel also addressed co-creation with regulators, with speakers emphasizing that engagement with legal and data protection requirements should occur early, ideally from the beginning, to avoid investing in approaches that later prove non-compliant.

**8. Closing and Next Webinar Announcement**

The webinar concluded with ISfTeH leadership reaffirming that this was the first session in a continuing national-member webinar series. The floor was then given to **Dr. Umashankar S** from the Telemedicine Society of India (TSI), who announced that India would host the next webinar in February, focusing on India's 25-year experience with telemedicine, scaling digital health across public and private sectors, rural implementation, and the increasing integration of AI.

## Conclusion

This webinar provided a comprehensive view of Finland's digital health ecosystem from both research and implementation perspectives. The session emphasized that digital health effectiveness must be assessed based on solution objectives, with growing evidence supporting positive outcomes and cost-effectiveness in selected chronic disease areas. It also demonstrated how regional service reform can enable coordinated digital service expansion, including AI translation and documentation tools, while highlighting persistent challenges in evaluation speed, change management, integration with legacy systems, and regulatory compliance. Finland's Health Village model illustrated how large-scale national collaboration among university hospitals can produce evidence-based, trusted digital care pathways and self-care services that continue to evolve through research-informed service design.

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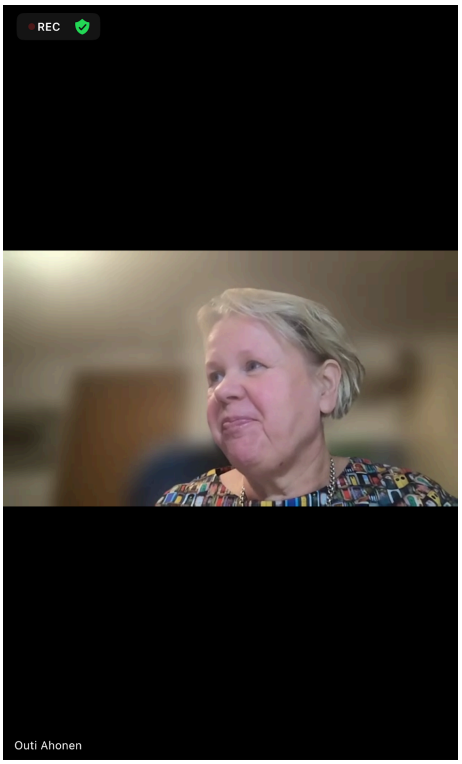
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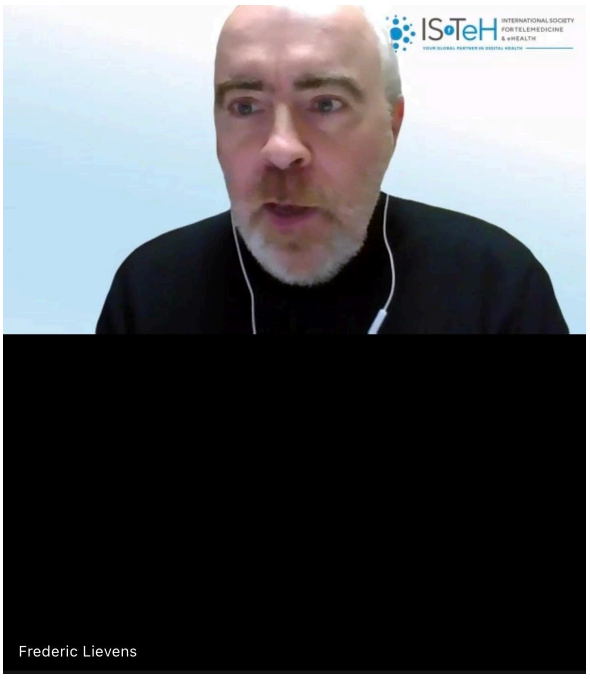
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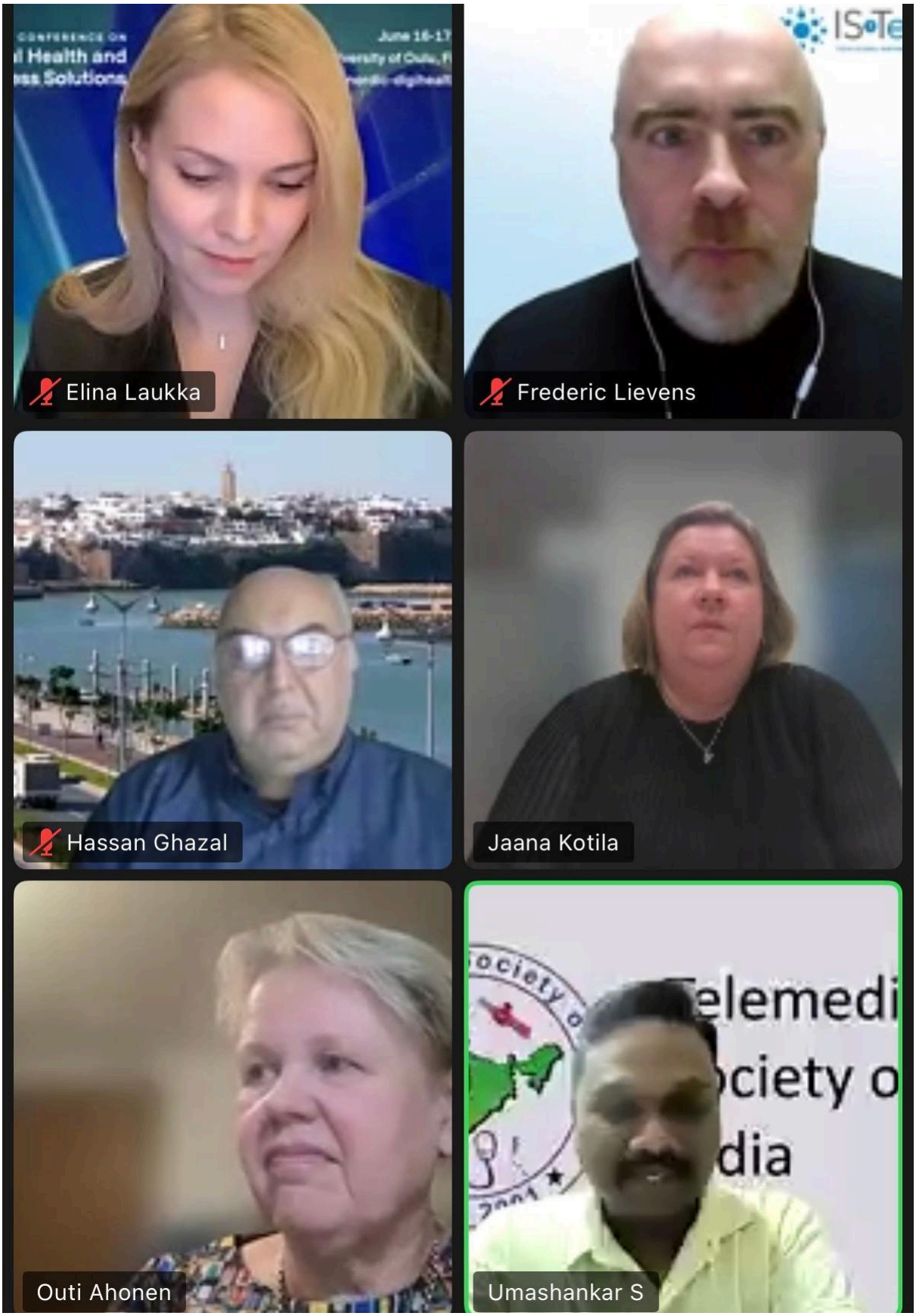

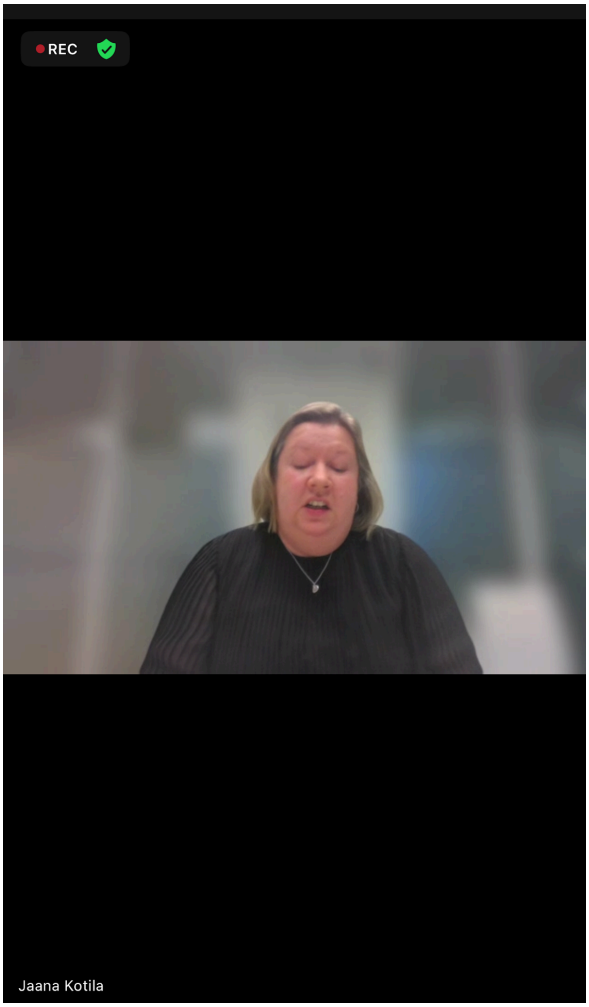
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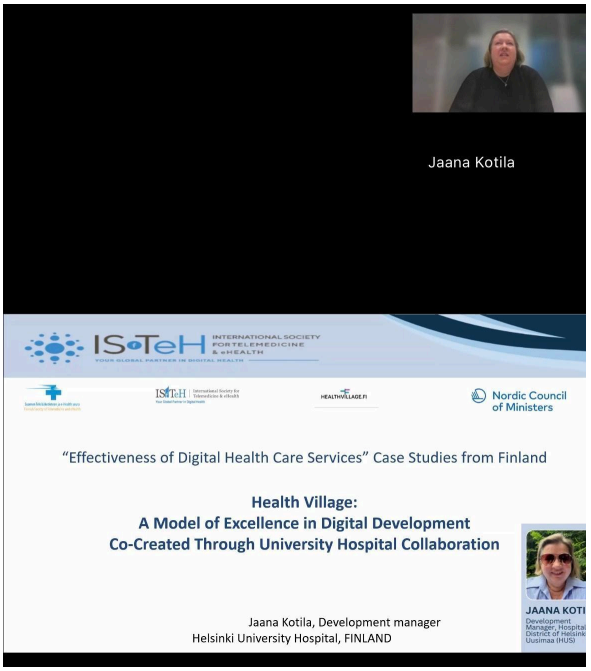
Jaana Kotila
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"Effectiveness of Digital Health Care Services" Case Studies from Finland
Health Village:
A Model of Excellence in Digital Development
Co-Created Through University Hospital Collaboration
Jaana Kotila, Development manager
Helsinki University Hospital, FINLAND