

Rethinking Education for Digital Transformation

Mie Basballe Jensen | Aalborg University, Department of Sustainability and Planning

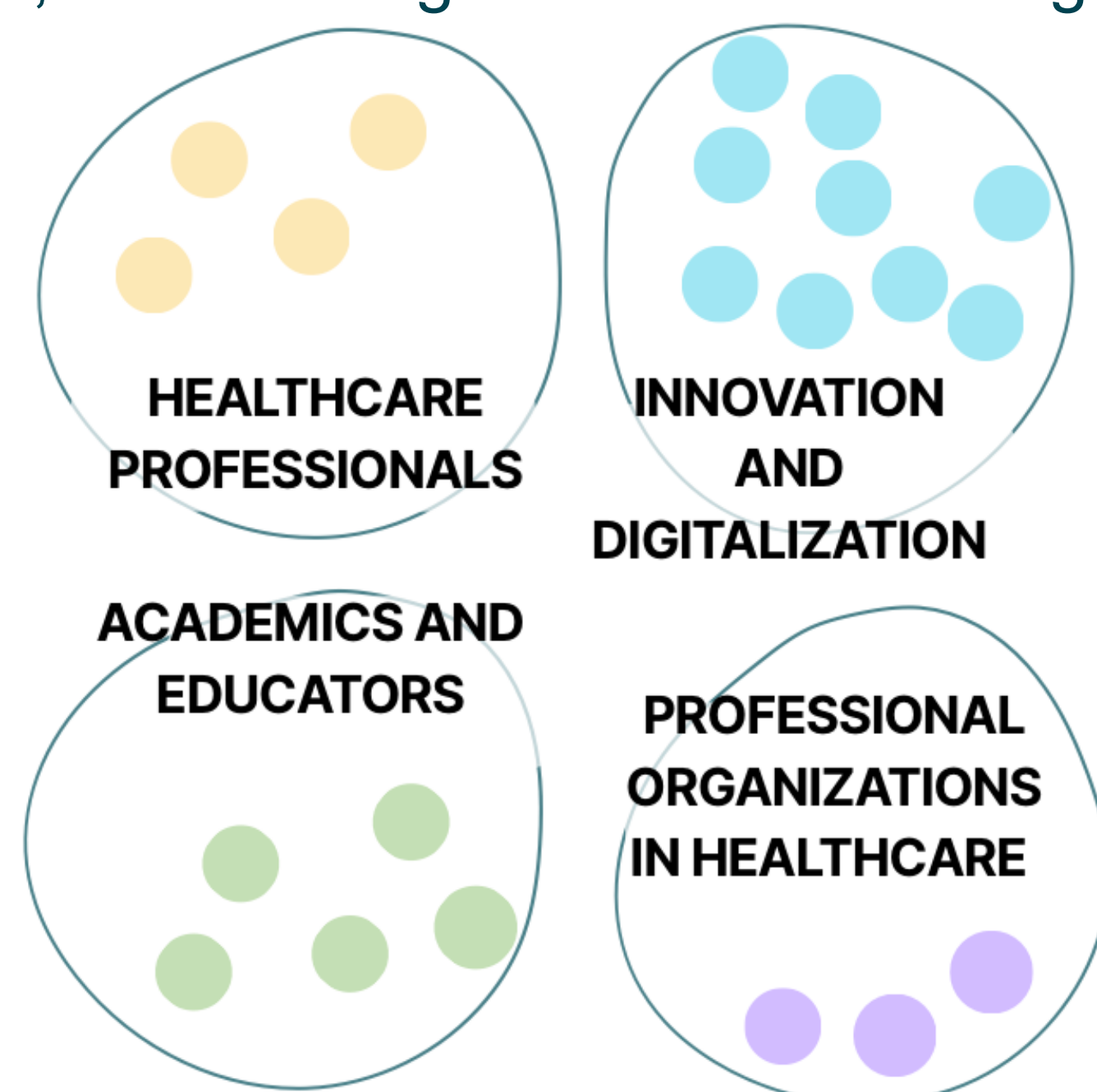
Introduction

The Danish healthcare system faces demographic pressures, workforce shortages, and increasing complexity. Digital health technologies are promoted as solutions to enhance efficiency and quality, yet their potential is rarely realised in practice (Ballegaard et al., 2022; Shemesh, Coughlan & Horton, 2025). Implementation often fails due to time constraints, fragmented responsibilities, and insufficient competencies. **The HealthTech project** explores how *continuing education in Health Technology Assessment (HTA)* can strengthen healthcare actors' abilities to critically assess, select, and implement digital technologies in ways that support quality, sustainability, and professional meaning (Jensen & Børsen, 2025).

Method

Phase 1: Interviews

20 semi-structured interviews with healthcare professionals, educators, innovators, and policy actors explored experiences, barriers, and learning needs related to digital technologies.



Phase 2: Co-creation Workshops

Findings were translated into 5 participatory workshops where 30 healthcare actors co-created educational tools for holistic and reflective technology assessment.

Phase 3: Curriculum Design

Insights were synthesised into a practice-based continuing education module using the HTA 2.0 framework integrating six technology assessment dimensions: Technology, Economy, Organisation, Patient/Citizen, Ethics, and Environment.



HTA2.0

Framework to support reflective decision-making

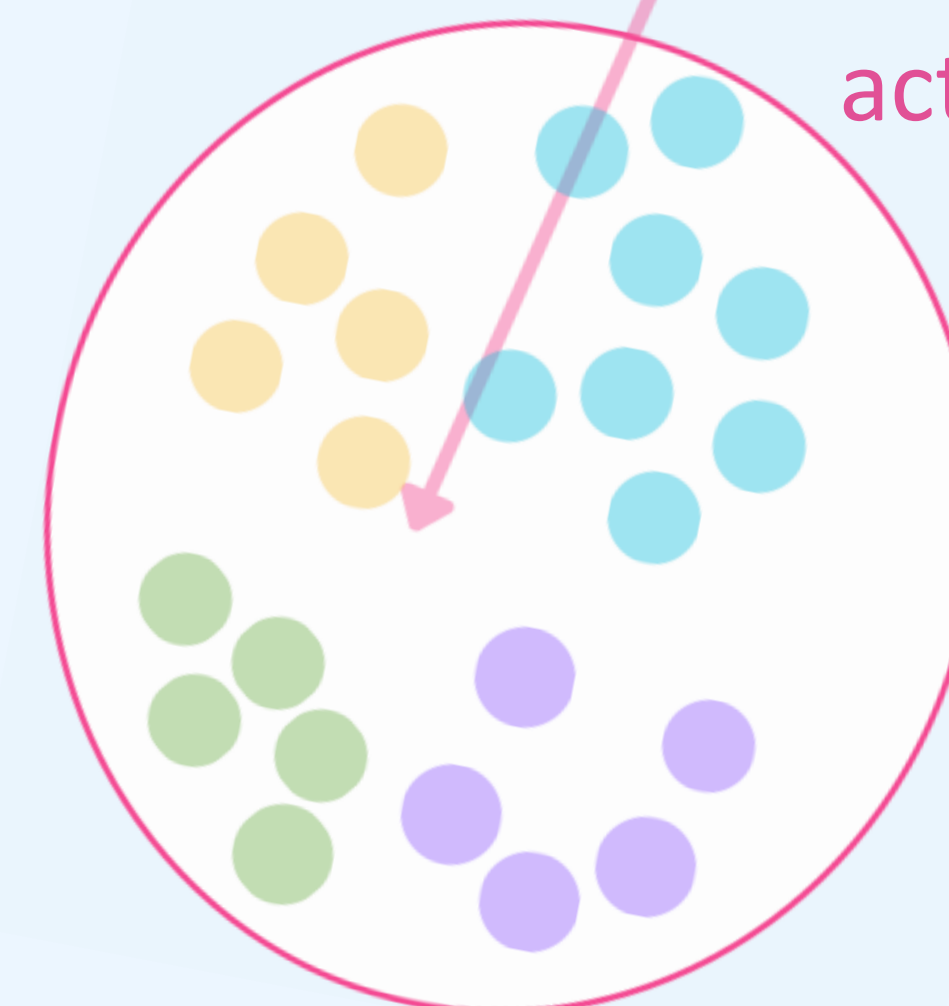
Results

The analysis of interviews and workshops identified five recurring themes:

1. Technology as both support and strain: Digital tools can improve coordination and data flow but often add complexity when not well integrated into everyday practice.
2. Structural and organisational barriers: Limited time, unclear roles and insufficient managerial support restrict opportunities for reflective implementation.
3. Lack of shared language: Different professional groups approach technology from distinct perspectives, which hinders collaboration.
4. Need for reflective learning: Participants called for education that links practical experience with ethical reflection and interprofessional dialogue, rather than tool-specific training.
5. Translation into curriculum design: These findings informed the development of the HTA 2.0 framework and the creation of learning cues for a continuing education programme (Jensen & Børsen, 2025), (Basballe Jensen et al., 2025).

New Joint Field

Continuing Education in Health Technology Assessment for Health actors



Discussion

The findings show that digital transformation in healthcare is as much a social and organizational challenge as a technological one. While digital tools are often introduced to enhance efficiency and quality, their value depends on how they are adapted and embedded in local practices. Across interviews and workshops, participants emphasized the need for structured and interdisciplinary spaces to reflect on the ethical, organizational, and professional implications of technology. A continuing education model in holistic HTA can serve as a meeting space for different health actors. HTA 2.0 emerged from this process not as a fixed evaluation model but as a *reflexive and pedagogical framework* that supports dialogue and shared understanding across professions. It functions as a *boundary object*, flexible enough to connect different professional logics, yet structured enough to facilitate systematic reflection and collaborative learning.

Conclusion

The project demonstrates that meaningful digital transformation requires more than technical skills; it demands new forms of collective learning and reflection. By positioning continuing education as a reflective transdisciplinary arena rather than a technical training site, the SUNDTEK project contributes to rethinking how digital competence is cultivated within healthcare. HTA 2.0 will continue to be developed through educational pilots and workshops. As a living framework, it aims to strengthen professionals' ability to assess, adapt, and co-create technologies in ways that promote quality, ethics, and sustainability in digital healthcare.

References

- Ballegaard, S. A., Bjørnholt, B., Petersen, N. B. G., Steensgaard, A., & Frahm, M. (2022). Styrkelse af digitale kompetencer inden for datadrevne teknologier til brug for automatisering, prædiktions- og beslutningsstøtte hos sundhedspersoner. Tilgængelig på : <https://www.vive.dk/media/pure/2z1klnxj/6503330>
- Basballe Jensen, M., Børsen, T., Berthing, F. A., Mathisen, L. K., Bjørnholdt Overgaard, O., Rej Rasmussen, S., Rasmussen, S. M., & Zinck, C. D. (2025). *Continuing Education in HTA for Digital Health Integration*. In *Proceedings of the STS Conference Graz 2025*. Graz: TU Graz Verlag.
- Jensen, M. B., & Børsen, T. (2025). *Input fra sundhedsaktører om "Efteruddannelse i teknologivurdering for sundhedsprofessionelle" (SUNDTEK): Delrapport*. Aalborg University Open Publishing.
- Kidholm, K., Clemensen, J., Caffery, L. J., & Smith, A. C. (2017). The Model for Assessment of Telemedicine (MAST): A scoping review of empirical studies. *Journal of Telemedicine and Telecare*, 23(9), 803–813. <https://doi.org/10.1177/1357633X17721815>
- Shemesh, Y., Coughlan, S., & Horton, R. (2025). *Digital transformation and health systems: Challenges of integration*. *The Lancet Digital Health*.

