

# TOWARD HYBRID MENTAL HEALTH CARE

## AN EARLY HEALTH TECHNOLOGY ASSESSMENT BASED ON STAKEHOLDER ANALYSIS AND ECONOMIC SIMULATIONS

Mari Skoge<sup>1,2</sup>, Linn N. Støme<sup>1</sup>, Sofie R. Aminoff<sup>1</sup>, Henrik M. Ihler<sup>1</sup>, Kari J. Kværner<sup>1,3</sup>, Josina Vink<sup>4</sup>, Kristin L. Romm<sup>1,2</sup>

<sup>1</sup> Section for Early Intervention in Psychosis Advisory Service, Southeast Norway, Clinic of Mental Health and Addiction, Oslo University Hospital  
<sup>2</sup> Institute of Clinical Medicine, Faculty of Medicine, University of Oslo  
<sup>3</sup> Department of Strategy and Entrepreneurship, BI Norwegian Business School  
<sup>4</sup> Institute of Design, Oslo School of Architecture and Design



Corresponding author: Mari Skoge Contact: [MSKOG2@OUS-HF.no](mailto:MSKOG2@OUS-HF.no)

### BACKGROUND

Combining digital and traditional treatment elements as part of a hybrid care delivery model may strengthen the sustainability of mental health care<sup>1</sup>. However, implementation issues impede efforts of digitalizing routine care in Norway<sup>2</sup>.

With this study, we aim to explore **current unmet stakeholder needs** and the **potential value of hybrid care models** in treatment of severe mental disorders.

Our ambition is to guide further research and inform implementation strategies.

### METHODS

We applied the *Step Up*<sup>3</sup> framework and performed (Fig. 1):

- **stakeholder analysis** based on co-created scenarios. (mapping unmet needs, potential effects of hybrid care models, and conditions relevant for implementation)
- **economic simulations** based on stakeholder input. (effect estimation of increased video consultations on quantitative sustainability variables)

### RESULTS

- Stakeholders anticipated value from hybrid care models across all domains: patient, clinician, and next-of-kin user experiences; clinical variables; organizational setup; and economy.
- Two recommendations for enhancing implementation were identified: 1) *promoting nuanced perceptions of digitalized care* and 2) *developing clinician incentives*.
- A conservative increase in video consultations potentially increases services' clinical capacity, as well as economic and environmental sustainability.

### CONCLUSIONS

- Moderate changes in clinical practices toward digitalization can create new opportunities for organizing services, result in substantial impact on sustainability variables, and cause beneficial qualitative effects for all user categories.
- Successful implementation requires early and continuous consideration of the clinician perspective.

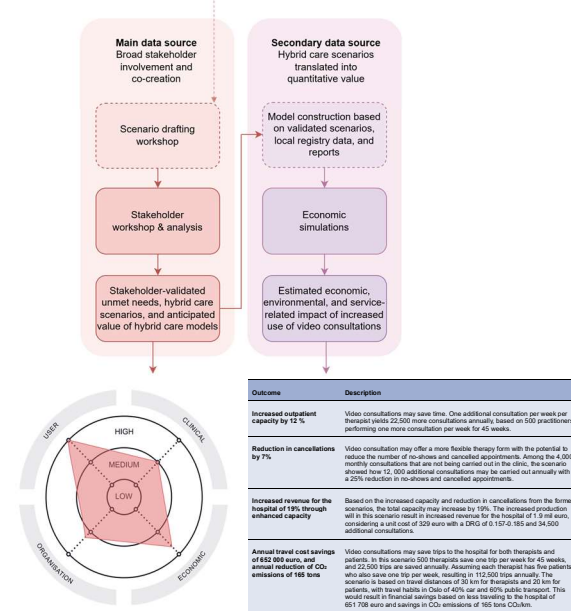
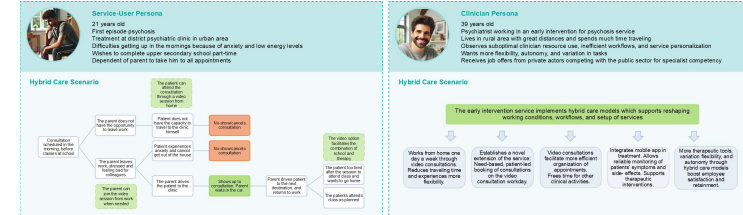


Fig. 1. Flow of data sources and assessment outputs: anticipated value across domains and sustainability outcomes.

### REFERENCES

1. World Health Organization (2021) Global strategy on digital health 2020–2025. Geneva.
2. Berardi C, Antonini M, Jordan Z, et al. (2024) Barriers and facilitators to the implementation of digital technologies in mental health systems: a qualitative systematic review to inform a policy framework. BMC Health Services Research 24, 243.
3. Kværner KJ, Linn N, Støme S (2023) Early Health Technology Assessment (Step Up). From qualified assessment to knowledge-based decisions. In: KJ.H. Kværner, Thomas, (ed.) Handbook of Healthcare Innovation. Research-based tools and methods for shaping the health service of the future. Cappelen Damm Akademisk.