Effects of digital remote care on healthcare utilization and patient satisfaction in COPD

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AIM OF THE STUDY

To evaluate the effects on healthcare utilization and patient satisfaction after implementing a collaborative service model for digital remote care in patients with chronic obstructive pulmonary disease (COPD).

BACKGROUND

Digital remote care is applied in various formats to optimize care for non-communicable diseases. We hypothesized that an interactive system for digital home monitoring and self-management plans, combined with a cross-disciplinary response team, could reduce healthcare utilization in patients with COPD.

METHOD

- Patients from 10 municipals in the catchment area of Akershus University Hospital were eligible for inclusion in the prospective study “Mitt liv, mitt ansvar” (MILA) between 2022-2024. See poster PA2035.
- One year follow-up was available in 177.
- The one-year healthcare utilization data were extracted from the Norwegian Patient Registry and the Registry for Primary Health Care in July 2025, and compared to retrospective data from the previous year.
- Hospital utilization costs were estimated by the “cost per patient” model.
- Patient-reported outcome measures on patient perceptions were collected through the digital application in October 2024.

RESULTS

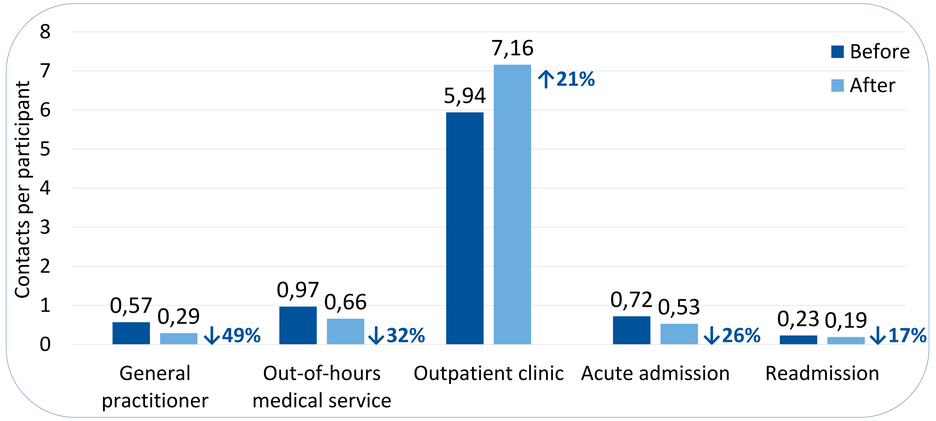

Figure 1. Average annual number of healthcare contacts per participant, one year before and one year after the inclusion date. N = 177.

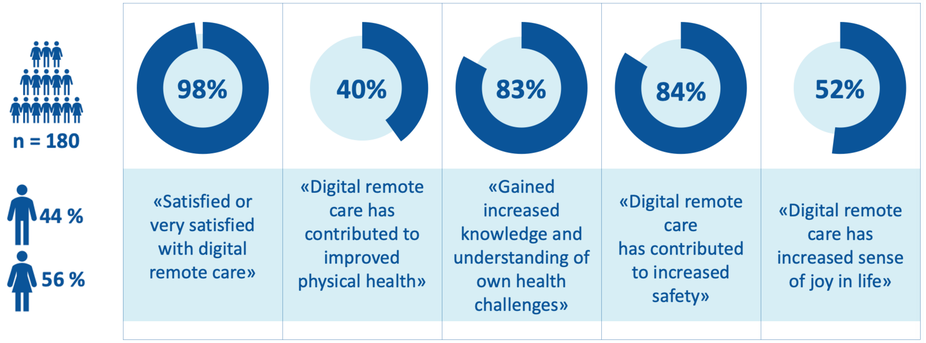

Figure 2. Patient-reported outcome measures, collected via a user survey in the digital application. N = 180, 79 males.

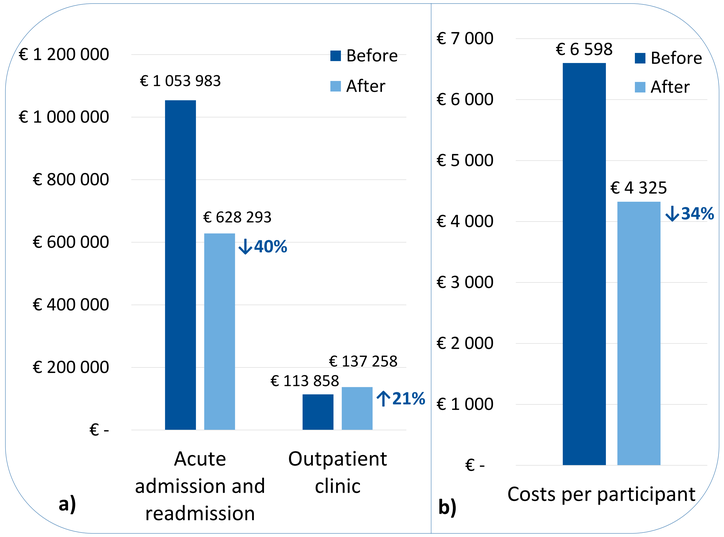

Figure 3. a) Estimated hospital utilization costs, and **b)** accumulated annual hospital costs per participant, one year before and one year after the inclusion date. N = 177.

CONCLUSION

The results suggest a reduction in healthcare utilization and associated hospital costs, along with improvements in patient safety and self-management one year after implementing the MILA model.

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