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

Telemedicine, COPD - management, Monitoring

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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 decrease healthcare utilization in patients with chronic obstructive pulmonary disease (COPD). This study reports preliminary data on acute healthcare utilization and patient perceptions in the digital remote care project "Mitt liv, mitt ansvar" (MILA).

Methods

Patients from 10 municipals in the catchment area of Akershus University Hospital were eligible for inclusion between 2022-2024. The one-year prospective healthcare utilization data were extracted from the Norwegian Patient Registry (NPR) and the Registry for Primary Health Care (KPR) June 2024, and compared to retrospective data from the previous year. Patient-reported outcome measures (PROMS) on patient perceptions were collected through the digital application October 2024.

Results

One year follow-up was available in 51. The number of acute contacts in hospital and municipal acute centres was reduced by 31% and 64% respectively. One-month readmissions was reduced by 62%. The average annual cost per capita for acute episodes was reduced from 8910 EUR to 4144 EUR. Table 1 shows patient perceptions (n=180, 79 males).

Statements	Response
Satisfied or very satisfied with digital remote care	98%

24/06/2025

Digital remote care has contributed to increased safety	84%
Gained increased knowledge and understanding of own health challenge	83%

Conclusion

Results suggest a reduction in acute healthcare utilization and improved patient safety and self-management one year after implementing the MILA model.

24/06/2025