Development and implementation of digital remote care in COPD: A collaborative service model



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AIM OF THE STUDY

To describe the development of a collaborative service model implementing digital remote care for patients with chronic obstructive pulmonary disease (COPD).

BACKGROUND

Demographic projections predict an increasing number of elderly people living with chronic conditions. Making the future healthcare system sustainable necessitate adopting innovative pathways to healthcare delivery. In 2018, the Norwegian Directorate of Health initiated pilot projects to guide national recommendations for digital remote care.

METHOD

The "Mitt liv, mitt ansvar" (MILA) project was developed in an iterative process of workshops, network meetings, profit planning, active user participation assessing quantitative and qualitative evaluations, adjustments and revisions. Representatives of the municipal health services, general practitioners, hospital specialists and Siemens Healthineers participated in the model development.

Key elements include:

- Digital home monitoring of symptoms and vital signs
- Digital self-management plans based on stoplight tool
- Remote follow-up by regional response centre
- Cross-disciplinary meetings between healthcare providers

ELIGIBILITY DIGITAL **REFERRAL ASSESSMENT SELF-MANAGEMENT PLAN MUNICIPAL MUNICIPAL MUNICIPAL** Municipal General General Home monitoring practitioner coordinator practitioner of symptoms and Local health vital signs services Self-management HOSPITAL HOSPITAL **HOSPITAL** plan based on Inpatient ward Clinical nurse Respiratory stoplight tool Outpatient clinic specialist physician Rehabilitation Ambulatory care unit

INCLUSION CRITERIA (GENERAL AND DIAGNOSIS-SPECIFIC)

- Aged 18+ and able to give informed consent
- Community-dwelling
- Owns a personal tablet/ smartphone with 4G
- Motivated to make use of the service

COPD GOLD group D*OR

 COPD GOLD group B/C* with significant COPDrelated anxiety

*Per 2022 Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines

EXCLUSION / TERMINATION CRITERIA

The patient's clinical condition or disease complexity indicates that digital remote care is unsuitable, not beneficial, or incompatible with other ongoing services.

Figure 1. The care pathway in MILA, including clinical process, allocation of responsibilities and inclusion/exclusion criteria.

RESULTS

• Baseline: Daily for two weeks Follow-up: Weekly or more frequently Copploment on se state were Mine makinger (0) Mine makinger All continues on setting Copploment on set at wave Mine makinger All continues on setting Copploment on set at wave Mine makinger Copploment on set at wave Copploment on set

PATIENT ACTIVITIES

Weekly or Mine mallinger (0)

Wine mallinger (1)

Wine mallinger (2)

Wine mallinger (3)

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• HOSPITAL

As-needed consultations and weekly cross-disciplinary

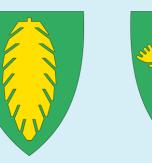


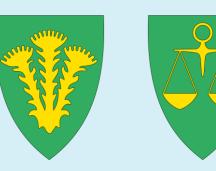
GENERAL PRACTITIONER

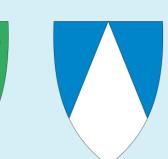












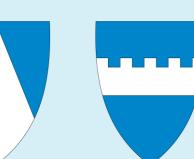






Figure 2. A collaborative service model in which the regional response centre functions as the central coordinator.

CONCLUSION

The MILA model is implemented as part of regular healthcare by January 2025. It utilises multicomponent interventions through a joint digital platform solution.

Further data analysis is necessary to evaluate the impact on patient safety, quality of life and self-management. See poster PA6261.











