

Patient Reported Outcomes used for Weekly Internet-based Detection of progressive disease in lung cancer

The aim of the ProWide study is to investigate whether the overall survival of patients with advanced lung cancer can be improved by weekly symptom monitoring via the Internet.

Background

Lung cancer is a serious disease that, despite advances in treatment, continues to have a severe prognosis. Two studies have, however, shown that weekly symptom-reporting via the Internet can improve symptom monitoring and improve both the survival the quality of life.

Project

In a Danish research collaboration we have selected thirteen questions for weekly symptom monitoring adapted to a Danish setting. The questions are used in the national ProWide trial, where half of the patients report symptoms to the department via the internet. All participating patients will be CT-scanned with fixed intervals as in routine care.

Patients in the intervention group answer the thirteen questions every week from home. The system can automatically detect deterioration of the symptoms and sends an electronic notification to a nurse at the department, who then contacts the patient by phone. If progressive disease is suspected after the phone call, a CT scan will be performed as soon as possible. Otherwise best supportive care is offered.

The system was pilot-tested in the spring 2018 at the department of oncology in Herning. We found that the full study set-up had high usability, acceptability, clinical relevance and was logistically acceptable.

The intervention is complex and involves many actors and logistical procedures, so we also investigate the patient experiences using the system in a separate interview study. In another substudy, we will describe, by means of registry data and questionnaires, the group of patients who cannot participate in the study as they do not have access to the necessary technology at home. A health economic analysis examines whether the effort is cost-effective compared to usual care.

The national ProWide study has been initiated in eight departments of oncology in Denmark. The goal is to include 492 patients in the study, and we expect to have all patients enrolled no later than at the end of 2021.

Perspectives

The ProWide study is a national collaboration project with support from the Danish Oncology Lung cancer Group (DOLG) and the Danish Lung Cancer Group (DLCG). It is the intention that the project will contribute to further research collaboration across regional borders in the future.