

Moovcare®: web-based follow-up care for lung cancer patients

Tags: follow-up

Summary

Routine follow-up care for lung cancer patients often involves clinical assessments every 3–6 months. However, these standardised intervals may leave relapsing patients without medical input for weeks between appointments.¹

Researchers in France developed a web-based algorithm to help oncologists take action at the first signs of a potential relapse.^{1,2} Lung cancer patients were asked to rate their symptoms every week using a short online form. The algorithm processed these symptom scores and automatically emailed oncologists if there were signs of a potential relapse. This algorithm, now built into a web and mobile application called Moovcare®, offers significant improvements in overall survival, relapse detection and healthcare costs for patients with lung cancer when compared to standard care.³⁻⁵

Problem

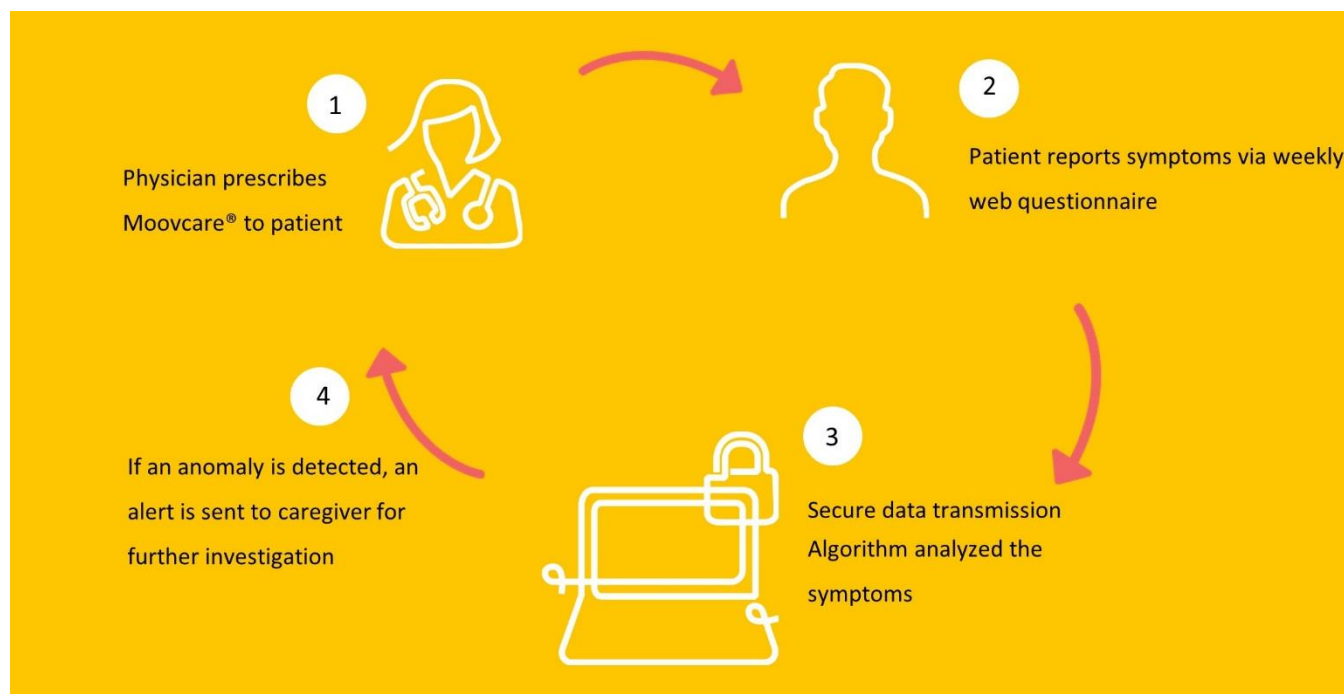
Routine follow-up care for lung cancer patients commonly involves clinical assessments and imaging at standard intervals, often every 3–6 months. These non-personalised intervals may leave relapsing patients without medical input for weeks between appointments.¹ In addition, repeated imaging is costly and may increase patients' anxiety.² At least 75% of lung cancer relapses are symptomatic, and these symptoms could be used to improve and personalise follow-up care.^{4,6}

Solution

Researchers in France developed a web-based algorithm to detect potential lung cancer relapses based on patient reports.^{1,2} Lung cancer patients were asked to rate their symptoms (e.g. fatigue, pain or changes in weight) using a short online form every week. The algorithm processed these symptom scores and automatically emailed the patient's oncologist when scores indicated a potential

relapse. This process enabled oncologists to take immediate action (e.g. follow-up calls or imaging tests) at the first signs of a relapse.⁴

The algorithm was eventually built into a web application called Moovcare[®] in partnership with Sivan Innovation. Patients can submit weekly symptom reports through Moovcare[®] on a computer or mobile phone. Moovcare[®] is currently being used by 22 clinicians across 10 medical centres in France.



What has it achieved?

The phase III randomised clinical trial of Moovcare[®] was stopped early due to significant differences in median overall survival – 19 months in patients using Moovcare[®] versus 12 months in patients receiving standard care.⁴

From the interim analyses at 12 months:⁴

- Overall survival at 12 months: 78% of patients (Moovcare®) and 58% of patients (standard care)
- Imaging procedures decreased by 49% per patient per year, compared to standard care
- 86% of patients using Moovcare® had at least one alert leading to follow-up care from their oncologist
- 72% of first relapses were detected with Moovcare®, compared to 32% of first relapses in standard care

From the final analyses at 2 years:³

- Median overall survival was 22.5 months for patients using Moovcare®) and 14.9 months for those in standard care

From a study looking at the cost and cost-effectiveness of Moovcare®:⁵

- Imaging costs: €571 per patient for Moovcare® compared with €749 per patient with standard care
- Quality-adjusted life years (QALY) gained with Moovcare®: 4.6 years

Next steps

Following the effectiveness of Moovcare® for lung cancer patients in France, next steps include testing its application in other cancers and expanding to other European countries, Israel and the United States.

Further information

- The [final results](#) from the Moovcare® trial published in the Journal of the American Medical Association
- The [abstract](#) of the trial presented at the 2018 American Society of Clinical Oncology (ASCO) conference
- The [Moovcare® website](#) by Sivan Innovation

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