

An intervention to support adherence to inhaled medication in adults with cystic fibrosis: the ACTiF research programme including RCT

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Plain English summary

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Plain English summary

People with cystic fibrosis need medication to stay well. They take some medication using a nebuliser. This is a machine that helps people to inhale medicine as a mist. Nebulisers are used to take medication that prevents health problems occurring. People do not always take all the doses of their nebuliser treatments and they often believe that they take more than they do. Our research aimed to develop a new intervention called 'CFHealthHub'. This was a website and mobile application to show people with cystic fibrosis their actual medication use, and training for health-care professionals to help people to take more of their medication.

We used feedback from patients and staff in three cystic fibrosis centres to develop CFHealthHub. We tested it in a small study. We then improved the intervention before using it in a larger study. We focused on whether or not people with cystic fibrosis had fewer spells of being ill in hospital and whether or not they took more of their treatments.

A total of 19 cystic fibrosis centres took part in the main study. The study recruited 608 people with cystic fibrosis. They were in the study for 12 months. All participants received their usual treatment. Half were also given the CFHealthHub intervention. Numbers of nebuliser treatments taken by people with cystic fibrosis were automatically measured. People with cystic fibrosis completed questionnaires about their general health during the study. We interviewed 22 people with cystic fibrosis and 26 health-care professionals delivering the intervention about their views of CFHealthHub.

We found that CFHealthHub did not reduce spells of being ill in hospital. However, we found that those who used CFHealthHub took more of their nebuliser medication. People with cystic fibrosis felt that the new intervention was helpful and valued the relationship they had with health-care professionals delivering the intervention. We found that the intervention may be good value for money for the NHS. However, this depends on how long the intervention is effective for and whether or not increasing adherence also increases the numbers of prescriptions for medicines.

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This report

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