

Executive summary

Background

The West of England AHSN's [Future Challenges Programme](#) provides support for innovators and local partners to pilot and validate new technologies and services in real-world settings. The "[Keeping Active During Covid-19](#)" project was launched in May 2020 when [Wiltshire Health and Care \(WHC\)](#) had to pause the provision of face-to-face community [Pulmonary Rehabilitation \(PR\)](#) during the Covid-19 pandemic. The clinical team were concerned that patients with chronic respiratory conditions would not be able to maintain an adequate level of physical activity and their condition would deteriorate.

Innovation

This pilot evaluated [KiActiv® Health](#), a personalised and guided online intervention that empowers participants to optimise physical activity within their everyday lives. KiActiv® Health provides an interactive personalised dashboard to display accurate physical activity data and is supported remotely by phone calls with a dedicated KiActiv® Mentor over 12-weeks. At the end of the 12-weeks, participants retain access to their personal dashboard and activity monitor, enabling them to continue their self-management using the technology if desired.

Purpose / objective

As WHC was unable to provide group face-to-face PR, the clinical team and commissioners felt that KiActiv® Health could be useful for those patients who would normally be referred for PR. The main objective of this pilot was to offer a remote solution to support isolated, vulnerable patients who are living with a respiratory condition.

Methodology

Patients were assessed by the WHC respiratory team for suitability prior to participation. 29 participants with a respiratory diagnosis and a [Medical Research Council Dyspnoea Scale](#) score three or more, who were assessed as likely to benefit from maintaining their physical activity during shielding, were invited. All 29 contacted KiActiv®, 28 were recruited and 25 completed the 12-weeks. Data for this pilot was analysed from a range of sources: the KiActiv® Health platform, KiActiv® Mentor calls, a self-administered online questionnaire (completed pre- and post-intervention) and a post-intervention questionnaire provided by the WHC clinical team (completed by only 13 patients).

Key findings

- High levels of engagement in KiActiv® Health were demonstrated by participants, including uploading physical activity data at least every other day (59%) and interacting with the online dashboard once every four days (24%).
- A statistically significant number of participants reported that they felt more confident in their ability to be physically active following KiActiv® Health.
- No other statistically significant differences were found in the responses to the other five questions asked.
- On completion of the 12-week programme, 85% (n=11) participants who responded felt KiActiv® Health had met their expectations, either fully, or to some extent.
- Many patients reported having to face a variety of barriers to physical activity change, which were largely dictated by external factors, such as weather and illness.
- 95% (n=11) respondents indicated they believed it was important to be able to receive at-home care for their condition during the Covid-19 pandemic, with 85% of respondents feeling that this would remain important for them post-pandemic
- 61% (n=8) of respondents expressed feeling better as a result of their participation in KiActiv® Health, with reported benefits being both physical and mental.

Lessons learned and conclusions

This small pilot suggests that for certain participants with a respiratory condition, who experience difficulty in accessing existing face-to-face services, KiActiv® provides an alternative management solution and meets some of the components of national guidelines for PR. The programme facilitates increased self-management skills, following an assessment and a recommendation by a health professional. Participants in the project received person-centred care along with tailored individual advice on managing their daily activity to best support their respiratory diagnosis. The remote nature of KiActiv® Health overcomes the travel barrier; ensuring participants were supported from the safety of their own homes. It may also provide a good alternative to face-to-face PR for those who would otherwise have received no intervention.

Recommendations

This was a Covid-19 response project; as such, it did not evaluate the impact of KiActiv® Health on physical activity behaviours or provide a cost-based analysis of benefit. Despite this, and the small sample size, we believe the evidence collected supports the consideration of ongoing use to allow further real-world validation, and to assess the utility of the product as part of the overall care offered to this cohort of patients.

Further opportunities to integrate KiActiv® Health alongside existing clinical pathways were identified, and these could be evaluated separately to demonstrate impact on particular patient groups (e.g., those in very rural areas). It may also be useful to consider

developing educational content that can be delivered remotely to complement the KiActiv® programme, if it were to be used as a direct alternative to face-to-face PR. Further evaluation of health benefits and cost utility would support the case for widespread adoption of the KiActiv® Health product.