



Y Grŵp Gweithredu
ar Iechyd Anadlol
Respiratory Health
Implementation Group

Healthhub



ICST

Patients who regularly use the respiratory apps for more than 6 months improve their respiratory health, resulting in 36% of users reducing their visits to the GP and 19% reducing their admissions to A&E

Furthermore, those with suboptimal control prior to using the app (score <5) and regularly use the apps for more than 6 months have a more significant improvement in their health, resulting in 44% of users reducing their visits to the GP and 33% reducing their admissions to A&E.

Background:

The NHS Wales apps have been developed in a partnership between ICST, NHS Wales and patients in Wales. The apps are bilingual, and their goal is to support patients so that they are better able to manage their long-term respiratory condition.

The apps currently have over **20,000 downloads**, and **99% of GP practices** in Wales have patients using them. Previous data from users have shown that there is **no variation in uptake geographically, nor by deprivation index of GP Surgeries**. Data also shows that **90% of users** find the app helps them manage their condition, and that **75% of users were introduced to the apps through their healthcare professional** (2/3 of this from primary care).

The three NHS Wales respiratory apps are:

Asthmahub
COPDhub
Asthmahub for Parents

The key values of the respiratory apps:

- Giving confidence to users to manage their condition at home, reducing unnecessary healthcare contacts.
- Users can become an expert, empowered to manage their condition better
- They have access to a personalised asthma/ COPD action plan, which have been proven to reduce hospital admissions.
- Access to personalised inhaler technique videos and instructions, improving medication deposition in the airways.
- Easy way to record their measurements and 'wellness' in one place, optimising the consultations with their healthcare professionals
- Promotion of the green agenda initiative in Wales to increase inhaler switching

For more information on the apps, visit: <https://healthhub.wales/>

To download them from Google or Apple stores:

ICST/Healthhub Developer page on Apple App Store:

<https://apps.apple.com/us/developer/institute-of-clinical-science-and-technology/id1440483542>

ICST/Healthhub Developer page on Google Play:

<https://play.google.com/store/apps/developer?id=The+Institute+of+Clinical+Science+and+Technology&gl=GB>

Survey methodology:

The analysis of this survey has been done in conjunction with Oxford University Statistics department.

During the week of 14th November, ICST conducted a survey sent out to 10,000 current app users. All active users of the app were given the chance to respond to the survey to maximise coverage. The survey received 371 responses in the time window it was open (48 hours) and had a 100% completion rate. The typical time spent taking the survey was 1 minute 33 seconds. The sample was deemed to be representative of the app user population and is sufficient to allow for meaningful exploratory analysis of subgroups of users that are of particular interest.

Survey results:

The results from the survey shows that patients who **regularly use** the respiratory apps **for more than 6 months** improve their respiratory health, resulting in **36% of users** reducing their visits to the GP and **19% reducing their admissions to A&E**.

Furthermore, those with suboptimal control prior to using the app (scored themselves <5) and regularly use the apps for more than 6 months have a more significant improvement in their health, resulting in **44% of users** reducing their visits to the GP and **33% reducing their admissions to A&E**.

Discussion:

NHS Wales estimates the asthma and COPD prevalence in Wales to be one of the highest in the world. Findings suggest there are 260,000 people living with asthma in Wales, 205,000 adults and 55,000 children. In the wider UK 5.4 million people have asthma. There are around 74,000 people diagnosed with COPD in Wales. In the UK this is 1.2 million. Globally, there are more than 600 million people diagnosed with Asthma or COPD.

The survey results demonstrated above are valuable when it comes to assessing how medical apps can be used to improve patient management of a long-term condition. Not only do users report improved measures of wellness, but also lower GP visits and hospital admissions, reducing the burden of these conditions on the already stretched post-pandemic health system.

The medical advice contained within these app is in accordance with national guidelines for asthma and COPD. Therefore, it should not be a surprise that patients benefit from good health self-management. The success of these outcomes is one of digital technology being a mechanism that engages and supports the patient through the year integrating with the care delivered directly by healthcare practitioners. The app is a carrier of key patient information and demonstrates the ability to successfully translate policy to patient in a dynamic, simple way- so that everyone can benefit no matter where they live. Going forward, it is important that as many people as possible benefit from this app, and ICST will continue to promote the apps to ensure this.