

Connected Inhaler Service Evaluation Project In The Routine Clinical Assessment Of Severe Asthma

(GSK UK Ltd. and Belfast Health and Social Care Trust, University Hospitals Birmingham NHS Foundation Trust, Barts Health NHS Trust, Guy's & St Thomas' NHS Trust, Royal Brompton & Harefield NHS Foundation Trust, Nottingham University NHS Hospitals Trust, University Hospitals Southampton NHS Foundation Trust, Oxford Health NHS Foundation Trust)

Executive Summary

Belfast Health and Social Care Trust, University Hospitals Birmingham NHS Foundation Trust, Barts Health NHS Trust, Guy's & St Thomas' NHS Trust, Royal Brompton & Harefield NHS Foundation Trust, Nottingham University NHS Hospitals Trust, University Hospitals Southampton NHS Foundation Trust, Oxford Health NHS Foundation Trust and GSK UK Ltd. are undertaking Joint Working with the aim of exploring the use of clip on sensor systems in a "real world" usual care setting. This involves significant contributions by all parties, with the pooling of skills, experience and resources. The service evaluation will build on the Medical Research Council Refractory Asthma Stratification Programme UK data on adherence monitoring and biomarker profiling.

The project will run from May 2020 to June 2023

Key Objectives:

- Explore usefulness of connected inhaler systems to improve adherence in routine clinical care
- Explore if these systems improve patient outcomes and efficiency of assessment of patients for biologic eligibility

Intended Benefits:

For the Patient	<ul style="list-style-type: none">• Gives patients an evidence based tool to support their adherence with inhaled medication• The appropriate treatment for the appropriate patient at the right time• Accelerated time to MDT decision for additional biological therapy, if required• Patient control on current therapy enhanced without the addition of biological therapy• Promoting self-management with real time data on app.• Access to another treatment option within the ICS/LABA class
For the NHS	<ul style="list-style-type: none">• There is good reason to believe that many patients referred to severe asthma tertiary care are not compliant with their maintenance therapy. The clip-on adherence device for Ellipta™, its support app for patients and dashboard for healthcare professionals gives another option to better support patients to be more compliant with their maintenance therapy inhaler. Other ICS/LABAs with adherence devices are already available and will also be used within the project. Optimising inhaled therapy will ensure that appropriate patients receive biological therapy where required. Should patients' asthma control improve with their improved adherence then their concomitant healthcare utilisation should reduce. Should patients require a biological therapy then the hope is that they would receive it sooner, thus reducing waiting lists.• There is an expected cost saving to the NHS associated with this project should it prove successful
For GSK	<ul style="list-style-type: none">• By supporting the availability of the clip-on device compatible with the Ellipta™ inhaler, this will mean that adherence assessments can be performed for GSK inhaler as well as those that already have compatible devices available. (This is not the case currently as the Ellipta™ clip-on device is not commercially available) Successful implementation of the project may lead to appropriate continued prescribing of inhaled medicines and initiation of biologics in appropriate patients, in line with guidelines. This may lead to prescribing of GSK medicines as well as those of other pharmaceutical companies