

Novel System for Improving Medicines Adherence in Respiratory Diseases

The Novel System for Improving Medicines Adherence in Respiratory Diseases project explored the use of a **digital innovation** to support medicines adherence and inhaler technique in people living with respiratory disease, with a particular focus on **adult asthma patients**.

The project aimed to assess the feasibility of using video-based technology to support remote review, optimise medicines use and improve inhaler technique.

Project Overview

The project was delivered as a **quality improvement pilot** within the **Western Health and Social Care Trust (WHSCT)**, in partnership with **Continga Limited**, a Queen's University Belfast spin-out company.

The intervention used **video-based directly observed therapy (vDOT)**, enabling clinicians to remotely observe inhaler technique and adherence. Patients recorded inhaler use via a digital platform, which could then be reviewed by clinicians to support personalised feedback and optimisation.

Key Outcomes

Feasibility and engagement

The pilot demonstrated the feasibility of using digital technology to support remote monitoring of inhaler technique and medicines adherence in an outpatient setting.

Participant and clinician feedback indicated good engagement with the system during the pilot period, supporting its usability in routine care contexts.

Implementation learning

The project identified key learning to support future implementation, including technical requirements, workforce considerations and communication processes needed to integrate digital adherence tools into clinical pathways.

Clinical Practice and Governance

The pilot operated within established governance arrangements. The use of digital technology enabled review of inhaler technique while maintaining appropriate clinical oversight and data protection standards.

Achievement of Project Objectives

The project contributed to understanding the potential role of digital innovation in supporting medicines optimisation for respiratory disease.

Findings provided learning on how video-based adherence tools may be implemented and evaluated within outpatient pathways, rather than demonstrating effectiveness as a commissioned service.

Partners Involved

The project was delivered in partnership with:

- **Continga Limited**
- **Medicines Optimisation Innovation Centre (MOIC)** – evaluation and implementation support
- **Western Health and Social Care Trust (WHST)**

Project Duration

The pilot was delivered over a defined project period within **WHST**.