

5.01 A pilot of digital technology innovation for video Direct Observation of Therapy (v-DOT) in adult asthma patients

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Background: Medicine adherence and correct inhaler technique are important in asthma management. V-DOT could be a feasible approach to facilitate monitoring and supervising therapy supporting delivery of care.

Methods: The v-DOT platform (supplied by Continga), operating on mobile phones and portable devices, involves making a 'selfie' video of medication administration, automatically encrypted and uploaded onto secure website for viewing. 19 patients from adult asthma outpatient service were invited, with 10 recruited & monitored for 6 weeks. Standard care continued. Daily videos were uploaded, assessed by clinician as good, partial or poor & feedback/correction offered to participants as needed. Spirometry, FeNO & asthma control test (ACT) were measured at the start & end of the project.

Results: 10 participants (50% female), median (interquartile range – IQR) age of 44y (33-65), uploaded 78% (66-92) of videos. 50% of participants had technical issues at some stage. Patient satisfaction was good. There was mean (standard deviation) improvement in FEV₁% of 10 (9) %. Median ACT clinically significantly improved from 12 (10-14) to 19 (17-21).

Conclusions: V-DOT technology was feasible to assess inhaler technique and monitor adherence in this small group. Clinically significant impacts for clinician & patient. Technical challenges can hamper progress. Further work needed to understand technology reluctance.

Keywords: asthma, adherence, inhaler technique, healthcare app

Disclosures:

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