

## **Patient-reported barriers to accepting a technological adherence package in the MAGNIFY trial.**

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### **Introduction**

COPD exacerbations lead to increased mortality and disease progression. Maintenance inhaled therapies can reduce exacerbation risk amongst COPD patients, but non-adherence reportedly ranges from 20-60% in this population. The ongoing cluster randomised trial MAGNIFY is investigating the use of technological adherence support as a solution to this problem, but there is little evidence regarding patients' willingness to accept such devices.

### **Aims and objectives**

To explore patient-reported barriers to accepting a technological adherence package.

### **Methods**

COPD patients were eligible for MAGNIFY if aged 40 years or above, with  $\geq 2$  moderate/severe exacerbations in the last two years and with  $\leq 50\%$  adherence to mono/dual therapy. Eligible patients received a phone call from a pharmacist who conducted a remote patient review and invited them to use the digital support package, comprising an Ultibro Breezhaler and adherence support technology. Patients declining the package were asked to provide reasons.

### **Results**

Out of 331 patients clinically suitable for the adherence package, 113 (34.1%) declined the adherence package. Reasons for declining included: no smartphone/not compatible phone (n=89), unwilling to change inhaler (n=8), unwilling to use inhalers regularly (n=5), life events (n=2), another health condition (n=1), no reason (n=8).

### **Conclusions**

Most patients declined the adherence package for practical reasons, such as lacking a compatible smartphone, rather than unwillingness to use technology. Though this is interim data from a single trial, it suggests that technophobia may not be an important barrier to patients accepting technological adherence support.