

10.10 The use of remote electronic spirometry to assess patient adherence to peak flow monitoring in a tertiary teaching hospital.

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The use of peak flow measurements is a core tenant of asthma management but adherence levels to peak flow diaries are often low. Self-monitoring is the cornerstone of chronic disease management with studies suggesting an increase in adherence to self-monitoring may be linked with increased treatment adherence. New technologies have enabled remote monitoring of patient symptoms, adherence to medication, assessment of technique and provide objective measures of disease such as peak flow readings and at home spirometry readings. In this study we analysed patient adherence to remote handheld spirometry monitoring over a 90-day period. Data from 17 patients, 71% female, were examined. Mean +/- SD age was 45 +/- 18 years (Range 17 – 74). 71% (n= 12) recorded a spirometry reading greater than 66% of the time. Mean number of days where patients recorded one or more readings was 67 +/- 27% with a median value of 77%. In the month of July 2022, 97% of spirometry reading were recorded in less than 2 minutes. Home monitoring of patient spirometry is an effective, well tolerated, and convenient way to monitor patient ability to effectively perform peak flow recordings and monitor response to treatment.

Conflict of Interest: None to declare