

1.15 Digital assessment of lung function and ICS/LABA treatment among Irish Severe Asthma Centres – a service evaluation

¹Ahmed Allami, ¹Orla Smith, ¹Elaine MacHale, ¹Grace O'Donnell, ¹Cara Gill, ¹Ciara Ottewill, ¹Richard W Costello

¹Department of Medicine, RCSI University of Health Sciences, on behalf of the HSE Digital Living Lab, Dublin, Ireland

Background: Guidelines recommend asthma patients with elevated T2 biomarkers, with exacerbations, be considered for biologic treatment. In previous trials, we demonstrated, using digital monitoring of lung function and ICS/LABA use, that less than half patients have objective evidence of poor control or sufficient adherence. The feasibility of digital measurement of these parameters in practice is unknown. **Methods:** The HSE commissioned a real-world evaluation assessing parameters as part of an MDT work-up for poorly controlled patients. This is an evaluation of a service developed to manage digital aspects of patient set-up and engagement, with concurrent clinical decision software, displaying data to clinicians. Patients with uncontrolled asthma were referred by specialist clinicians. Patients were contacted, issued a digital peak-flow (PEF) meter and digital device specific for their inhaler. Patients were supported by the team to maximise treatment adherence and engage in PEF recording. **Results:** One hundred patients were evaluated. Ninety-two were prescribed GINA Step-4 or higher treatment. ICS/LABA adherence was > 60% in 70% of patients. 28% of patients were uncontrolled despite good adherence, 30% were uncontrolled with poor adherence. **Conclusion:** The data support digital monitoring of PEF and adherence to identify whether poor control reflects refractory disease or poor adherence. **Disclosures: Conflict of Interest:** The Authors declare that they have no conflict of interest.