

#### **4.07 Cork University Hospital review of inhaler education initiative within the inpatient service.**

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Asthma and COPD are common respiratory chronic diseases with substantial symptom burden on the healthcare system both nationally and internationally (GINA, 2021 & GOLD, 2021). Despite, advancements in treatments and management guidelines there has been an increasing incidence on the prevalence of these conditions globally in the recent years. Inhaled drug delivery remains the cornerstone of treatment for both COPD and Asthma. However, 90% of these patients do not use their inhalers correctly and thereby experience frequent exacerbation of their symptoms some of which can be life threatening requiring hospitalization (Lavorini *et al*, 2008). We provided 30 education sessions in 2021 to over 150 healthcare professionals, on wards within CUH 190 assessments were completed on inpatients requiring inhaler education and disease management review. Each of the patient assessed, received face to face teaching with placebos for each appropriate device prescribed. More than 90% of these patients were reviewed for first time education on how to use their prescribed inhalers. It was found that 80% of patients had poor inhaler technique. Lack of education re their disease and inhaler adherence accounted for 60% of these patients reviewed.

If inhaler technique is reviewed on every possible patient contact this will help to improve the importance of inhaler adherence and be associated with reduced symptom burden. This will also help to reduce the burden on hospital admissions. Patients are more likely to use their inhalers effectively, when inhaler technique is demonstrated and educated to an appropriate level.

#### **References:**

[https://ginasthma.org/wp-content/uploads/2021/05/Whats-new-in-GINA-2021\\_final\\_V2.pdf](https://ginasthma.org/wp-content/uploads/2021/05/Whats-new-in-GINA-2021_final_V2.pdf). (Accessed on 25<sup>th</sup> August 2022)

[https://goldcopd.org/wp-content/uploads/2020/11/GOLD-2021-POCKET-GUIDE-v1.0-16Nov20\\_WMV.pdf](https://goldcopd.org/wp-content/uploads/2020/11/GOLD-2021-POCKET-GUIDE-v1.0-16Nov20_WMV.pdf). (Accessed on 25<sup>th</sup> August 2022)

Lavorini F., Magnan A., Dubus J.C., Voshaar T., Corbetta L., Broeders M., Dekhuijzen R., Sanchis J., Viejo J.L., Barnes P., Corrigan C., Levy M. & Crompton G.K. (2008). Effect of incorrect use of dry powder inhalers on management of patients with asthma and COPD. *Respiratory Medicine*. **102**(4):593-604. doi: 10.1016/j.rmed.2007.11.003. Epub 2007 Dec 20. PMID: 18083019.

**Conflict of Interest: None to declare**