

Adherence to national non-pharmacological asthma and chronic obstructive pulmonary disease (COPD) guidelines: Insights from the Swedish National Airway register

Caroline Stridsman¹, Therese Sterner², Apostolso Bossios³, Fredrik Nyberg⁴, Frida Strömberg Celind⁵, Malte Frerichs⁵, Yvonne Sjö⁶, Henning Stenberg², Jörgen Syk³, Anne Lindberg⁷, Lowie Vanfleteren⁵, Jon Konradsen³

¹ Region Norrbotten, ² Region Skåne, ³ Region Stockholm, ⁴ Göteborgs universitet, ⁵ Västra Götalandsregionen, ⁶ Region Värmland, ⁷ Umeå universitet

Background: The Swedish National Airway Register (SNAR) was initiated to improve and ensure quality of care for patients with asthma and COPD.

Aim: To describe registrations in SNAR, and to assess health care clinics' adherence to non-pharmacological interventions in accordance with national guidelines.

Methods: SNAR was initiated in 2013 and includes patients with asthma (all ages) and/or COPD at all levels of care across Sweden. Registrations are performed manually by healthcare professionals or automatically transferred from electronic medical records to a web-based platform. In addition to pharmacological treatment, data on smoking cessation support, spirometry, symptoms (Asthma Control Test, ACT; COPD Assessment Test, CAT), received patient education and written treatment plans are systematically recorded. These constitute quality indicators with percentage-based target levels defined by national guidelines. Smoking cessation support, spirometry at diagnosis, and ACT/CAT assessments should be performed for 95% of all patients, while patient education should be provided for 80%.

Results: In 2024, SNAR comprised 515 207 patients; approximately two thirds had asthma (~100 000 children), and the remaining had COPD. From 2020 to 2024, smoking cessation support decreased in both asthma (29.5 → 22.8%) and COPD (40.0 → 35.4%). During the same period, spirometry examination increased in asthma (43.0 → 48.9%) and COPD (37.6 → 49.0%). ACT use increased from 38.7 to 47.8%, and CAT from 41.2 to 50.2%. Provided patient education improved both in asthma (36.0 → 40.5%) and COPD (46.5 → 54.4%), and written treatment plans (asthma 10.0 → 13.5%; COPD 11.1 → 14.8%).

Conclusion: To date, SNAR includes over 500 000 patients and offers comprehensive insight into asthma and COPD care in Sweden. Over the past five years, the use of spirometry, symptom assessment, patient education, and written treatment plans has increased, whereas smoking cessation support has declined. However, national guideline targets for non-pharmacological interventions remain unmet.