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Implementing FeNO Testing Protocol in a Pulmonary Clinic: A DNP Project

Submitted in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice
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By

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Abstract

Airway inflammation is a common condition seen in the pulmonary clinic and can be present in patients with chronic obstructive pulmonary disease, asthma, chronic cough and asthma chronic obstructive overlap syndrome. Utilization of fractional exhaled nitric oxide testing is a quick means of identifying airway inflammation in patients who visit the pulmonary clinic with the diagnoses listed above. Fractional Exhaled Nitric Oxide testing along with Asthma Control Testing were used in the pulmonary clinic to aid in the identification of airway inflammation along with traditional spirometry testing. The results reflected an increase in the identification of patients with airway inflammation found in newly referred patients. A total of 41 patients were identified eligible for the DNP Project and of those 13 were diagnosed via Fractional Exhaled Nitric Oxide results. Post treatment Asthma Control Testing demonstrated a 27% increase in the overall score reflecting a significant decrease in symptoms.

Keywords: asthma, COPD, ACOS, FeNO, airway inflammation, chronic cough