

## The Patient Needs in Asthma Treatment (NEAT) Questionnaire: Further Validation and Preparation of its Application in Routine Care

*Background:* Prior evidence suggests that major unmet needs exist among asthma patients in the context of their treatment. Addressing those needs may improve the compliance and health outcomes of patients. A prerequisite is though that patient needs can be measured reliably and validly. As such an instrument had been lacking, we have previously developed the *Patient Needs in Asthma Treatment* (NEAT) questionnaire and gained preliminary insights into its validity.

*Objectives:* While initial insights into the validity of our instrument were encouraging, additional validation work needs to be done before it can be routinely deployed. In particular, we now need to examine further measurement properties, including the predictive validity, responsiveness to change, the minimal clinically important difference (MCID), and test-retest reliability. In addition, we aim to explore what mode of instrument administration in routine patient care would be acceptable to both patient and physicians.

*Methods:* The objectives will be addressed based on a series of four studies. Study 1 will be based on a 3-year follow-up of patients with asthma recruited for our prior study, which has led to the NEAT questionnaire development. For Study 2, we will recruit 115 asthma patients and will follow these up after about 4 weeks. In Study 3, we will administer the NEAT instrument before and after pulmonary rehabilitation to at least 100 inpatients at two clinics. Finally, in Study 4 we will explore the characteristics of acceptable approaches to implement the NEAT instrument in routine care. This will be achieved by focus groups and in-depth interviews among patients, physicians and potentially other relevant groups of health care professionals.

*Relevance:* Further establishment of the validity of the NEAT questionnaire will document the suitability of our tool for asthma research. By exploring potential approaches to implementation in routine care, we increase the likelihood that the NEAT questionnaire is transferred to clinical practice and thus may be used in clinical decision-making, e.g. to facilitate the delivery of patient-centered asthma care.

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## **Publications**