

Who is organising the research?

Professor Hilary Pinnock and Dr Luke Daines are leading the research team from the University of Edinburgh. The interviews and focus groups will be run by Victoria Murray a researcher in the Asthma UK Centre for Applied Research. The study is being funded by Asthma UK / Innovate UK and has ethical approval from the London–Stanmore Ethics Committee (19/LO/1722)



Hilary Pinnock



Luke Daines



Victoria Murray

How Can I Get Involved?

If you are interested in taking part please contact Victoria Murray by:

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Asthma Diagnosis Decision Aid



Information for practices about an asthma research study

Substantial over and under-diagnosis of asthma is occurring in routine clinical practice in children and adults. Through this study, we aim to develop an asthma diagnosis clinical decision support system for primary care which will aid health professionals to consider the likelihood of asthma, and recommend the most valuable next steps to enable an accurate and timely diagnosis.

The Asthma Diagnosis Decision Aid (ADxDA) study will help us develop and test an asthma clinical decision support system which meets the needs of primary care staff and fits within the routines of busy general practices.



What is a Clinical Decision Support System?

Clinical diagnosis of asthma currently depends on a healthcare professional's assessment of probabilities based on their knowledge, experience and ability, with evidence from prescribing data that, in people with non-specific respiratory symptoms, decisions are no better than random. A clinical decision support system could aid professionals' diagnostic decision-making by:

- Sifting relevant information from a patient record
- Interpreting probabilities and making patient-specific recommendations for objective tests.
- Aiding patient understanding
- Supporting the shift towards phenotyping of individuals newly diagnosed with asthma

What are the benefits to clinicians?

Embedded within the clinical decision support system, the clinical prediction model will provide a quantified probability of asthma calculated from elements in the history, examination and existing test results taken from the electronic health record (EHR). Where uncertainty remains, the clinical decision support system will recommend additional investigations/actions to further consider the probability of asthma. If asthma is confirmed, the clinical decision support system will guide further tests to identify the asthma phenotype, and inform personalised treatment options

What are the benefits to patients?

Sharing the computer screen during a consultation can enhance communication and decision making, but is rarely designed with patients in mind. A clinical decision support system with a patient-facing mode could encourage screen-sharing, promote clarity and involvement in the diagnostic process, understanding likely trajectories, choosing the most effective therapy and reducing unnecessary medication. Embedded information leaflets could be printed during a consultation.

What is involved?

This study will explore how a clinical decision support system could aid the diagnosis of asthma in primary care. Decision support systems only work if they are used, so we want to understand more about how asthma is currently diagnosed, what would be most valuable to staff and patients, and how to integrate the decision support system so it operates seamlessly with existing practice software.

What is involved?

Staff: We would like to interview any GPs and nurses in the practice who are involved in diagnosing asthma. Interviews will be short (approximately 30 minutes) and can be done face to face or by telephone. Another option would be to allow us 30 minutes in a practice meeting or training afternoon for a group discussion.

Patients: We will also ask practices to send out invitation letters to a random sample of patients (or parents of patients) with 'active' asthma. Patients will have a choice of taking part in small group based discussions or interviews. Those interested in taking part can indicate their choice (interview or focus group) on expression of interest forms which will be returned directly to researchers at the University of Edinburgh who will then contact participants.

What is the benefit for Practices?

Participation may be used as evidence of engagement in active clinical improvement programmes, research and as part of practice development plans and educational activities. We will provide certificates for practice and personal development portfolios. Participation also provides the opportunity to be part of an improvement initiative which may make asthma diagnosis more accurate.

Will our costs be covered?

Yes. In line with Clinical Research Network rates we will reimburse £80/hour for GPs and £30.1/hour for nurses.