Prescription Alerts for Reliever Inhalers in Children (PARC) Project

Project Summary

Project leads: Dr Anna Selby and Professor Graham Roberts

Sponsor: University Hospital Southampton NHS Foundation Trust (UHS)

Funder: National Institute for Health Research (NIHR)

Start date: 1 Feb 2024 **Duration:** 3 years

Project contact: Dr Anna Selby (a.c.selby@soton.ac.uk)

Background

Excessive short-acting beta-agonist (SABA) inhaler use in children with asthma is associated with an increased risk of severe asthma attacks and deaths. Children prescribed 7 or more SABA inhalers per year are 4-5 times more likely to have an asthma attack than children prescribed none.

The 2014 National Review of Asthma Deaths recommended that electronic surveillance of prescribing should be introduced in primary care to identify patients being prescribed excessive SABA inhalers and that these patients should be invited for an urgent asthma review. This does not yet happen routinely; likely due to lack of evidence that it would benefit patients and be cost-effective.

Aim

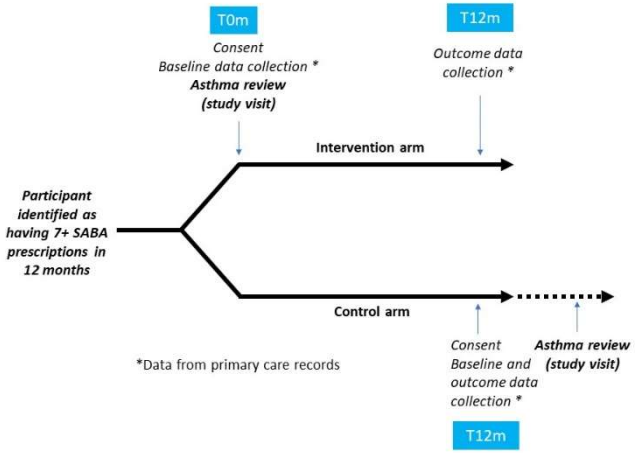
To determine whether targeted, enhanced asthma/wheeze reviews in children aged 1-17 years prescribed 7 or more SABA inhalers over 12 months can prevent severe asthma attacks. (The primary analysis will focus on school aged children).

Secondary objectives:

- To evaluate the cost-effectiveness of the intervention.
- To understand facilitators and barriers to implementation through an embedded qualitative process evaluation.

Design and Methods

- Cluster, randomised control trial with waiting list control design.
- General practices will act as participant identification centres (PICs).



University Hospital Southampton NHS Foundation Trust

FUNDED BY NIHR | National Institute for Health and Care Research

University of Southampton

Trial Setting

Locations for reviews will include:

- Clinical Research Facility at UHS.
- CRN Research Hubs and Buses.
- David Hide Centre, St Mary's Hospital (for participants on IoW).

(Virtual reviews will be offered to participants who cannot travel.)

Intervention

30-minute face-to-face review with a specially trained primary care nurse covering:

- Patient/carer's understanding of what asthma is/asthma treatment.
- Current symptom control and symptom triggers.
- Environmental factors.
- Co-morbidities.
- Asthma treatment including adherence and inhaler technique.
- Education/self-supported management.

Participants will receive a follow up phone call approximately 4 weeks after their review.

(Interviews with a selection of participants/their parents and health professionals will be undertaken as part of a process evaluation).

PARC – Prescription Alerts for Reliever inhalers in Children

NHS Solent NHS Trust

Primary care organisation activities:

1. Run pre-built search every 3 months for 12 months. (Control practices will use the same time period for searches as intervention practices but will perform searches 12 months later).
2. Check eligibility and send study invites/reminders to eligible children/their parents via text/email/post.
3. Phone call (by practice nurse) to non-responders.
4. Provide relevant download of participants' primary care records.

Patient/parent involvement:

1. Read online participant information sheet.
2. Complete online booking form/request call from member of research team.
3. Complete online consent form.
4. Attend asthma review and receive follow up phone call.

Benefits to participants/practices

- Children at high risk of asthma attacks will receive an enhanced review which covers the QOF indicators for ongoing asthma management and other areas. Full details of the review/actions taken will be shared with practices.
- Study activities will be reimbursed.
- All children from control practices will be offered a review at the end of the study.

If you have any questions or would like to get involved, please contact **Dr Anna Selby (a.c.selby@soton.ac.uk)**.

ASTHMA+ LUNG UK