Results Within the 40 patients there were 23 non-suppressors (ie adherent patients) and 17 suppressors (ie non-adherent patients). With the patients using the INCA technology, the server high-lighted technique errors; for example, not activating the drug blister or exhaling into the mouthpiece, as well as erratic timing issues. At subsequent follow up appointments these issues were emphasised and addressed by using patient-friendly print outs showing the usage of the inhaler, with the addition of alarm reminders and behavioural cues to encourage adherence.

Conclusion FeNO Suppression and INCA testing is an effective method of identifying and managing non-adherence with the capability of encouraging improved technique and timing also having the capability to be used as a long term behavioural assistance to adherence to ICS.

P146 | PRESCRIBING RESPIRATORY MEDICINES WITHOUT MAKING A DIAGNOSIS OF ASTHMA IN UK PRIMARY CARE

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Introduction and objectives Despite asthma being one of the most prevalent worldwide chronic diseases, there remains a wide variation in prevalence.[1] The United Kingdom's (UK) National Review of Asthma Deaths[2] suggests avoidable factors play a part in as many as three-quarters of cases of asthma death. There is need to highlight and address many aspects of asthma care including the variation in diagnosis across all ages to enable appropriate treatment and improve symptom control. Here we investigate the relationship between prescribing respiratory medications and making the diagnosis of asthma, in UK primary care.

Methods GP recorded data were collected from 72 UK general practices participating in the pilot British Lung Foundation asthma management program in 3 health authority areas, (two Clinical Commissioning Groups in England and one Health Board in Scotland). A retrospective analysis was undertaken of the Optimum Patient Care Research Database. This included data on child and adult patients (aged between 0 and 89) in receipt of asthma medication without a diagnosis of a chronic respiratory disease, classified by the absence of a QoF recorded asthma diagnosis. Asthma medications prescribed in the previous 12 months were identified (beta2-agonists, inhaled corticosteroids, cromones or montelukast).

Results 39,124 patients received at least one respiratory medication in the 12 months prior to data collection. Of these, 9,761 (25.0%) had no clinical diagnosis ever recorded for asthma or COPD. 3,655 patients were prescribed 2 or more respiratory prescriptions without a coded respiratory disease and 982 patients had a lower respiratory tract infection recorded within the same period.

Conclusion These results raise concern about over and under-treatment of children and adults in whom no diagnosis of asthma or any other chronic respiratory disease has been made. It is important that future Primary Care studies highlight the importance of early accurate diagnosis before starting treatment. Also, we suggest the present UK national prevalence and morbidity data are likely to underestimate the total burden of asthma within the Primary Care setting.
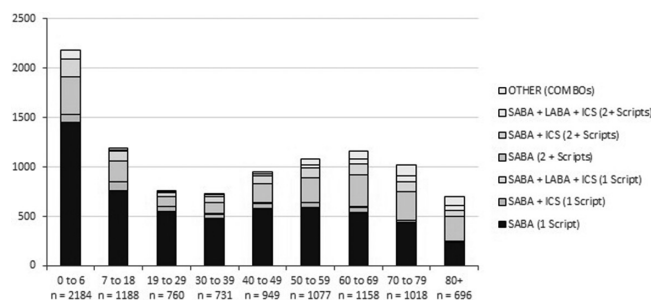
Abstract P146 Figure 1

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2   The National Review of Asthma Deaths London, NRAD, 2014

P147 | EVIDENCE OF MODIFIABLE PRESCRIPTION FACTORS IN PRIMARY ASTHMA CARE

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Background In 2014, the Royal College of Physicians published the National Review of Asthma Deaths. This confidential enquiry into 195 confirmed asthma deaths in the UK highlighted that two thirds of these deaths were associated with potentially modifiable prescription factors including excessive short-acting beta agonist (SABA) use without review and prescription of long acting beta agonists (LABA) without inhaled corticosteroids (ICS), the latter of which have been associated with higher mortality.[1]

Aim The aim of this project was to determine how widespread these two modifiable prescription factors are in the treatment of asthma in UK general practice.

Methods Primary Care data were obtained from the Optimum Patient Care Research Database (OPCRD). Extraction criteria included patients with a current diagnosis of asthma, at least two years of continuous medical records and at least one asthma prescription in the preceding 12 months. Those who: had a comorbid diagnosis of COPD, had received no treatment for the past 12 months and children <4 years of age were excluded. Asthma prescription data for the previous 12 months were extracted, and patients who had been prescribed LABAs with no ICS, or