DO THE ROYAL COLLEGE OF PHYSICIANS ‘THREE QUESTIONS’ PREDICT SYMPTOM CONTROL IN PEDIATRIC ASTHMA?

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Introduction and Objectives The UK Quality Outcomes Framework (QOF) rewards primary-care practices for completing the Royal College of Physicians “Three Questions” (RCP3Q) score for all patients listed on their asthma register. Almost no validation data currently exists, however, to support its use in children. This study aimed to investigate the performance of the RCP3Q to predict asthma control in children, by comparing it with the validated Asthma Control Test (ACT) or Childhood Asthma Control Test (C-ACT).

Methods This was a prospective, observational study involving 8 primary-care practices. Children aged 5–16 on the QOF asthma register and/or receiving asthma medication were invited to self-complete the ACT (age 12–16, n=96) or C-ACT (age 5–11, n=223) questionnaire immediately prior to a primary-care asthma review, where responses to the RCP3Q were collected. RCP3Q scores were compared with ACT or C-ACT data to assess performance of the RCP3Q in predicting asthma control. The RCP3Q scoring system is summarised in figure 1.

Results Questionnaire and RCP3Q data was completed for 319 participants. RCP3Q scores correlated moderately with C-ACT and ACT data (Spearman’s rho =0.49 and –0.52 respectively, p<0.001). A RCP3Q score of ≥2 predicted uncontrolled asthma (C-ACT or ACT ≤19) with a sensitivity of 57% and specificity of 81%. A lower threshold RCP3Q score of ≥1 gave a specificity of 55%, resulting in a high false positive rate. A RCP3Q score of 0 predicted well-controlled asthma (C-ACT or ACT ≥20) with a sensitivity of 55% and specificity of 81%. Using thresholds of RCP3Q≥2 for uncontrolled asthma and RCP3Q=0 for good control resulted in 25% participants unclassified (RCP3Q=1) and 18% of participants scoring 0, 2 or 3 incorrectly classified. Binary logistic regression showed that individual positive answers to RCP questions 1 and 2, but not 3, significantly increased the likelihood of uncontrolled asthma.

Conclusions Our data in ≥300 participants does not support use of the RCP3Q to classify asthma control in children. Our findings support current BTS/SIGN guidelines, which recommend use of validated asthma control questionnaires, such as C-ACT, when conducting a paediatric asthma review.

Asthma: infection and inflammation

INTRODUCTION AND OBJECTIVES The majority of asthmatics can be well-controlled using inhaled corticosteroids (ICS) and long-acting β2-agonists (LABAs). However, approximately 5% have a severe, refractory form of the disease and are often difficult to treat. Corticosteroid (CS) Insensitivity is the defining feature of these asthmatics known as “severe” asthmatics. The