

performance on 3 criteria:

1. Equivalent patient acceptability: no significant differences in number of incomplete responses to RCP questions.
2. Equivalent validity as a measure of asthma control: correlations between the RCP (0–21) and ACQ should be of a similar order to correlations between the RCP (0–3) and ACQ.
3. Sensitivity to treatment: as a preliminary test we hypothesised that, compared with the RCP (0–3), the RCP (0–21) would be more strongly correlated with reported adherence to ICS.

**Results:** The study questionnaire was completed by 78 community-managed patients at Step 2 or 3 of the asthma guidelines. There was no difference in response rates between RCP (0–3) and RCP (0–21), suggesting equivalent patient acceptability. The RCP (0–21) demonstrated high concurrent validity. Both RCP (0–21) and RCP (0–3) were highly correlated with the ACQ but the RCP (0–21) attaining a numerically higher correlation and stronger relationship with ACQ (RCP (0–21)  $r=0.87$ ;  $p<0.001$ ; RCP (0–3)  $r=0.73$ ;  $p<0.001$ ). A statistically significant correlation was found between the RCP (0–21) and reported adherence to ICS ( $r=0.24$ ;  $p<0.05$ ) whereas reported adherence to ICS was not correlated with the RCP (0–3), suggesting that the RCP (0–21) may be more sensitive to the effects of treatment. **Conclusion:** These data provide preliminary evidence in support of the RCP(0–21) scoring system. Using a 0–7 day response frame, in place of the 0–1 score appears to be equally acceptable to patients and equally valid. The RCP (0–21) may confer additional advantages in sensitivity and responsiveness to change. The findings justify further work to evaluate the RCP (0–21).

#### Conflict of interest

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#### Asthma inhalers and patient choice

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Asthma-trained nurses view patient preference as the most important consideration when selecting inhaler devices [1]. This is because they perceive that actively involving patients in treatment decisions and taking into account their device preferences can improve adherence to treatment. The aim of this study was to explore patients' perceptions of their inhalers in relation to choice and preference.

A postal questionnaire identifying potential influences on adherence was constructed using statements from interviews with asthma patients and then piloted among a wider sample to identify ambiguities and errors. The final questionnaire was sent to 757 asthma patients on preventer therapy randomly selected from 69 general practices who were asked to give their responses to each statement on a Likert scale of 1 (strongly disagree) to 5 (strongly agree).

332 (44%) replies to the questionnaire were received. Although almost half of the respondents (46.7%) stated that they were confident that they could choose the most suitable inhaler devices for themselves, only two-fifths (38.2%) said they would take this opportunity if it was offered. Only one third (32.4%) of the patients reported that they had been offered a choice of inhaler devices. Two-fifths (39.3%) said they would prefer to use particular inhalers and two-thirds (59.3%) would prefer to take only one inhaler.

In this study, the majority of patients expressed an interest in choosing their inhaler devices, although most had not had the opportunity. Patient choice should be encouraged, whilst simplifying patients' medication regimens may assist in asthma self-management.

#### Conflict of interest

Study funded by Astra Zeneca UK Ltd.

#### Reference

- [1] Hardy A, Fletcher M, Karbal B, Morrison K, Walker S. Improving adherence: nurses perceptions of patients inhaler needs. *Am J Crit Care Med* 2004;169(7):A327.

#### Prevalence of hayfever symptoms and diagnosis in UK teenagers

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Hayfever is a common condition which reaches peak prevalence in adolescence. Symptoms occur during periods of high grass pollen exposure (May/June in the UK), at a time when important examinations take place. Despite evidence that allergic rhinitis itself, as well as the medication taken to treat it, can interfere with learning and concentration, symptoms are often trivialised by patients and health professionals. The aim of this study was to investigate the prevalence of self-reported hayfever diagnosis, hayfever symptoms, respiratory health and use of allergy medication in UK secondary school children. All students aged 15/16 ( $n=3286$ ) in 14 schools in the West Midlands area of the UK were invited to participate via parental letter and consent. A pre-piloted questionnaire asking about respiratory health, smoking and hayfever treatment was developed (using, where appropriate, validated questions from the ISAAC study) and piloted among a group of 16 year olds to identify ambiguities and errors. The resulting questionnaire was distributed to all year 11 students in April 2004. 3189/3286 (97%) students agreed to participate in the study, and questionnaires were completed and returned by 2282 (72%). 51% (1153) students reported symptoms indicative of hayfever although only 21% (485) reported a diagnosis of hayfever by their nurse or doctor. 25% (570) reported a diagnosis of asthma, whilst 20% (461) smoked cigarettes. 22% (502) reported taking medication for their hayfever.

Of responders, 51% of UK 15/16 year olds report symptoms indicative of hayfever, although only 21% reported having had a confirmed diagnosis. Those children without a formal diagnosis may have untreated symptoms which could impact on exam performance and other social and psychological outcomes. The high prevalence of hayfever symptoms in this age group, and their potentially disruptive nature, should prompt health professionals to diagnose and treat hayfever symptoms more appropriately.

#### Conflict of interest

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#### Preliminary data from the Lung Information Needs Questionnaire (LINQ)

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