Results: This approach resulted in a significant enhancement of the quality of care criteria analyzed:

<table>
<thead>
<tr>
<th>Documented in the medical record</th>
<th>Before (n = 115)</th>
<th>After (n = 93)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent focus of the disease</td>
<td>79 (65%)</td>
<td>88 (75%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Presence of follow-up</td>
<td>32 (28%)</td>
<td>41 (39%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Prescription of antibiotics</td>
<td>60 (52%)</td>
<td>67 (73%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>PEF before treatment</td>
<td>22 (19%)</td>
<td>82 (88%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>PEF after treatment</td>
<td>8 (7%)</td>
<td>77 (83%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Steroid therapy</td>
<td>50 (39%)</td>
<td>71 (67%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Follow-up after ED-discharge</td>
<td>19/90 (21%)</td>
<td>35/47 (74%)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Discussion and Conclusion: Implementation of locally developed guidelines with PEF after treatment

The aim of our study was to evaluate, in asthmatics with mild bronchial obstruction, Undertreatment in asthmatic outpatients with mild bronchial obstruction. The total DSS was not associated with the therapy used by the Opts, unlike that of Wilcoxon test), even if a correlation did exist between them (r=0.39, p < 0.0001), that prescribed by the specialists (Sps) based on the severity of symptoms referred. A retrospective of 112 consecutive Opts (51 males, 61 females; mean age: 29.5 years; range: 13-63) with 6 p FEV1 ≥ 70 (mean: 98%, range: 70-132%) was performed. The patients' histories and disease severity score in the previous four weeks (DSS) were investigated and the therapy (level 0-4) used by the Opts and prescribed by the Spearman's rank correlation was used for nonparametric data. Only 6 out of 112 (5%) Opts did not report symptoms of asthma (DSS equal to 0) after domiciliary treatment. We found a significant difference between the therapy used by Opts at home and that prescribed by the Sps (median: home therapy = 0.5; Sps = 2; p < 0.0001, Wilcoxon test), even if a correlation did exist between them (r = 0.39, p < 0.0001). The total DSS was not associated with the therapy used by the Opts, unlike that of the Sps (r = 0.24, p < 0.001).

We found a significant correlation between the domiciliary therapy and day symptoms only (r = 0.20, p < 0.03) and shortness of breath due to exertion (r = 0.19, p < 0.04); on the contrary there was significant correlation between Sps' therapy and day symptoms (r = 0.22, p < 0.01), shortness of breath due to exertion (r = 0.23, p < 0.01) and also night symptoms. In conclusion, in asthmatics with mild bronchial obstruction: 1) the treatment used by the Opts at home is different from that prescribed by the Sps and their treatment level is indicated by the severity of day symptoms and shortness of breath due to exertion. The domiciliary therapy is not used regularly; therefore the night symptoms are probably still present.

P1286

Non-participation in early intervention with inhaled steroids in asthma and chronic obstructive pulmonary disease (COPD): The role of 'fear of steroids'.

Results of the 'DIMCA' study

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Treatment of chronic airflow obstruction with inhaled steroids at an early stage has shown to preserve the lung function. However, long-term treatment with inhaled steroids may cause local and systemic adverse effects. We tested the hypothesis that "fear of steroids" may be an important reason of non-participation in the 'DIMCA' project. A two-year randomised trial (strategy A) leads to more effective control. 75 Non-smoking adults with mild to moderate atopic asthma (18-50 yr, FEV1 > 70% pred, 23 newly detected; FEV1 (mean ± SD): 92 ± 17.0°) and repeated the observations two weeks later in a subset of 21 patients. The paired observations showed that both Juniper (r = 0.87) and Qscore (r = 0.79) were repeatable with similar validity. The Qscore was negatively correlated with the Juniper symptom score (r = -0.79, p < 0.01) and total score (r = -0.73, p < 0.01) and both Qscore and Juniper correlated with level of resting FEV1 (Q: r = 0.44, J: r = -0.42) and with the severity of asthma as indicated by the treatment step (Q: r = 0.47, J: r = -0.36, p < 0.01) although there was considerable scatter for the latter. The Qscore correlates well with both the established longer questionnaire and also shows similar relationships to lung function and to severity. If it also shows sensitivity to changes in asthma status over the next year it may provide a practical tool with which to estimate asthma morbidity in routine practice.

P1288

The clinical control of asthma after adding airway hyperresponsiveness (AHR) to the picture of lower respiratory AHR: A two-year randomised trial

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According to present guidelines (GINA), the level of anti-inflammatory therapy for asthma is solely based on symptoms and lung function. In a randomised parallel design we investigated whether a treatment strategy aimed at reducing AHR (strategy B) on top of improving symptoms, FEV1 and peak flow (PEF) variability (strategy A) leads to more effective control. 75 Non-smoking adults with mild to moderate atopic asthma (18-50 yr, 23 newly detected; FEV1, median ± SD: 92 ± 15 ±10°) visited the chest physician, every 3 months during 2 yrs. Prior to each visit, methacholine PC20 (baseline: geom. ± SD: 0.63 mg/ml ± 2.1 I DD) was assessed and the subjects recorded asthma symptoms, flog-symptom usage and 

P1289

Use of a simple patient focussed asthma morbidity score

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Established and validated questionnaires have been shown to be useful research tools with which to assess asthma morbidity (Juniper 1995), but they too consuming for routine clinical practice. We have used four questions that the doctor would usually ask in each consultation (covering night waking, reliver inhaled use, daytime beezing and disruption of activities) to produce an 8 point score that requires no extra time from the clinician. We have assessed this short questionnaire score (Q score) with the Juniper morbidity score (total score and symptom score), with levels of PEF, and with the UK asthma guidelines treatment step (Q score) for FEV1 and morning PEF, PEF-variability and PC20 were smaller in strategy B vs A (MANOVA: p < 0.05). This treatment strategy aimed at reducing BHR on top of improving symptoms, FEV1 and PEF-variability leads to more effective control of asthma, resulting in fewer exacerbations and less variable airflow limitation. This implicates a role for monitoring AHR in the long-term management of asthma.

This abstract is funded by: The Netherlands Asthma Foundation

P1320

Effects of patient education to the education level in asthma patients: 3 years experience

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Acceptance and application of the International Asthma Report by most countries made asthma therapy more than a simple prescription. It may be expected that patient education in addition to drug treatment will improve the life quality and prognosis of patients. For this reason, we studied randomly selected 25 cases (group I) that given special education for 1 year and randomly selected 27 cases (group II) that received regular education. Group 1 Group II

- % KS 77.4 ± 12.0° 53.8 ± 10.6°
- % DS 97.4 ± 6.10° 92.9 ± 15.6°
- Ast score 0.52 ± 0.87° 0.85 ± 1.20°
- N.SS 1.20 ± 0.05° 1.60 ± 0.05°
- N.SS 0.33 ± 0.62° 0.81 ± 1.21°
- QOL 6.18 ± 1.38° 5.52 ± 1.81°

p = 0.0005 £ p = 0.05 £ p = 0.05 £ p = 0.001

In 1997