**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>38 (42%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Breathing rate at night</td>
<td>42 (36%)</td>
<td>44 (49%)</td>
<td>0.002</td>
</tr>
<tr>
<td>PEF before treatment</td>
<td>25 (22%)</td>
<td>36 (39%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>PEF after treatment</td>
<td>2 (17%)</td>
<td>27 (30%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Steroid therapy</td>
<td>50 (50%)</td>
<td>71 (79%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Follow-up after ED-discharge</td>
<td>1990 (21%)</td>
<td>3547 (47%)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

**Discussion and Conclusion:** Implementation of locally developed guidelines with the participation of all healthcare personnel was time consuming but had a significant impact on the ED management of asthma patients. This program should be continued to further increase the quality of patient care. The impact on clinical outcome is currently being assessed.

PI286

**Untreatment in asthmatic outpatients with mild bronchial obstruction**

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Untreatment is one of the reasons for symptoms, sleep disturbance and limitation of activities in asthmatics. Inhaled anti-inflammatory drugs, in particular steroids, are very effective in controlling asthma symptoms in patients of all ages and severity.

This new study was to evaluate, in asthmatics with mild bronchial obstruction, the difference between the domiciliary treatments carried out by outpatients (Ops) and that prescribed by the specialists (Sps) based on the severity of symptoms referred.

A retrospective study of 112 consecutive Ops (51 males, 61 females; mean age: 29 yrs, range: 13-63) with ≥ 6 p FEV1 ≥ 70 (mean: 99%, 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 Ops and prescribed by the Sps was compared.

The time of year for our study was to evaluate, in asthmatics with mild bronchial obstruction, the difference between the domiciliary treatments carried out by outpatients (Ops) and that prescribed by the specialists (Sps) based on the severity of symptoms referred.

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Spearman’s rank correlation was used for nonparametric data. Only 6 out of 112 (5%) Ops did not report symptoms of asthma (DSS equal to 0) after domiciliary treatment.

We found a significant difference between the therapy used by Ops 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 Ops, unlike that of the Sps (r = 0.24, p < 0.001).

We found a significant correlation and the difference 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 Ops at home is different from that prescribed by the Sps and the difference is significant. 2) A domiciliary therapy is not used regularly, therefore the night symptoms are probably still present.

PI287

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

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According to present guidelines (GINA), the level of anti-inflammatory treatment 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, PEF and peak flow (PEF) variability (strategy A) lead to more effective control. 75 Non-smoking adults with mild to moderate asthmatic asthma (18-50 yrs; 23 newly detected; FEV1, mean ± SD: 6.3 mg/ml ± 2.11 DD) was assessed and the subjects received asthma symptoms, F2-agonist usage and morning + evening PEF on a diary card, during 14 days. At each visit, in both strategies, controller medication with inhaled corticosteroids and/or prednisone (4 levels: no steroids, 400, 800, 1600 µg/day+2 wk prednisone) was adjusted according to a stepwise approach similar to GINA, and to which 4 corresponding classes of AHR were added. In 62% of all instances, AHR-class indicated the need for an increased medication level, which was only applied in strategy B. Improvements in FEV1 and morning PEF (% personal best) were more pronounced in strategy B vs A (B: 5.6 ±9%, 9% and A: 1.18% and 3.5 ±3%, respectively; p < 0.05).

The daily treatment rate was 2.2 times lower in strategy B vs A (Cox regression: p < 0.05). Furthermore, individual standard deviations over the last 1.5 yr period for FEV1/9%pred, morning PEF, PEF-variability and FC2were smaller in strategy B vs A (MANOVA: p < 0.05).

We conclude that a treatment strategy aimed at reducing AHR on top of improving symptoms, PEF 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

PI289

**Use of a simple patient focused 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 1993), but they too time consuming for routine clinical practice. We have used four questions that the doctor would usually ask in each consultation (covering night waking, reliever inhaler use, daytime bronching 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: r = 0.47, J: r = -0.36. all 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.

PI290

**Effects of patient education to the life quality in asthma patients: 3 years experience**

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Acceptance and application of the International Asthma Report by most countries may provide a practical tool with which to estimate asthma morbidity in routine practice.