

**ABS64: Asthma/COPD service improves diagnosis and monitoring in primary care**

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**Introduction:** In solving under-diagnosis and non compliance with follow up in primary care in a Dutch region (West- Brabant and Zeeland), an outreach asthma-COPD service was developed. **Methods:** The service consists of lung function assessments at 23 locations. The GP can order a lung function test and annual monitoring of obstructive patients. The GP is advised on treatment, additional diagnostics and referrals of the patient based on extensive anamnesis, measurement of lung function and Body Mass Index (BMI). The asthma/COPD-service operates with 12 biometrists, 2 asthma/COPD-nurses, 1 lung function-technician, 5 consultant pulmonary physicians (from regional hospitals) and a coordinator/GP. To improve performance in primary care and raise adherence of GPs to the service, GPs are visited by an asthma/COPD-nurse, who gives feedback concerning the number of screened patients and discusses the actions the practice has taken on basis of the advice. Support is also offered to perform a practice survey, the service aids in selecting and diagnosing patients based on medication prescription codes (ATC-code). **Results:** 332 GPs use the services (>1 lung function). Since 1996 a total of 28,605 lung-function tests for primary care took place. In 2005 there were 6027 lung function tests performed. 3055 patients are monitored annually. Of 299 GPs (an average of 10.2 patients/GP) are participating annually. 52% of the new patients were obstructive, mostly mild (67%) and moderate (20%). In 2004 the Asthma/COPD-nurse visited 194 GPs. During this visit (30–45 minutes) a number of patients (6 to 10 patients) are evaluated in accordance with the recommendations of the pulmonary physician and implementation of the advice by the GP. The Asthma/COPD-nurse motivates the given advice and gives information that could help to provide practical information, like stop smoking. From 7 GPs 736 patients were selected on medical prescription. 501 patients were invited for lung function tests and 299 were diagnosed asthma/COPD and will be monitored annually. **Conclusion:** A service fulfils presented needs. De-centralised lung function-tests are approachable for the patients. The cooperation between lung function laboratory, consultant pulmonary physician, Asthma/COPD service, is of large value for the region.

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**ABS65: Primary care-based asthma clinics improve detection of asthma and COPD in the population**Mikael Hasselgren<sup>a</sup>, Mats Arne<sup>b</sup>, Gunnar Johansson<sup>a</sup>

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**Introduction:** General practice in Sweden is mainly organised into primary health care centres (PHCCs) with defined catchment areas. Individuals with asthma and chronic obstructive pulmonary disease (COPD) are treated in primary care. Half of PHCCs in the study region have asthma clinics. The evidence shows limited benefit from primary care based asthma clinics and nurse-led management in COPD in randomised controlled trials. Swedish GPs register a code for the cause of the consultation; this code can be used for measuring a clinical period prevalence. **Aims and objectives:** To evaluate if primary care based asthma clinics facilitate detection of obstructive lung disease in the population. **Subjects and method:**

A cross-sectional questionnaire in a Mid-Swedish region with 216 primary health care centres. The organisation of PHCCs with or without asthma clinics were compared with the proportions of persons with a coded asthma or COPD visit. Differences between PHCCs were calculated with non-parametric tests, for a linear regression model logarithmic values were used. **Results:** Reliable codes were extracted from 137 centres. The PHCCs with asthma clinics coded more individuals with both asthma and COPD in the population as compared with centres without such clinics. In a regression model adherence to the coding system and fulfilment of criteria for a complete asthma clinic improved the detection rate of asthma. **Conclusions:** PHCCs with asthma clinics had seen a larger proportion of their catchment population with obstructive lung disease. Thus primary care based asthma clinics facilitate detection of asthma and COPD in the general population. Detection rate could serve as an independent measure of quality of care in General Practice.

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**ABS66: Management of asthma in a primary care centre in Singapore based on the Chronic Care Model**

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**Introduction:** Asthma patients are managed in private general practitioner clinics or government subsidized polyclinics under a fee for service, walk in primary healthcare system in Singapore. **Aim:** To show the improved management of asthma patients in a typical polyclinic after adopting strategies of the Chronic Care Model (CCM) by Vagner EH. **Method:** The polyclinic at Pasir Ris manages approximately 300–500 asthma patients every month. Based on CCM, the polyclinic re-designs the delivery system (introducing appointment system, second tiered asthma clinic), enhances self-management (introduce patients' use of symptom calendar and written asthma action plans) & decision support (chart for doctors to classify asthma severity and selection of inhaled asthma medication) and utilizes clinical information system (capturing data of asthma attendance and inhaled medications dispensed monthly) to form prepared proactive asthma team interacting with informed activated patients. The polyclinic assists the establishment of asthma support group to promote self-care and as a reach-out strategy in the community. Asthma collaborative is set up to diffuse effective measures to other polyclinics in the organization. **Results:** The prescribing pattern of the polyclinic doctors, as reflected in the preventer (inhaled steroid): reliever medication (inhaled bronchodilator) or PR ratio, which increased from 1.23 to 2.81. The cumulative number of written asthma action plan prescribed rose from 3 in Sept 2004 to >500 in Dec 2005. The nebulised bronchodilator rate, as a proxy indicator of acute asthma exacerbation rate, declined from 25% to 15%. Patients using inhaled steroid who are well-controlled in their asthma status increased from 50% in Feb 05 to 75% in Oct 05. **Conclusion:** Care of asthma patients can be improved using evidence-based measures and restructured system delivery based on CCM.

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