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Easy Asthma Management

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The prevalence of asthma and its burden are rapidly increasing in Korea. However, its severity is underestimated and many patients are not adequately treated with low awareness of the disease compared to high prevalence. Although asthma management guideline was introduced in 1994 by the Korean Society of Allergology, it has not been used widely in real practices until now. According to a survey in 2002 about the understanding of asthma management guideline in Korea, only 12% of patients with asthma were taking ICS, which means only a small portion of PCPs treat their patients according to the guideline in their daily practices. Therefore, a program that can fill in the gap between the guideline and the real practice of PCPs came to be absolutely required. A computer-assisted program, Easy Asthma Management (EAM), for an easy diagnosis, severity classification, treatment according to the severity and monitoring was developed by the Korea Asthma Allergy Foundation.

To evaluate the efficacy of EAM program, EAM pilot study was performed in 4,662 asthma patients and 550 doctors for 3 months. EAM provides symptom-based asthma diagnosis as well as guideline-based severity classification and standard prescription options according to the severity. It also provides easy monitoring tool. These whole steps are automatically carried out by clicking each computer screen increasing the convenience of the program.

Asthma symptoms were successfully controlled by treating patients according to the EAM program. A survey, which was conducted in 186 doctors who participated in the EAM program, showed the EAM program was much more convenient to use than the existing guideline. 85% of doctors replied that they came to better follow the guideline through EAM than before. 89% of doctors wanted to recommend EAM to their colleague doctors.

To measure the effectiveness of EAM program in changing prescription behavior of doctors, the medical insurance claims (J 45 and J46 as a main disease) were compared before (January～February in 2004) and after (January～February in 2005) the EAM pilot study. Also, the claims from non-participating doctors in EAM were collected as a control group to eliminate the natural change according to the market prescription trend. Among physicians who participated in EAM, ICS use increased by 86%, while use of systemic steroids, oral beta2-agonists and methylxanthines were decreased significantly. On the other hand, there was no significant change of

prescription pattern in control group. This suggests that EAM program has impacts on physicians' behavior change toward the asthma treatment guideline.

As a conclusion, computer-assisted EAM program is much more convenient to follow than the existing asthma treatment guideline in real practices. It also has educational values leading to the changes in doctor's recognition of asthma treatment and prescription pattern.