

**Supplementary table E1. ASTHMA PROGRAMMES in Europe**

Country	FINLAND	FRANCE	IRELAND	ITALY	The NETHERLANDS
Type of programme	National	National	National	National	National
Period	1994-2004	2000-2005	2014-2017	2013	2014-2018
Initiator	The Finnish Ministry of Social Affairs and Health + Working group	The National Agency for Accreditation and Evaluation of Health (ANAES)	Health Service Executives (HSE)	GARD Italy	Lung Alliance Netherlands (LAN)
Executor	Finnish Lung Health organisation (Filha) – a non-governmental org.		Asthma Society of Ireland	42 partners	
Population 2012 (million)	5.4	47.5	4.6	60.8	16.7
Asthma prevalence and other asthma indices	Around 5% (~250 000 patients) ~135 000 patients received special drug imbursement Helsinki: 6.5% (1996); 10.0% (2006)	4.8  [Demoly P, et al. Eur Resp Rev 2009;18:105-112]  ]	~10% (470 000 patients) ~20% in children; 40% increase in the prevalence in 13 to 14 years old children in the last 20 years 1 death/week due to asthma 20 000 Emergency Dept visits, >11 000 bed days due to acute asthma	6.6 % [de Marco R, et al. Eur Respir J 2012;39:883-892]	1. ~4.0% [Van Schayck CP, Smit HA. Eur Respir J 2005;26:647-650]  370 000 adults 150 000 children
Goals	As many patients as possible with early asthma should recover  Asthma patients should feel well, and their ability for work and their functional capacity should correspond to their age  The percentage of patients with moderate or severe asthma should fall from current 40% to 20%  The number of bed-days for asthma should decrease by 50% by the year 2000, that is to 50 000 per year  The annual costs per patients should fall by 50% as a result of more effective prevention and treatment	Development of information on asthma for asthmatics and for the general public, together with the introduction of advisers regarding the domestic environment;  Improvement of the quality of asthma care with regard to the treatment of severe acute asthma, follow-up of chronic asthma patients and detection of new cases with management of asthmatic children in the school environment;  Development of therapeutic education;  Improvement of the management and detection of occupational asthma;  Establishment of a system to collect information on all epidemiological	90% reduction of asthma deaths over 10 years  50% reduction in hospital days  30% reduction in cost per patient	Education on asthma and allergy in childhood with the main objective to create documents on the following: - Epidemiology; definition by age, therapy, emergency management - Rehabilitation and physical activities/sports - Therapeutic education - Quality of life - Critical issues in management; the views of professionals and families - Proposal for improving therapeutic adherence	<i>Asthma and COPD:</i> 25% reduction in hospital days  15% reduction in lost working days  20% increase in efficiency of inhalation therapy (QoL per euro)  25% reduction in number of children <18 years starting to smoke  10% reduction in deaths due to asthma

		and economic aspects of asthma, and to identify the risk factors.			
Implementation	<p><i>Stepwise educational sessions:</i>  Pulmonary and paediatric hospital units: 100 sessions; 5300 participants  Primary and secondary care professionals: 237 sessions; 3700 participants  All health care professionals: 450 sessions; 25 500 participants</p>		<p>Modest investments</p> <p>Commitment to implementation</p> <p>Collaborative approach</p> <p>At start inclusion of 25 000 patients with the most severe asthma</p> <p>Rest of the asthma patients to be included 2015-2017</p>		
Programme expansion	<p>1997 The Association of Finnish Pharmacies created a network of 695 asthma pharmacists at local pharmacies</p> <p>2002 Launch of Childhood Asthma miniprogramme: Regional paediatricians and primary care physicians: 25 sessions; 1300 participants</p> <p>2008-2018 National <i>Allergy</i> Programme. Allergy and Asthma Federation conducts a General public awareness -project in cooperation with The Organization for Respiratory Health in Finland (HELI) and the Finnish Central Organization for Skin Patients. Filha is responsible for the professional's education –project (as above).</p>				
References	[7,8,39,40,52-59]	[9,66]	[10,11]	[12,42]	[13,42]