

# The fight against chronic respiratory diseases in the elderly: the European Innovation Partnership on Active and Healthy Aging and beyond

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## Introduction

The International COPD Coalition (ICC) believes that COPD and other respiratory diseases that strike the elderly will become an increasing problem worldwide as the elderly become a higher proportion of the overall populations. Because the European Union has anticipated this problem and is taking many proactive steps to deal effectively with the health care needs of the elderly, we wanted to provide more detailed information about their efforts in this ICC Column in *JTD*.

## Active and Healthy Aging (AHA)

Chronic respiratory diseases affect all age groups but particularly old-age patients (1). Functioning and physical health declines with advancing age and co-morbidity (2). Aging increases the likelihood of non-communicable diseases (NCDs) and co-morbidities, thereby increasing their adverse effects on health and well-being. As the general population ages, the number of patients with NCDs grows more rapidly. There are gender differences (3) that must be kept in mind, and the magnitude of the effect of NCDs on aging is greater in developing countries where budgets are fixed and limited (4). Although most NCDs are clinically evident in adults, asthma and allergic rhinitis often occur in children, persist throughout life, and should be tackled early (5), but often they are not and must be dealt with in the elderly. Most chronic respiratory diseases express age-dependent phenotypes, and in elderly adults it is

often difficult to differentiate between asthma and COPD. Moreover, CRDs are intertwined with co-morbid NCDs and treatments are complex, in particular when inhalers are required.

AHA is a major societal challenge common to all European countries, but also to other populations. The elderly often experience socioeconomic inequalities, and aging is an under-appreciated cause of poverty that also hinders economic development, particular involving underserved populations and women (6). AHA should be promoted prior to old age if it is to be successful as old age arrives. Promoting AHA offers many benefits for countries worldwide in providing innovative responses to this challenge.

Let us describe the European approach to healthy aging. European Innovation Partnerships (EIP) are working to decrease societal problems in facilitating healthy aging through research and innovation. They address weaknesses in the EU research and innovation (e.g., under-investment, fragmentation, and duplication), which complicate the discovery or exploitation of knowledge and may ultimately prevent the entry of innovations in healthy aging into national market places (7).

## European Innovation Partnership on Active and Healthy Aging

The pilot EIP on AHA pursues a triple benefit for Europe:

- Enabling EU citizens to lead healthy, active and independent lives while aging;

- Improving the sustainability and efficiency of social and health care systems;
- Boosting and improving the competitiveness of the markets for innovative products and services, responding to the challenge of healthy aging both in the EU and globally, thus creating new opportunities for businesses worldwide.

The EIP on AHA Strategic Implementation Plan defined three priority areas of work in the healthy aging initiative (A: prevention and health promotion; B: care and cure; C and D: active and independent living of elderly people) and proposed a first set of specific actions launched in 2012 which included:

- (I) Innovative ways to ensure patients receive and take their medications (A1);
- (II) Innovative solutions to prevent falls and support early diagnosis of medical problems for older people (A2);
- (III) Co-operation with their health care providers to help prevent functional decline and frailty among the aging with a particular focus on malnutrition (A3);
- (IV) Spread and promote successful, innovative, integrated care models for chronic diseases amongst older patients through monitoring their progress (B3);
- (V) Improve the ability to maintain independent living solutions through global standards to help older people live independently, mobile, and active for longer (C2);
- (VI) Provide age-friendly environments (D4).

The EIP on AHA brings together key stakeholders (end users, public authorities, industry), who are all actors in the innovation cycle for improving healthy aging, to assist with research and adoption of healthy aging programs. This includes those who are engaged in standardisation and regulation of the programs.

### Integrated care pathways for airway diseases

The Action Plan B3 of the EIP on AHA has taken chronic respiratory diseases as a model. Integrated Care Pathways for Airway Diseases (AIRWAYS-ICPs) has the objective to launch a collaboration to develop care pathways for chronic respiratory diseases in European countries and regions (8). It is part of the European Innovation Partnership for Active and Healthy Ageing and to scale up globally with WHO GARD (the Global Alliance against Chronic Respiratory Diseases of the World Health organization). AIRWAYS-

ICPs has strategic relevance to the European Union Health Strategy and the WHO NCD (Non-Communicable Diseases) Action Plan [2013-2020], adding value to existing public health knowledge by (I) proposing a common framework of care pathways for chronic respiratory diseases, which will facilitate comparability and trans-national initiatives to improve care; (II) to propose plans targeted to all populations according to local culture, health systems, and income; (III) to develop a strategy based on WHO PEN (program for essential medications) and the essential list of drugs for low and middle income countries; (IV) to inform cost-effective policy development, in particular strengthening those on smoking and environment exposure; (V) to aid risk stratification in chronic disease patients with a common strategy to facilitate effective prevention, diagnosis, and treatment; (VI) to build a sentinel network for allergic diseases and asthma for diagnosis and mortality reduction; (VII) to have a significant impact on the health of citizens in the short term (reduction of morbidity, improvement of education in children, ability to work in adults) and the long-term (healthy aging); (VIII) to tackle chronic diseases across the life cycle and (IX) ultimately reduce the health care burden (emergency visits, avoidable hospitalisations, disability, and costs) while improving quality of life and promoting active and healthy aging. In the longer term, the incidence of disease may be reduced by innovative prevention strategies.

- AIRWAYS ICPs is aimed at strengthening the WHO NCD Action Plan [2013-2010].
- AIRWAYS ICPs has been developed by the EIP on AHA.
- AIRWAYS ICPs will be scaled up globally by WHO GARD to function in many countries worldwide.

For those with further interest in the details of these European programs to foster healthy aging, please feel free to contact the authors for additional information.

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