

Scaling up strategies of the Chronic Respiratory Disease programme of the European Innovation Partnership on Active and Healthy Ageing – Executive Summary

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Summary

Action Plan B3 of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) focuses on the integrated care of chronic diseases. Area 5 (Care Pathways) was initiated using chronic respiratory diseases as a model. The chronic respiratory diseases action plan involves AIRWAYS integrated care pathways (ICPs). It is deployed in collaboration with the WHO Global Alliance against Chronic Respiratory Diseases (GARD). The EIP on AHA has proposed a 5-step framework for developing an individual scaling up strategy: (i) what to scale up: (i-a) databases of good practices, (i-b) assessment of viability of the scaling up of good practices, (i-c) classification of good practices for local replication and (ii) how to scale up: (ii-a) facilitating partnerships for scaling up, (ii-b) implementation of key success factors and lessons learnt, including emerging technologies for individualised and predictive medicine. This strategy has already been applied to the chronic respiratory diseases action plan of the EIP on AHA.

Key words

EIP on AHA, European Innovation Partnership on Active and Healthy Ageing, chronic respiratory diseases, AIRWAYS ICPs, MACVIA, ARIA, scaling up

Abbreviations

AIRWAYS ICPs: Integrated care pathways for airway diseases
ARIA: Allergic Rhinitis and Its Impact on Asthma
CDSS: Clinical Decision Support System
COPD: Chronic obstructive pulmonary disease
DG: Directorate General
EIP on AHA: European Innovation Partnership on Active and Healthy Ageing
EU: European Union
GA²LEN: Global Allergy and Asthma European Network (FP6)
GARD: WHO Global Alliance against Chronic Respiratory Diseases
ICP: Integrated care pathway
IPCRG: International Primary Care Respiratory Group
MACVIA-LR: contre les MALadies Chroniques pour un Vieillissement Actif (Fighting chronic diseases for active and healthy ageing)
MASK: MACVIA-ARIA Sentinel Network
MOH: Ministry of Health
NCD: Non-communicable disease
NHS: National Health Service
RSCN: Reference Site Collaborative Network
WHO: World Health Organization

Introduction

Health and care services in Europe are undergoing changes to adapt systems to the growing demands caused by expansion of chronic diseases and ageing. This restructuring involves development and testing of innovative solutions as well as the implementation of the most successful pilots (1).

The European Commission launched in 2012 the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA, DG Santé and DG Connect) to enhance EU competitiveness and tackle societal challenges through research and innovation (2). The B3 Action Plan is devoted to the scaling up and replication of successful innovative integrated care models for chronic diseases amongst older patients.

Chronic respiratory diseases were selected to be the pilot for chronic diseases of the EIP on AHA Action Plan B3 (AIRWAYS ICPs) (3, 4) with a life cycle approach (5). Several effective plans exist in Europe for chronic respiratory diseases, but they are rarely deployed to other regions or countries. There is an urgent need for scaling up strategies in order to (i) avoid fragmentation, (ii) improve health care delivery across Europe, (iii) speed up the implementation of good practices using existing cost-effective success stories and (iv) meet the EIP on AHA objectives (2).

This paper presents the summary of the scaling up strategy for chronic respiratory diseases published in Clinical Translational Allergy (6).

Scaling up is often considered as a continuous process of change and adaptation that can take different forms (7). The AIRWAYS ICPs scaling up strategy strictly follows the five-step framework scaling up strategy of the EIP on AHA (Table 1). It may be used as a model for scaling up activities in other areas of the EIP on AHA and other chronic diseases.

Table 1: The 5-step framework of EIP on AHA scaling up strategy

Step	Scaling up strategy	Individual scaling up strategy
<i>What to scale up</i>		
1	Database of good practices	
2	Assessment of viability of the scaling up of good practices	
3	Classification of good practices for local replication	
<i>How to scale up</i>		
4	Facilitating partnerships for scaling up	
5	Implementation Key success factors and lessons learnt	Planning and initiating the service
		Setting up a system for change
		Organisational process and design choices
		Training and skills for the work force
		Appropriate resourcing for equipment
		Integration of clinical record systems
		Creating capacity
		Monitoring, evaluation and dissemination

1- Good practices in chronic respiratory diseases

- **AIRWAYS ICPs**

Six commitments for action have been submitted in 2014 to the EIP on AHA to support AIRWAYS ICPs. AIRWAYS ICPs study groups exist in all but 2 EU countries (Luxembourg, Malta). They follow the GARD model deployed in Turkey (8, 9) and Italy (10, 11).

- **Other international, national or regional projects**

Many guidelines, ICPs and national plans exist for the most common chronic respiratory diseases (asthma (12-15), COPD (16), rhinitis (17-19), rhinosinusitis (20) or severe asthma (21)).

The Finnish plans for asthma (22), allergy (23) and COPD (24) are considered to be the prototypes of national plans for chronic respiratory diseases (25). The Portuguese National Programme for Respiratory Diseases (PNDR) is the first national programme including all respiratory diseases (26).

The WHO Global Alliance against Chronic Respiratory Diseases (GARD) is leading successful initiatives globally (11).

Care pathways provided by national institutions are of great interest (e.g. NICE in the UK or the Haute Autorité de Santé in France, ICP for acute asthma in children in Northern Ireland).

Guidance documents exist for primary care. IPCRG (International Primary Care Respiratory Group) has undertaken a mapping on national guidelines used by primary care for COPD, asthma, rhinitis, CAP, obstructive sleep apnea and stop-smoking (<https://www.theipcr.org/display/ResMapping>).

2- Database

A centralized repository (EIP on AHA portal (https://ec.europa.eu/eip/ageing/repository_en) is available.

3- Assessment of viability of the scaling up of good practices

The members of AIRWAYS ICPs, ARIA and WHO GARD (10, 11, 27) are experienced to work together and already scaled up several chronic respiratory diseases good practices.

4- Classification of good practices for replication

Feasibility for replication has been reviewed for the Finnish Asthma Plan (22) and can be used for other projects. It is expected that AIRWAYS ICPs following the expertise raised in ARIA and GARD will have a similar success.

5- Facilitating partnership for scaling up

Role of scientific societies: AIRWAYS ICPs is in line with the mission and vision of scientific societies which aim to (i) promote research, (ii) collect, assess and diffuse scientific information, (iii) represent a scientific reference body for other scientific, health and political organisations and an advocate towards political organisation and the general public, (iv) encourage and provide training, continuous education and professional development and (v) collaborate with patients and lay organisations in the area of their field in order to lead the way towards better understanding, prevention, management and eventual cure of diseases. The European Academy of Allergy and Clinical Immunology (EAACI), the European Respiratory Society (ERS), the European Rhinology Society (ERS), the European Union Geriatric Medicine Society (EUGMS), the International Academy of Pediatrics and the International Primary Care Respiratory Group (IPCRG) are the major societies in Europe of their respective field and are all members of AIRWAYS ICPs. A recent meeting on precision medicine in airways and allergic diseases was held at the EU Parliament with these societies (28, 29). Moreover, at the national level scientific societies are essential to scale up.

Role of patient's organisations: For an optimal dissemination of good practices, there is a need for patient involvement and empowerment. EFA (European Federation of Allergy and airways diseases patient's association), the major patient's organisation for respiratory and allergic diseases in Europe has been very active for AIRWAYS ICPs (28, 29).

Role of the Reference Site Collaborate network (RSCN): The RSCN brings together all EIP on AHA Reference Sites, and Candidate Reference Sites, across Europe into a single forum to promote cooperation; and develop and promote areas of innovative good practice and solutions, which contribute to improved health and care outcomes for citizens across Europe, and the development of sustainable economic growth and the creation of jobs. Members of 13 EIP on AHA Reference Sites (2013) have agreed on the AIRWAYS ICPs concept and are co-authors of the paper published in Clinical Translational Allergy (6). A meeting of all EIP on AHA Reference Sites was co-organised by the Région LR, North England (30) and the EIP on AHA Reference Site Collaborative Network to scale up AIRWAYS ICPs in all Reference Sites (October 21, 2014). A new call is being placed for the

new members of the EIP on AHA Reference Sites (2016).

Network of excellence centers in respiratory and allergic diseases: It includes the Commitments for Action (EIP AHA action Plan B3), Reference Sites of the EIP AHA, the GA²LEN (31) (FP6 Network of Excellence) and UCARE networks (32), members of ARIA (17) and AIRWAYS ICPs.

6- Implementation, key success factors and lessons learnt

Planning and initiating the service:

- Needs for AIRWAYS ICPs, in particular in old age adults and co-morbid diseases, are clear (33).
- AIRWAYS ICPs strategy, road map (3) and first implementation results have been published (4).
- ICPs for asthma have been shown to be highly cost-effective in different settings including middle-income countries (34, 35).

Setting up a system for change

- **Good understanding:** The members of AIRWAYS ICPs have perceived the need for the innovation, and consider it beneficial and congruent with central ideas and concepts. Deployment has been made to all stakeholders including patients and citizens. The results of the ARIA or GARD initiatives are clear (8, 11, 36-43).
- **Implementation of emerging technologies for predictive and personalised medicine.** MASK (MACVIA-ARIA Sentinel Network) is developing multisectoral care pathways for rhinitis and asthma and their multimorbidities across the life cycle, implementing emerging technologies for individualised and predictive medicine (44, 45).
- **Political endorsement:** Several meetings have been organised by the EU (46-49). The present document has been presented at a meeting in Lisbon, Portugal (July 1-2, 2015) organised by the Reference Site Collaborative Network of the EIP on AHA in collaboration with EU regions and the Directorate General of Health of Portugal (50).
- **Engagement of relevant stakeholders:** All relevant stakeholders have been included and are highly motivated: health care professionals (physicians, pharmacists, nurses, physiotherapists and others), social workers, policy makers. A special effort has been attempted for patient empowerment.
- **Financial viability and business model:** It has been shown that the implementation of the Finnish national plans, ARIA and GARD does not require large resources. However, AIRWAYS ICPs will require arrangements for the reimbursement of the services.

Organisational process and design choices

- **Investing in human capital:** Training and reskilling the work force is an essential and fundamental component of AIRWAYS ICPs. The source paper has been co-authored by many professional leaders from over 70 countries to build a global momentum (6).
- **Integrating ICT solutions:** Telemedicine represents a possible specific advanced tool of ICT in chronic respiratory disease management and secondary prevention. ICT solutions are integrated to support AIRWAYS ICPs implementation and MASK (44, 45). A CDSS is being built and should be available at the end of the year. This system may form the prototype for a more complex one for asthma, COPD and co-morbidities.
- **Organisational changes:** Currently under discussion but will require flexibility in order to adapt to the needs of different areas.

Monitoring, evaluation and dissemination

These activities have been initiated by ARIA and GARD at the international level, but they are also part of the national and regional plans for AIRWAYS ICPs.

Assessment indicators are essential. In asthma and COPD, hospitalisation rates and mortality are two indicators of interest and are responsive to change within 2-3 years. In rhinitis, these indicators cannot be used but quality-of-life indicators and work productivity are important and can be monitored.

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